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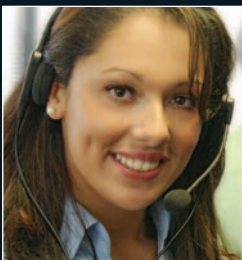
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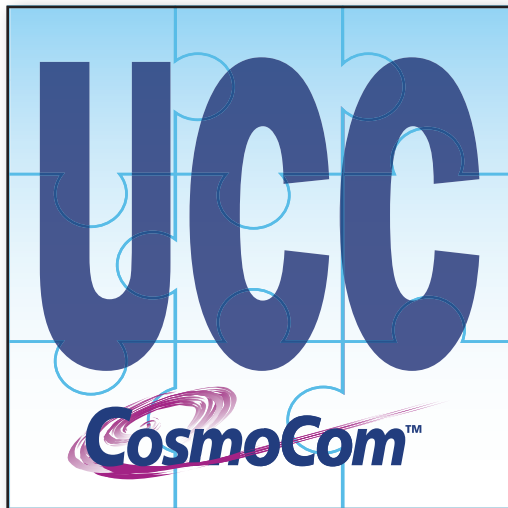
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By: Nadjji Tehrani,  
Founder, Chairman & CEO, Editor-in-Chief,  
Technology Marketing Corporation

## 2007 Contact Center CRM Industry Status And Forecast

Our phenomenal industry, which officially began to grow as of June 1982 with the publication of our flagship magazine, *Telemarketing*®, has continued to grow, in spite of many obstacles and roadblocks, at a phenomenal rate. Just this morning, December 20th, for example, I was speaking with a member of the senior management team of a teleservices company. He shared with me that 2006 has been a truly phenomenal year for their company: every one of their divisions has experienced record growth and profits. Needless to say, this phenomenal company has no offshore facilities whatsoever and, in fact, 100 percent of their call centers are in the U.S.

Obviously, they are not the only company that has established such phenomenal growth. A number of other contact centers have reported similar growth records. Indeed, every month we receive notices from the press that several hundred new call centers are being announced here in the U.S.

To the extent that the call center today is playing a vital role in the growth of every company in the world,

customer service, CRM, customer retention and assorted similar functions. In plain English, there is no other department in any company that is more important than this powerful, revenue-generating department known as contact center and/or CRM center.

Having said all that, let us look at specifically why the industry continues to grow:

1. **The vital service.** Call centers provide such a vital, revenue-generating function that it makes them indispensable. As I have stated many times in these editorials, every company is a call center.

2. **Continued innovation.** Our industry has been blessed with a tremendous amount of innovative, savvy and visionary executives. As the industry changes, they will also reinvent themselves. For example, because of those innovators coming up with IP communications technology, home agent programs, host-

**In plain English, there is no other department in any company that is more important than this powerful, revenue-generating department known as contact center and/or CRM center.**

it seems to me like the growth prospects for our industry will never change. Simply because no company can exist without sales leads, sales efforts, cross-selling, credit collection, fund raising,



ing, advanced speech technology, etc., significant advancement in quality, capability and cost reduction has been achieved to keep call centers more and more profitable.

3. **Technological advancements.** As mentioned in the December 2006 "Publishers Outlook," technological advancements have played a major role in keeping call centers state-of-the-art so they are continually profitable. Indeed, early adopters have been the greatest beneficiary of the new technologies.

### Industry Survey Results

For the purpose of this editorial, we have contacted several leading industry executives and conducted a survey in which we have requested them to share their views regarding the current status as well as the future trends for the call center industry. I am pleased to announce that many of these executives have responded tremendously by providing insightful vision and actionable suggestions about current and future contact centers.

We will now share with you some of the comments made by various executives from many of the leading technology and services providers to the contact center, CRM and teleservices industries.

The following individuals contributed answers to our survey questions:

- Dudley Larus, VP Global Marketing, Amcat ([news](#) - [alert](#)) (<http://www.amcat.com>)
- Ralph Breslauer, Executive VP of Sales and Marketing, Aspect Software ([news](#) - [alert](#)) (<http://www.aspect.com>)
- Nathan Stearns, VP Business Solutions, IEX ([news](#) - [alert](#)) (<http://www.iex.com>)
- Steve Brubaker, Senior VP of Corporate Affairs, InfoCision Management Corp. ([news](#) - [alert](#)) (<http://www.infocision.com>)
- Charles Ansley, President & CEO; Keith Roller, VP of Development; Bob Brittan, Director of Product Marketing, Symon ([news](#) - [alert](#)) (<http://www.symon.com>)
- Joseph A. Staples, Senior VP of Worldwide Marketing, Interactive Intelligence, ([news](#) - [alert](#))

