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Conversational AI is Ready for Prime Time

Don't lump the various types of AI-based technologies into one basket. There are differences among them, as a look at call center tech highlights.

We're seeing some dramatic changes in the call center outsourcing market, driven by big changes in customer expectations and exponential improvements in technology. Until fairly recently, call center executives were focused primarily on cost reduction and productivity improvements. This kind of thinking has changing quickly, for a few reasons:

- Customer demographics are changing. Millennials now have significant buying power, and they expect a very different experience when interacting with a brand. They want a seamless, omni-channel experience that can take place across a physical store, a mobile app and a Facebook messenger chat.
- Switching costs are also very low, given how easy it is to swap one brand for another via a mobile app. Companies are trying to find ways to improve customer stickiness by creating a personalized experience that surfaces the right products and services to customers at the right time and at the right place.
- Conversational AI is ready. Technologies that can understand human intent and can hold a human-like conversation have improved dramatically over the past 12 months. Contact center executives are telling us that conversational AI is rapidly moving beyond prototypes and into production-ready products. [Recent ISG research](#) reinforces this: Adoption of virtual agents and chatbots will more than double over the next two years.

We're seeing a marked increase in interest from enterprise buyers in chatbots, virtual agents and intelligent Q&A, a basket of technologies we're collectively calling "intelligent assistance". At the same time, we're seeing a lot of confusion on the differences between them. Because technology vendors and service providers use these terms in different ways, it's hard to determine which vendor or provider can solve the specific problem at hand (which sounds a lot like cloud a few years ago).

While we're still in the process of interviewing call center executives and researching the various products and vendors in the market, there are a few commonalities emerging, which is enabling us to start to put these vendors into some categories. The scope of our current research covers chatbots, virtual agents and intelligent Q&A – more about voice assistants in a minute.

We see two main axes that differentiate these three technologies: 1) the number of tasks it can perform, and 2) the number of channels it operates on. Tasks can be simple, like fetching news, or complex like asking a question about an open order. Channels are where conversations take place, like email, a mobile app, a messenger platform, like Facebook or Slack, or even a standalone device, like Amazon Echo, or Google Home.

For the most part, we're seeing chatbots handle single tasks across a small number of channels. These tasks don't require a lot of context, personalization or empathy. Chatbots are good at things like corporate branding and product sales (see Burberry's chatbot on Facebook Messenger, for example) or at doing one thing really well (using x.ai as your personal meeting scheduler, for example).

On the other hand, virtual agents are being used to answer more complex questions and support existing customers, areas that require understanding the context of a question and at least some ability to mimic empathy for a frustrated customer. Intelligent Q&A technology is more of an under-the-covers solution. It integrates with your knowledgebase(s), and surfaces the most relevant information for customers across multiple channels. Think about when you are typing something into a search bar and the most relevant information pops up in real-time – that's intelligent Q&A.

The other way we are comparing products is by their "conversational" ability. This means their ability to interact with a human in a more human-like way. In our framework, the size of the bubble indicates how

well the technology does this, via voice or text. We're comparing this not just on the conversational AI technology (interpreting intent, mimicking empathy, etc.), but also the degree to which the technology understands the context of what is being asked based on things like location, device and what's already been searched for. It also includes the degree to which the response is personalized. For example, knowing if you prefer an aisle seat, skim milk or romantic comedies.

To create this kind of contextualized and personalized experience, it means that the intelligent assistance technology needs to be integrated into a lot more backend systems like CRM, loyalty systems, and internal knowledge bases. Of course, virtual agents are going to take longer to implement and are going to be more expensive than chatbots, for example. It does not mean that one is better than the other, they just solve different problems.

Our research purposefully didn't cover voice assistants (VAs). VAs like Amazon Alexa and Google Assistant are more focused on the "personal" realm than the enterprise realm today. That is going to change quickly as enterprises start to use VAs for branding, selling, and support, but we don't think they are just there yet (for example, see Amazon's [recent announcement](#) on Alexa for Business). Also, the VAs themselves are channels upon which virtual agents and chatbots will eventually be deployed, so the picture can get a little muddy with them included.

This is an exciting and fast-moving topic, and it will be fascinating to watch how AI applications continue to transform the relationship between customers and brands.

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