

Is ASR Right for You?

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If you've used an automated system to check flight arrival/departure times or place a stock trade, chances are you've used Automated Speech Recognition (ASR) technology. Pioneers in the travel and brokerage industries gave us a new way to self service. They let us "talk" to their systems instead of press keys on our touch tone telephones. It made their systems more friendly, and let us process our requests more quickly. These early adopters paid a high price tag for the technology, the custom programming, and implementation. Fortunately, they had a large volume of calls on which to achieve cost savings.

In the past 18 to 24 months, there has been a noticeable increase in the number of organizations introducing speech-enabled applications. ASR vendors have made significant improvements in their core technology, and their ability to deploy custom applications effectively and economically. Best practices have been developed that define the easiest way for callers to navigate through these systems and to capture caller information. These factors have lowered the investment hurdle for ASR and improved performance, leading to the question: Is it time for you to rethink your approach to self service?

A Preferred User Interface

A recent Gartner study sponsored by SpeechWorks shows that most customers prefer speech to both touch tone and the internet for self service. The chief reasons are the convenience of anywhere, anytime access coupled with hands-free interaction. The Gartner study also shows that callers strongly prefer using a speech-enabled self service application over speaking with a representative if the wait time is over two minutes. These preferences translate into a higher percentage of customer contacts that are self serviced.

A Maturing Technology

The technology underlying speech-enabled applications is getting better all the time. According to Emma Johnson, Marketing Director at Nuance, recognition accuracy is typically in the 95-97% range across a broad vocabulary and wide range of accents. The software also filters out background noise effectively, so callers do not have to repeat themselves to be understood correctly.

Of course, this sophisticated software requires some robust hardware on which to run. The last few years have seen a precipitous drop in prices for hardware platforms, speech processors, and telephony boards, all of which makes the technology more affordable. At the same, programming standards such as VoiceXML are gaining a foothold in the telephony applications domain, so it is

becoming easier to find software developers capable of working on speech-based systems. Programmers who develop web-based applications can leverage their skills in voice-based systems.

A Compelling Business Case

The return on investment (ROI) for speech recognition is attractive. Speech allows organizations to introduce self service for transactions that can't be done easily (if at all) on touch tone, such as name and address capture, ordering parts, and scheduling appointments. These new transactions decrease call length on routine transactions, and free up CSR time to handle more complex calls. Steve Chambers, Chief Marketing Officer at SpeechWorks, said a realistic payback for an average installation can be as little as nine months.

Organizations have also derived benefits from migrating existing touch tone applications to speech. Although touch tone applications have traditionally been very cost efficient to deploy, there are drawbacks to navigating through layers of menus. For example, finding your checking account balance via a touch tone interface can take upwards of two minutes; the equivalent speech-based transaction can take about 30 seconds. These streamlined interactions encourage usage, which can add up to a hefty savings for a contact center. When the Dreyfuss Corporation implemented speech recognition for their existing applications, they saw a thirty percent increase in usage. Increased usage with shorter hold times delivers compounded savings over touch tone applications.

Are You Ready?

How can you tell if your contact center is ready to deploy ASR? Answer the following six questions to determine if the time is right for you.

1. Does your customer contact strategy point to self service opportunity?

First look at whether self service is important to your organization and your contact center, and if so, the role it plays. Some organizations use personalized customer service as a differentiator. Some focus on media choice, service options and easy access for customers. Others focus on offloading routine, low value transactions to automation to save money. What is *your* strategy? Are you most interested in cutting costs through increased self service, or do you really want to increase the level of customer satisfaction you provide? According to Nuance's Johnson, the real value of speech on top of ROI is a happy customer. In her experience, organizations reap the most benefit from ASR when "customer care and the contact center are strategic parts of the overall corporate goals." This level of integration happens when contact centers are seen as a competitive asset within the larger organization.

2. Are you a technology leader?

Next, think about the role of technology in your organization's strategy. Is it important for you to be one of the first in your market to offer new technology? If this sounds familiar, you'd better be pursuing speech today. Or if you feel pressure to keep up with the competition, you should begin thinking about what your approach to speech will be. The increasing acceptance of speech technology in customer care, both by companies and their customers, makes it likely that your competition is using it. So it isn't too early to identify suitable applications, and to talk with your customers to understand the transactions they'd use via speech.

3. Are you in a "hot" industry?

Travel and tourism continues to be a good match for ASR for schedule information, reservations, and pricing information. Similarly, the financial services industry continues to introduce applications. Banks such as First Union are replacing touch tone interfaces with speech to flatten menus and decrease call lengths. Insurance is also a good bet for speech technology, introducing applications that couldn't easily be done via touch tone, such as claim status, form requests, and policy changes.

Utilities are using ASR to direct calls, to process basic customer service transactions, and to gather outage information from customers. Outage notification is an especially attractive application for utilities, as it provides the means to capture location information. Self service offloads calls from service representatives during these unpredictably high calling periods when it is impossible to staff to meet demand.

Manufacturing is another hot industry, using speech for ordering products, providing order status and product availability, and scheduling appointments. GE Appliance, for example, is piloting an application with Syntellect that allows customers to schedule appliance repair appointments using ASR.

4. Do your inquiry and transaction types fit speech well?

Look at the reasons your customers are calling into the contact center, or are going on-line, and identify contacts that ASR could automate. By using name and address capture in an application, for example, you can work with potential customers who may not have an established relationship with you. ASR could help you secure information to fulfill requests (e.g., send forms or other information), or place simple orders. Or if you have touch tone applications in production, look at your self service usage rates. "The incremental improvement – or 'lift' – over touch tone is significant," according to Chambers of Speechworks, who cites ROI studies with 5-40% increases in usage with speech-enabled applications.

5. Are your contact volumes significant?

Call volume is one of the most important metrics used to build an ROI model. The greater your volume, the greater your opportunity. Conduct “what if” analysis to determine the payback for projected success rates of self service usage, given your volume on call types suited to a speech interface. Ask your vendor for potential targets based on what they’ve seen with other implementations.

6. Do you have the time and patience to do speech right?

“You can’t just throw out an application without testing” says Chambers. Building a complex, conversational application takes time, “and if you don’t do it right, people are going to get lost” agrees Greg Simsar, who heads up the speech practice at Syntellect. Use focus groups to understand customer objectives, and conduct usability testing to ensure the application will work as designed, and meet the projected usage rates. If you want to get an application up and running and plan to skip these steps to save time or money, think again.

An ASR Success Story

ABN AMRO Mortgage Group, Inc., headquartered in Sunrise, Florida, handles a large number of calls from existing customers wanting to find out if they should refinance their mortgages. Performing these routine calculations placed a huge demand on ABN AMRO contact center resources, and created significant spikes in call volume that were impossible to predict. The organization decided to implement a speech-based application that could respond to customers quickly and accurately, 24 hours a day.

Once the caller is identified, the application accesses the current account information and calculates how much money could be saved by refinancing. If the caller chooses to refinance, he or she can transfer to the contact center or continue using the IVR to provide the basic information needed for the transaction. This information is provided to CSRs who then close the loan.

The application, hosted by NetByTel, increases the level of customer service provided to loan holders by responding to their inquiries immediately, and by providing refinancing information in as little as 30 seconds. In addition, CSR productivity more than doubled, as they could focus on closing loans rather than performing loan calculations and answering routine questions.

The system handles 30,000 calls a month, and paid for itself in three months.