(<http://www.inin.com>)

- Nancy Treaster, Senior VP of Global Marketing, Witness Systems ([news](#) - [alert](#)) (<http://witness.com>)

Nadji Tehrani: *Can you offer a short opinion on the current status of the call center/CRM and teleservices industries?*

Dudley Larus, Amcat: We are in a transitional time. Some companies really get it and are linking success, growth and revenue with providing a better customer experience. Still others are stuck measuring the wrong KPIs (key performance indicators) that are tied only to cost reduction. Until organizations begin to measure the right elements such as first-call resolution, we will continue to have poor service and the contact center industry will keep its lackluster reputation with consumers.

For companies that "get it," new technologies and new ways of thinking are allowing visionary companies to link increased revenues, contact center efficiencies and business growth with a focus on the customer. These companies are directly linking success with their ability to attract and retain customers. And, they are finding they can come to their technology suppliers and paint a picture they require for successful customer interaction, and we are able to meet that vision cost-effectively. Mid-sized organizations can provide their customers all the services that only the Fortune 1000 could provide in the past.

The trends today are extremely positive, with CRM being viewed as a companywide process and CIM, or customer interaction management, finally coming together as part of a unified corporate process to serve customers and grow the business. The leveraging and sharing data between applications is becoming a reality and benefiting the consumer.

It also seems some organizations are stuck still measuring the KPIs of a past era, such as average talk time. While there is talk about customer focus (finally), with so many changes happening in technology, it's difficult for consumers of contact center technology to understand what their options are, what's real and what it all costs. We at

Amcat think it is possible to retain the objective of driving revenue and reducing costs while improving the customer experience.

Nathan Stearns, IEX: There are still a lot of mergers and acquisitions going on, which poses a lot of questions in the minds of customers. Therefore, it is up to companies like IEX to lead them through the consolidation and assure them that the industry is still providing them with what they need.

There is a lot of focus on performance management. However, if you look at the current state of the industry, everyone is still looking for ways to reduce costs. For example, one of the main reasons companies are looking at adopting work-at-home programs is for the associated cost savings. In fact, oftentimes, contact centers will risk taking a hit on effectiveness in order to reduce operating costs by using at-home agents. The same can be said of outsourcing. If the center goes with an outsourcer, the center will be more efficient but not necessarily more effective because the in-house center is losing a lot of control. The outbound environment is no different. Why are outbound centers adopting workforce management? To be more efficient. They want to blend inbound and outbound calls, which is great from a dollars and cents perspective. However, there is still a great chance that quality will be jeopardized when agents are trying to handle both types of calls.

So everyone is talking about effectiveness, but most of the energy, time and effort are still focused on efficiency. As vendors, we need to help customers find ways to gain maximum efficiency and also increase effectiveness.

Steve Brubaker, InfoCision: The call center industry is experiencing a resurgence after years of new federal regulations. There seems to be an overall positive momentum as companies are expanding and opening new centers. At InfoCision, we have experienced significant growth in all six divisions, which tells us the industry is strong across all market segments



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**Charles Ansley, Keith Roller and Bob Brittan, Symon:** The call center market is stable with low growth rates in North America and EMEA. PAC RIM is maturing with some unexpected feedback from consumers.

Teleservices are encountering new barriers, especially in the outbound segment and do-not-call legislation. Marketers have been saddled with obtrusive legislation that does not allow customer service professionals to call customers directly. Self-service solutions, by their very nature, attract customer-driven interaction, presenting an excellent business case to cross-sell and upsell various offerings. The growth in Web-based self-service solutions and the highly mature IVR solutions make them good channels for campaigns and other marketing initiatives.

Relative to CRM, as telemarketing becomes a less effective means to communicate, the overload in e-mail reduces the effectiveness of e-mail campaigns, the trend towards out-of-home marketing becomes more important and the ability to communicate effectively through new marketing channels becomes important. In particular, mobile marketing and digital signage need to be considered to complement the traditional marketing channels.

**Joseph A. Staples, Interactive Intelligence:** With the ongoing convergence of communication technologies, call centers, CRM companies and teleservices firms are increasingly differentiating themselves by using adjunct applications in new and creative ways to more proactively interact with customers, such as "pushing" voice-based automated customer satisfaction surveys via outbound dialers with IVR front-ends, or blasting personalized e-mail notifications via the consumer's device of choice, including computers, PDAs and cell phones.

