

The New Normal: Enriching CX in the Era of AI-Powered Virtual Agents

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In 1965, Birmingham Press and Mail opened the [first-ever call center](#), made possible by the invention of the Automatic Call Distributor (ACD), which helps to better route calls. Since that time, we've seen telephony advancements like 1-800 numbers and IVRs—but perhaps nothing is changing this landscape more than the onset of conversational Artificial Intelligence (AI). With the introduction of AI and cloud-enablement, call center and Customer Experience (CX) leaders have now entered a 'new normal.' Customer service organizations are now competing for the best CX in which that experience is no longer human-to-human dependent but rather human-to-machine for the first time ever.



This human-to-machine interface manifests itself in the form of AI-powered virtual agents that automate conversations that call center agents traditionally handled. Instead of a CX featuring an IVR menu and live agents, think of the 'new normal' as a pool of virtual agents to automate some (but not all) calls and chats. With integrated access to a company's customer data, this cloud-based AI automation can provide a much more simplified, low-effort process for customers when they reach out to the call center, thus enhancing and enriching their experience—and ultimately their loyalty to the brand.

Voice Automation of Today vs. Five Years Ago

IVR technology frustrates everyone who comes in contact with it. Since IVRs are limited on what can be automated, most contact centers have an overreliance on live agents for even the most routine call types and processes, which may in fact require very little complex critical thinking. In the 'new normal' call center, the biggest change is that instead of routing all calls to live agents, some are routed to virtual agents where the call or chat is either completed or transferred to a live agent with a screen pop of gathered data, so the human can pick up the call from there.

Unlike the voice automation of the past, virtual agents make self-service a very different experience. This evolution from IVR to early voice-powered virtual assistants to AI-powered virtual agents has happened very quickly due to advances in speech recognition. Think about it: just a few years ago, everyone was frustrated with Siri as a voice interface. Now, everyone is accustomed to the voice-to-machine interface on their mobile phones and in their homes, and they expect it from the organizations they call for customer service. Speech recognition, via assisted machine learning and years of training, has gotten so good that it has opened a new world of cognitive capabilities to do something intelligent with what was heard.

Further Defining an AI-Powered Virtual Agent

An AI-powered virtual agent is a cloud-based AI "brain" that extends beyond the capabilities of touchtone IVR, directed dialog, and simple chatbots. A virtual agent:

- Is connected to the same data your live agents are connected to;

- Has the ability to read and record data just as your live agents do;
- Has the ability to recognize natural language and extract intent over the phone, chat, or text;
- Navigates multi-turn conversations;
- And even predicts why someone might be calling.

In other words, a virtual agent is equipped with all the tools to mimic live agent behavior and beyond.

Importantly, virtual agents do all of this within the confines of defined business rules that act as guardrails to ensure the tool stays in the lane where it will provide a CX as good as a live agent. When a conversation goes outside the guardrails of your business rules, the call is merely transferred to a live agent with a screen pop of data to pick up where the virtual agent left off. This tactic helps to reduce call handle time for live agents and avert or avoid customer frustration as much as possible.

The top customer service organizations have already implemented virtual agents to handle dozens of different call types and chats, primarily across four broad use cases. These are:

1. Natural language intent capture and routing, replacing lengthy phone tree menus;
2. Front-end data gathering and authentication to collect information before transferring to a live agent;
3. Fully automating routine inbound conversations;
4. Conversational, multi-turn outbound calls and texts.

Each use case creates a streamlined and enhanced CX by making it faster and easier for customers to get things done. It also improves the call center's ability to do more with less, as automation costs far less than human labor.

Natural Language Front Door

One of the key benefits of an AI-powered virtual agent solution is the natural language processing to understand intent from an open-ended question. This offers a better CX than forcing callers to sit and listen to a long list of menu options or wait on hold for a live agent. A good example of this use case comes from one of the largest hospitality chains in Las Vegas, which had so many places to route calls that it simply was unfit for IVR. This meant that live agents had to route all calls, leaving customers on hold even for simple needs—not a great CX. Virtual agents have helped the company replace live agents answering the phone with an automated prompt that simply asks, “How can I help you today?” Depending on the property, the solution understands the intent for upwards of 10 to 15 different end points. With a 95 percent routing accuracy rate, the hospitality chain has significantly cut hold times and improved the CX.

Front-End Data Gathering and Authentication

Front-end data gathering is the process of automating the drudgery of account authentication, product registration, or other types of information collection so agents don't have to do it. This step is pivotal in speeding up the call process for a faster CX, as virtual agents often authenticate customers in about half the time it takes live agents to do so.

One good example is in the medical space around patient authentication. HIPAA mandates that companies have to triangulate three of eight different data points in order to verify patient identity, which can account for a large portion of handle time on the phone. For a top regional supplier, this task was taking its live agents three minutes on average. It implemented virtual agents to handle authentication before passing calls to live agents and was able to offload all of that verification time to virtual agents at a fraction of the cost.

Front-end data gathering is also perfect for retail or insurance companies in the form of product registrations. By automating the process of gathering all of the customer demographic information, product information, and other data, call center agents can focus on high value situations that

cannot yet be automated.

One of the biggest CX benefits for this use case, especially when bundled with a natural language front door, is that it minimizes “cold transfers,” which happen when a customer is transferred but the new agent who receives the call has no information about who it is or why they got the call. This severely limits how personalized the agent can make the greeting and conversation, forces customers to repeat information over and over, and ultimately frustrates everyone involved. By capturing this data in the automation—even if it is just a partial capture—and providing it to live agents as the customer is transferred, the customer is given the most streamlined and high-quality CX.

Routine Inbound Conversations

Scheduling an appointment or checking on the status of an order are examples of routine inbound conversations that can be handled by virtual agents. The classic example is in pizza ordering, as the world’s largest pizza chain transfers calls to virtual agents to handle certain orders. Over the cloud, the virtual agent is able to access customer data via caller ID and looks to see if the customer ordered within the last two months. If yes, the customer gets a personalized experience given the high probability that he or she wants to place the same order as last time.

Conversational Outbound

This is an untapped opportunity for many large companies because it often requires a lot of human effort. One of the top truck rental agencies used live agents for outbound reservation confirmations, which helped it with fleet management and reduced no-shows. But using live agents was a huge investment of time and money. By using cloud-based automation that is connected to their customer data, they can now “outsource” these calls and text messages to AI-powered virtual agents. While robocalls are another automation option, the difference between virtual agents and robocalls (or texts) is massive, as the virtual agent can handle multi-turn conversations like rescheduling the pickup, cancellations, location changes, and more. It also creates an even stronger CX.

Conclusion

Artificial Intelligence is no longer a fearsome black box that will render call center jobs obsolete, but rather the ‘new normal’ for how call centers must operate. In fact, the customer service organizations that will succeed over the next five to ten years are likely to be those that embrace AI-powered virtual agents and use them to enrich the Customer Experience far beyond what had ever been possible without them.