



Vocomo Announces Open Standards VoIP IVR Product

Vocomo Corporation, a provider of next-generation Interactive Voice Response (IVR) systems, has announced the immediate availability of its new open standards VoIP IVR platform. VocomoVoice Response for VoIP, a network-attached IVR platform, allows businesses to efficiently deploy their customer service applications in a single IP-centric network. Intended for customer self-service and call centers with less than 30 agents, Vocomo has launched a new generation of IVR products that enable a lower total cost of ownership. This VoIP IVR software, with support for VoiceXML, SIP, H.323 and RTP, enables developers to build flexible, scalable and cost-effective IVR applications. VocomoVoice Response for VoIP is designed for a server platform based on Intel architecture, and the platform integrates with Intel NetStructure Host Media Processing software in place of specialized digital signal processor (DSP) boards for call handling and control. The media processing functions are handled on the host CPU.

<http://www.vocomosoft.com>

Definition Du Jour

Concatenated Speech Synthesis (kon-kāt' n-ât')

A process by which units of actual recorded human speech are arranged in various combinations to synthesize human voice response to a query.

Pronexus And Vail Systems Offer Developers "A SIP Of Speech"

Pronexus Inc. and Vail Systems, both providers of telephony and speech solutions, have announced the availability of "A SIP of Speech," a software bundle aimed at developers exploring the growing opportunities for speech applications. The combination of Pronexus VBSALT and the Vail SIP TIM on the Microsoft Speech Server platform allows developers to rapidly create and test speech applications from a single workstation or a workstation/server combination, without requiring any telephony hardware investment. Combined with one or two soft-phones, this can create an end-to-end environment for speech application development and testing. This software bundle allows developers to leverage existing programming skills and to connect to SIP-based IP telephony networks while evaluating the potential for speech in their respective organizations.

<http://www.pronexus.com> and

<http://www.vailsys.com>

Voice Print Unveils Activ! Insight Speech Analytics Technology

Voice Print International, a provider of integrated communications solutions for digital voice, data and screen recording and quality monitoring, has unveiled its new speech recognition and call mining application. Activ! Insight can be used by contact centers in conjunction with Voice Print's full-time recording solutions to capture numerous customer interactions data and automatically derive business insights. Powered by CallMiner, Activ! Insight's speech recognition technology converts recorded conversations into text, which can then be searched and analyzed to uncover valuable business intelligence for trending and other purposes. Activ! Insight facilitates the analysis of sample call records or an entire database of recorded calls. It then renders graphical or numerical representations to reveal business trends, opportunities or threats. Activ! Insight listens to calls and returns a digital score on the content of the call, enabling supervisors to evaluate customer and agent behaviors.

<http://www.voiceprintonline.com>

“

Mend your speech a little,
Lest you may mar your fortunes.

— William Shakespeare

”

The “better customer service” revolution that transformed the CRM software industry a few years ago is poised to impact the speech automation industry.

Corporations have used the telephone to serve customer needs for as long as any of us can remember. From ordering take-out

rather than stand in line for a teller. Today, most customers prefer an ATM to a live bank teller for all but complex transactions. The pace of user adoption of such self-service solutions is only accelerating, so why has speech automation taken such glacially slow steps toward the level of acceptance afforded other technologies?

Three reasons: choice, quality and cost.

Latest Trends And Best Practices In Speech Applications

By Azita Martin, TuVox

food to installing a new DSL line to checking our account balances at the bank, the phone still represents the largest percentage of our remote interactions with vendors.

About 20 years ago, automation of phone-based customer service dawned with touch-tone-based interactive voice response (IVR). This technology, which began as a service improvement, evolved to broader usage, and in many cases, to the point where everyone began dreading the “touch-tone maze” — the complicated set of prompts that led nowhere, or more often than not, to a call center agent who invariably asked us to repeat all of our carefully dialed information all over again.

To be fair, other automation technologies that are now widely adopted also faced early challenges. When automated teller machines arrived on the scene, many people decried the loss of the human touch; complaints about unreliability dogged those early ATMs. In fact, in the earliest days banks were compelled to offer incentives to customers to use the ATM

Choice. Self-service works best when the customer has a choice with a solid fallback option. When you pay at the pump, if it doesn't work, it's not a big problem — simply pay the attendant. If the ATM outside the bank doesn't work, we can go inside the branch. It's the same story with the kiosk at the airport or the self-checkout at Home Depot. If the customer has a choice and there's no cost (but there is a definite benefit) to self-service, the customer will increasingly choose to opt-in to self service. The point of action at which IVR applications constantly fail is when allowing the customer to opt-in, then making sure that the information the caller inputs into the system gets to the agent, should one be needed. Without that action, self-service can become a hindrance.

Quality. There's a huge difference between a well designed speech application and a poorly designed speech application. A poorly designed Web site can still be navigated, but a poorly designed speech application is unusable. The same is true for a touch-tone application: when a caller can't find the choice he or she wants, frustration is a certain result.

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Cost. Building speech applications from scratch has historically cost a lot of money. The advent of open standards has helped to make the core technology affordable, but the application work is expensive. Maximizing the value of

a speech application involves countless "tweaks," all of which add up over the life-time of an application.

Despite the creeping pace to date, progress is being made and speech automation's future is very bright. Its cost advantages remain highly appealing to enterprises. Additionally, there are strategic reasons to implement speech as part of the customer service strategy. First, organizations look to speech automation to manage their unpredictable and seasonal call patterns. Speech automation allows companies to handle more incoming calls, to even out call traffic and to more effectively manage staffing during peak times.