As communications increasingly merge with IT infrastructure, these industries are also focusing more on business process integration, which extends beyond the customer service group and into the entire enterprise, further promoting the idea of the "intelligent contact center" based on software

suite architecture.

**Nancy Treaster, Witness Systems:** Most organizations are largely focused on growth, which means a concentration on acquiring new customers and doing more business with existing customers. Since many organizations struggle with how to differentiate their products from the competition, efficient and effective customer service delivery is the last battleground. This challenge has thrust customer centricity into the forefront of thinking among executives across industries.

Customer centricity drives organizations to focus on the customer experience; however, stakeholders demand the organization do this in a responsible manner, protecting the bottom line. The drive for efficiency and effectiveness is having a positive impact on the contact center industry as well as vendors involved with CRM. The teleservices industry, as practiced in cost management, is enjoying higher growth rates based on their ability to deliver customer satisfaction and results. A key technology driver is voice over IP, which is enabling the realization of more virtual enterprise operational models designed to deliver the best customer experience at the lowest expense.

**Nadji Tehrani: *What/where are growth prospects for 2007 — specifically in what areas?***

**Dudley Larus, Amcat:** We see a bright future for unified applications that provide a 360-degree view of customer data and customer interactions, thus providing a better service experience along with reduced costs and better results. The up trend will continue for technologies that turn information into usable insight such as workforce optimization. Also, the trend for customer interaction software to become more integrated with corporate CRM processes will continue.

**Nathan Stearns, IEX:** In 2007, the biggest growth prospect will be migration to non-traditional environments — work-at-home programs, hosted solutions, outsourcing, etc. — and the

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deployment of agent empowerment and performance management tools as well as other initiatives that help transform the contact center into a strategic resource. From a workforce management standpoint, that means new tools for forecasting and scheduling remote agents, outbound workforce management, tools that improve communication between in-house and outsourced operations and, of course, delivering self-service and performance management tools.

**Steve Brubaker, InfoCision:** Growth opportunities are abundant for companies providing excellent customer service. Consumers are tired of poor quality — they don't like speaking to someone who doesn't speak their language clearly, they don't like being put on hold for long periods of time, and they don't like not getting the answer they need on the first call.

**Charles Ansley, Keith Roller and Bob Brittan, Symon:** There will be renewed interest in reporting products (real-time, historical) that can supply additional insight through analytics. Symon has also seen a movement from LED wallboards to a mixture of wallboards and LCD/plasma displays that offer performance and productivity management as well as inform and educate agents and other employees. We also see growth for distance learning.

**Joseph A. Staples, Interactive Intelligence:** Collections, rapid response to Internet-generated leads and mobile/remote workforce.

**Nancy Treaster, Witness Systems:** Corporate strategies are continually seeking information surrounding the successful use of remote agents. It's an approach they hope will provide more part-time scheduling, which allows them to deliver high service levels during peak times without overspending. In addition, the increased use of remote agents provides access to a new talent pool in different cities and locations, and also allows organizations to leverage new knowledge workers and experts in certain fields that

are not interested in full-time work.

**Nadji Tehrani, What do you see as industry trends beyond 2007?**

**Dudley Larus, Amcat:** In the mid-sized space, we see real interest in leveraging customer data and reducing the silos of data that exist in almost every organization. Most companies have a strong desire to eliminate data silos that inhibit customer service as well as good business practices. It's going to take a while to overhaul all of these antiquated data architectures and configurations and turn them into systems that have a common data structure that many applications can leverage successfully for the benefit of the business as well as the customer.

**Ralph Breslauer, Aspect:** For 2007 and beyond, successful contact centers will be cognizant of five crucial trends that impact the industry:

- **Performance optimization.** Contact centers will continue to look for ways to get more out of their existing environments by analyzing the results of their contact center and optimizing their workforce and interactions through quality management, workforce management, performance management and analytic tools.

- **Unified solutions.** Contact centers are looking for ways to reduce complexity and integrations, ultimately maximizing productivity and improving customer satisfaction. A unified solution will be a significant step toward addressing these needs.

- **Internet protocol.** Contact centers are searching for ways to leverage existing systems while also taking advantage of IP (often SIP) for cost-savings and flexibility.

- **Open-source IP-PBX.** With fully-supported open-source IP-PBX packages on the market, we'll see more businesses exploring this cost-effective and flexible solution.

- **APAC.** The emerging APAC (Asia-Pacific) contact center industry continues to grow as an exciting market. While outsourcing is still important, the emergence of the domestic market in India and China is also driving significant growth.

