

Improving the Customer Experience with Artificial Intelligence and Virtual Agents

By: Greg Hasse

It's no secret that the way businesses communicate with their customers can make or break the relationship. As we see a shift in customers' communication preferences, it is paramount that businesses adapt to provide the experience and service levels that customers have come to expect. Data from a [recent study](#) suggests that one third of customers in America will leave a company if they aren't satisfied or if they have just one poor customer service experience, resulting in lost revenue for the business.



Customers want immediate service response—anytime, anywhere and on any device. They are increasingly looking for self-service options that enable them to get questions answered and problems resolved without needing to speak with a human. And the tide is changing: after years of rejecting these self-service solutions and preferring to speak with a live agent, customers are now showing a strong preference for self-service solutions. Because of this, [Gartner reports](#) that 84 percent of organizations expected to increase their investments in customer experience (CX) technology in 2018.

An advertisement for Pipeline Membership Packages. The background is dark with a person's hand holding a glowing orb. The text is white and orange. The main heading is 'Membership Packages'. Below it is a list of four bullet points: 'Unlimited Access to All Pipeline Services', 'Best Pricing & Easy Monthly Payments', 'Elevated Visibility Across All Pipeline Activities', and 'Direct Access to Publish Content in Pipeline'. Below the list is an orange button that says 'BUILD YOUR PACKAGE'. At the bottom left is the 'Pipeline' logo, and at the bottom center is the text 'Click this ad for more information' with a line and dots on either side.

Not for distribution or reproduction.

Virtual intelligent agent applications are one way in which businesses can enhance their customer communications. In partnership with [Inference Solutions](#), Consolidated Communications, a leading business and broadband communications provider, is now offering a virtual agent solution to its customers. It's a cloud-based, intelligent automation solution that enables businesses of all sizes to automate many of the routine and repetitive conversations handled by live agents. The virtual agent application integrates seamlessly with the ProConnect Unified Communications solution already offered by Consolidated.

Demand for AI-powered customer service has never been higher as businesses realize the benefits of using virtual agents. Gartner estimates that 25 percent of customer service and support operations will integrate virtual custom assistant or chatbot technology by 2020, significant growth from as few as two percent as recently as 2017. Making the transition to intelligent virtual agents will help businesses remove the deep layers of Interactive Voice Response (IVR) menus that tend to frustrate callers, making it easier for businesses to connect with their customers and clients.

Furthermore, businesses can gain significant cost savings when implementing an intelligent agent as it frees up live agents to focus on more pressing and more complex customer needs, creating

added value for the business's bottom line. A small improvement in utilization rates can not only improve the customer experience but also has the potential to net millions in savings. For example, if the cost of a live agent-handled call is \$5, a two percent increase in IVR utilization for a business that receives one million calls per month represents a savings of \$100,000 per month, or \$1.2 million per year.

Consolidated's Intelligent Agent solution provides an advanced conversational interaction, with a variety of skills and pre-programmed tasks and an extensive task library to automate many of the callers' needs, along with capabilities to perform outbound calling tasks. These skills can be utilized across many verticals, including retail, hospitality, healthcare, financial services and even local businesses—with tasks like intelligent callbacks, making reservations, booking appointments and issuing reminders; handling collections balance look-ups, password resets, inbound ticketing, order lookup; providing service activation and support ticket updates; and even giving answers to commonly asked questions like business hours and locations. The task library continues to evolve, adding more value to the intelligent agent application and taking more pressure off live agents, allowing them to focus on higher-priority tasks.

The solution is sophisticated and advanced and continues to evolve with features that set an intelligent agent application apart from a traditional IVR platform.

Virtual Agents Have Advanced Skills

The application offered by Consolidated Communications can understand human speech in more than 100 languages and is able to respond using text-to-speech that is nearly indistinguishable from a human agent. Virtual agents can be configured with very basic skills: for instance, the most basic agent might simply answer the phone, ask the caller if they would like to maintain their place in the queue and schedule a callback when a live agent is available. An advanced agent has the skills to understand speech in multiple languages, determine the caller's intent using natural language processing, process PCI-compliant payments and respond to clients in multiple languages.

Integrating with Existing Business Systems to Close the Loop and Solve Customer Inquiries

Once the Virtual Agent has a conversation with a customer, it will need to access other business systems and services in order to effectively respond to questions and solve problems. This is the process of fulfillment. Businesses can easily build an application that uses natural language to converse with a customer and then close the loop by communicating with back-end systems to fulfill the customer's request. There are options for custom integration with a company's specific back-end systems, as well as a set of pre-packaged integrations that work with popular business applications including customer relationship management (CRM) platforms, text messaging services, payment gateways and scheduling systems.

Virtual Agents Can Learn

Intelligent agents use machine learning to understand the various ways a business's customers ask for things. A business simply provides a set of examples of customer inquiries and the virtual agents learn to understand the different and varying ways customers might ask for the same thing. For example, a business might teach the virtual agent to understand the phrase "I'd like to get my car fixed," and over time the virtual agent will understand that "Can you fix my car?" means the same thing and will then be able to either respond or route the call accordingly. These kinds of efficiencies produce more correct answers to a wider variety of inquiries.

Businesses Can Influence the Voice and Tone

Businesses have a great amount of control over how the virtual agents communicate with tools that allow for customization of a more personalized voice. For example, the rate, pitch, volume or emphasis can be controlled, helping to create a more personalized interaction that is also a reflection of the business, whether it's a professional tone or an upbeat and lighthearted voice.

A key concern for many businesses is compliance with strict industry regulations—and for good reason. The penalties can be staggering for violations associated with PCI-DSS and HIPAA fines, not to mention the potential damage to a business's reputation if there is a violation. It's important for businesses to look for solutions that are PCI-DSS and HIPAA compliant, which in this case means that virtual agents are able to collect sensitive customer data without revealing any information to a human agent while also maintaining high levels of data privacy and security.

Artificial Intelligence represents the future of customer engagement, and conversational virtual agent solutions will help businesses differentiate the quality of their customer engagement. When working with a cloud-based solution, like the application provided by Consolidated, it means high scalability paired with robustness, reliability and security—and ultimately a better and more engaging end-customer experience.