Well-designed speech applications make call center agents more effective, by freeing them from routine tasks and allowing them to focus on high-touch, high-value calls. Many companies note that when callers are able to solve some of their own problems using speech automation, they are in a better mood if they eventually do need to speak with an agent. Callers feel as if progress has been made, and all that remains for the live agent is to "put a ribbon on" the interaction.

Unfortunately, such sophisticated speech applications are few and far between.

What kinds of calls can be automated? Today, calls coming into the call center generally fall into three major categories:

1. *Transactional calls* (order status, make payment, flight status). These calls require few dialogs to solve the problem. It involves many repeatable calls.

2. *Call routing* ("Thanks for calling, how may I help you?"). These calls require open-ended dialogs, error handling and fallback strategies, and a clear understanding of why people are calling.

3. *Knowledge-based calls* (product support, benefits information, shopping). These comprise fewer calls per call type but are more expensive per call with a live agent due to the longer call length and unique agent skill set.

Traditional economics have forced the speech industry to initially focus on very high volume "transactional calls" due to the historically high cost per unit of dialog and the cost per update cycle. Until now, speech applications have been manually coded, and it often takes 6 to 18 months to get it right. That works fine for the types of calls that don't change. But for many businesses, by the time the applications are complete, the business has changed, leading to speech applications that are not up-to-date with the rapid changes in companies' business processes. It makes sense, then, that with dialog states costing thousands of dollars each to design and build, the initial focus of

the vendor community was on the largest call centers and the narrowest types of calls (relatively few dialog states). It was acceptable if a speech application cost \$1 million to design and build because there were millions of calls. However, those economics no longer work as companies look to automate different type of calls, such as product support calls, of which there are fewer calls per application, but each call is very expensive.

Therefore, with the broadening interest in speech applications, how has the speech automation industry met the challenge? Unfortunately, not very well.

Historically, the most significant barriers to the adoption of speech-based appli-



cations have been the cost, time and complexity of implementing and maintaining the applications, often requiring the use of expensive professional services organizations (i.e., consultants). The traditional and existing processes of custom-building a speech application are "stove-piped" — specialized skills are required, which makes it difficult for an enterprise to become self-reliant. Each time customers want to update the applications, they are required to go back to the vendor. While custom applications provide a lot of design flexibility, offering any feature the customer wants, they don't offer business flexibility: the ability to quickly change the speech application in response to a change in business needs. In other words, custom-coded speech applications are an expensive option for all but the largest organizations.

On the other end of the spectrum, "packaged" speech applications have emerged as a new approach to speech. These packaged applications promise to be more cost-effective to deploy, but to date they have been very limited and are best suited to limited functions and organizations that don't want to differentiate customer service. The "packaged apps" offer less flexibility than many organizations require, and they are a long way from main stream adoption.

A Breakthrough

Only very recently, a "third way" has become available. Now that many companies understand the real business value of speech applications and believe that their customers will use a well-designed speech application effectively, the primary challenge is the unlocking of ROI, as well as overcoming the costs of building and maintaining applications.

There has appeared an opportunity to leverage open standards to discover ways of reducing the costs of building, managing and maintaining sophisticated speech applications. This newest trend in speech automation might be best termed "enterprise software for speech." This approach combines the speed of deployment advantages of pre-built speech applications with the flexibility of an open ability to modify

all levels of the application. This approach enables enterprises to differentiate themselves with conversational voice self-service without consuming excessive time, money and resources.

The enterprise approach brings together a package of pre-built functionality, high-level tools and components and, very important to any call center automation, a built-in ability to bring all call data to an agent.

Enterprise software for speech applications comes with pre-built speech applications that can be quickly deployed and a set of tools and components that allow enterprises to configure the application to their specific business needs, without customization.

In some cases, companies can extend the enterprise software for speech development and deployment tools by importing enterprises' existing content, such as Web self-service and knowledge bases, and easily convert them into VXML code without needing specialized grammar or coding. What formerly took months now takes days or weeks, allowing IT managers to save time, to reduce operational costs and to be more responsive to overall business needs.

The speech automation market has been radically changed by the advent of open standards. VXML, in particular, has made a variety of deployment options a critical part of the enterprise software approach. Companies can now offer a wider variety of deployment options, including on-premise or hosted solutions. In addition, speech applications developed using the enterprise software approach can be run on platforms marketed by a number of companies, as well as a variety of speech recognition engines.

By increasing the efficiency of speech application development, enterprise customers benefit not only from speed of deployment and near-infinite scalability but also from the ability to make quick

changes to speech dialogs. Overall, this leads to a much lower total cost of ownership. Thanks to this fundamental reduction to the cost per dialog and the cost per update cycle, the economics of speech automation can now work for a much wider range of calls — not only for transactional but also for call routing and even knowledge-based calls.

Today, the biggest hurdle to overcome is people's perception of speech automation over the last 10 years: that it takes a lot of time, money and resources to implement a speech application that provides superior caller experiences. What proponents of enterprise software for speech must do now is convince the marketplace that they can provide sophisticated self-service speech applications that are so good that consumers will favor them over the "zeroing out" option. Providers need to convince the marketplace that they can deploy groundbreaking speech solutions for approximately half the cost and one-third the deployment time of today's market-leading custom-coded solutions.

It's time for speech to be recognized as a leader in the "better customer service" revolution.

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