**Nathan Stearns, IEX:** Contact centers

are becoming a more integral part of a company's culture and success. While a lot of call centers are still looked at as cost centers and the focus is on efficiency, we're starting to see a shift. More and more, contact centers are beginning to be viewed as a strategic asset in the company's quest to gain market share.

**Steve Brubaker, InfoCision:**

Technology continues to drive the call center industry — it is the building block for developing a competitive advantage. However, technology can only enhance the quality product that the "people on the phone" in our business deliver.

**Charles Ansley, Keith Roller and Bob Brittan, Symon:** The great momentum in IP telephony and significant interest in IP contact centers is creating the platform for IP-based self-service solutions to gain traction.

**Joseph A. Staples, Interactive Intelligence:** Continued rapid transition to VoIP, continued moving away from point solutions toward suite solutions, and consolidation of mobile endpoints and use of cell phones as office phones.

**Nancy Treaster, Witness Systems:** The first is the need to implement a strong customer recovery strategy. This means providing customers with an opportunity to share feedback as soon as their interaction with a service representative is completed. When a rating for products, processes or people comes in low, a designated group of contact center staff needs to be alerted immediately. Studies show that if a less-than-satisfactory experience is addressed instantly, the respective customer tends to be more loyal than if they never had a problem in the first place.

It is critical to work at cross-channel consistency across the enterprise. In a banking scenario, for example, it is irrational to measure caller wait times in seconds in the contact center but have no idea what the customer experience is in the branch office. The way to avoid inconsistencies across the channels is to

employ the same processes and measures for all customer touch points.

Performance management provides a series of metrics to ensure that the contact center improves productivity and meets its departmental objectives. It also helps measure how the contact center goals are affecting the overall company objectives. This is becoming more critical to organizations, as it offers automated data collection and reporting technology that frees up contact center managers to work toward achieving goals.

Streamlining processes is another trend that will extend beyond 2007. Many processes currently used by companies are derived from an inside-out view. As a result, they have become stumbling blocks for the agents delivering service and for the customer trying to do business with the organization. These things need to be identified and changed.

Many organizations seek a reduced total cost of ownership from their technology purchases. We are noticing that companies are starting to consolidate their vendor relationships and leverage unified platforms to get more value and to reduce the costs associated with buying from and managing a variety of providers.

IP telephony has been on the "growing trend" list for many years, but just recently it has truly started to take off and companies are already experiencing the benefits associated with having a more flexible network. In fact, a recent study from Yankee Group claims that 38 percent of those surveyed have already deployed or plan to deploy IP telephony within the next 12 months.

The industry is driving customer data security to safeguard transactions and information from identity theft and other security-related concerns. This will continue to be a growing concern and something that many companies will begin to visit in the upcoming years.

**Nadji Tehrani:** *The industry's greatest needs...current and in the future?*

**Dudley Larus, Amcat:** We still need company leadership within all size companies to realize their bottom line is closely connected with the manner in which they treat customers — that the choice is not

between customer service and revenue or cost savings. Both can be achieved with the right vision and technologies.

**Nathan Stearns, IEX:** Tools that can address agent attrition are one of the industry's greatest needs. In some contact centers, it's still over 100 percent per year. Just the cost of recruiting and training and managing those employees is astronomical. To that end, agent empowerment tools are key to success. IEX has spent a lot of time looking to see what the company can do to help the agents do their jobs a lot better, from their desktop and without intervention by supervisors.

To promote agent empowerment, IEX offers a variety of task automation tools that free agents to be more effective and time-efficient while giving them a sense of power over their lives. They can go in and ask for time off at their desktops and immediately get an answer without a supervisor manually intervening.

Agent empowerment is just a small piece of the bigger performance management picture. This includes giving contact center managers the information they need to analyze what's going on and effectively change agent behavior to provide valuable customer service.

**Charles Ansley, Keith Roller and Bob Brittan, Symon:** Agent retention and motivation. Even though Web-based self-service solutions are configured to address customer queries electronically, there will always be a segment of customers who prefer human interface or agent interaction in resolving their queries. Trained agents and personnel that can find a career path in call centers are essential.

Additionally, systems are required that can motivate agents through visual display of their activity and performance of the entire agent team.

**Joseph A. Staples, Interactive Intelligence:** The industry's greatest need is the continued adoption of standards that help promote more flexible communications options.

**Nancy Treaster, Witness Systems:** The industry's greatest need is to better manage a customer service network. In addition to leveraging resources to reduce

costs, this involves taking advantage of the knowledge accessible through direct customer feedback and other departments across the enterprise. Focusing on customer centricity means companies must build synergies inside the customer service network to break down silos between functions in the contact center and across the service delivery channel. At that point, an organization can find balance between effectiveness and efficiency to ensure service levels remain strong, consistent and focused on corporate objectives and goals.

**Nadji Tehrani:** *What about legislative prospects in the near future? Are there any that will affect the call center industry?*

**Dudley Larus, Amcat:** To fend off legislation in the inbound and IVR areas, organizations will need to join efforts to self-regulate and implement best practices, providing easier access to live agents in the right circumstances.

**Steve Brubaker, InfoCision:** New legislation and regulations are always just around the corner. The call center industry is an easy target for politicians who want to get their names and faces in the news. We must be vigilant by offering quality calls and service so complaints are minimized.

**Joseph A. Staples, Interactive Intelligence:** In terms of legislation, we'll see the FTC looking to limit and/or ban the use of pre-recorded messages in telemarketing.

**Nancy Treaster, Witness Systems:** The trend to protect customer information will continue. One example of this is the PCI initiative implemented by the credit card industry. Call centers will need to pay close attention to these types of initiatives and ensure that they have the processes and tools in place to comply.

**NT:** Thank you all very much for your time.

As always, I welcome your comments. Please e-mail them to me at [ntehrani@tmcnet.com](mailto:ntehrani@tmcnet.com). **CIS**



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A White Paper By Envox Worldwide

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### Meeting Today's Challenges With Unified Communications

A White Paper By Siemens Communications

*Unified communications accelerates business by reducing communications friction, allowing seamless collaboration across boundaries of time and distance. These capabilities include incorporating real-time communications into business processes and workflows, and enables identifying the right person with the right skills at the right time, assuring first contact resolution. This presence-powered communication supports further process optimization, and thus cost saving, throughout the organization giving businesses a competitive edge. Read the white paper at <http://www.tmcnet.com/432.1>*

### Seven Questions Most CRM Vendors Are Afraid You'll Ask

A White Paper By Onyx Software

*There are two ways to evaluate CRM applications. Both the feature-checklist approach and problem-solving approach, along with their results, are poles apart, but the intent is the same. The goal is to select a platform for improving the way you do business, driving profits and reducing risks, while minimizing IT resource requirements. Analyzing applications for their problem-solving acumen is a way of preparing for the future. This white paper explains that process and provides a new kind of problem-focused checklist that examines seven areas that are common elements of successful customer management projects. Read the white paper at <http://www.tmcnet.com/433.1>*

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By: Rich Tehrani,  
Group Publisher, Group Editor-in-Chief,  
Technology Marketing Corporation

# VoIP Changes The Lives Of Disabled Veterans

Today, many people know how voice over Internet protocol (VoIP) has changed lives and how it has allowed communications to take place among individuals who previously could not afford to communicate. Voice over IP is obviously a “disruptive technology,” but at the same time it has changed the world in many ways. We know about cost savings and how service provider business models have evolved over the years, but we have not seen enough media attention focused on how **VoIP (define - news - alert)** is changing lives by enabling people who were previously unemployable to find jobs.

There are thousands of disabled veterans in the country, and these distinguished Americans are often unable to contribute to the workforce because they aren't able to commute to a job.

In May of last year, I wrote about how call centers are changing lives (see <http://www.tmcnet.com/435.1>) and specifically about the excellent work Ken Smith is doing as program manager at the Military Order of the Purple Heart (MOPH).

Here is a refresher from the above article:

- In November of 2005, the Military Order of the Purple Heart Service Foundation (MOPHSF) commenced its first class of 15 disabled, combat-wounded veterans in an online call center training program called Veterans Business Training Center, or VBTC.

- This training was 15 weeks, or 600 hours long, and focused on the Five9 (<http://www.five9.com>) dialing platform. As it turns out, Five9 gave this agency very favorable rates for their service and should be commended for doing so.

- The foundation allowed the trainees to use this platform to call prospect donors on behalf of the Foundation to solicit contributions in Virginia. The program was a huge success. It has now

expanded into 25 states, and the VBTC is accepting applications online. Visit [http://www.purpleheartfoundation.org/job\\_training.asp](http://www.purpleheartfoundation.org/job_training.asp) for more details.

VoIP has allowed organizations to do amazing things, such as locate call centers around the world, but the technology continues to evolve, and one of the latest trends in the call center market is “homeshoring” or hiring agents to work from their homes. When you couple this concept with agents who are restricted to working exclusively from their homes, the result is an agent pool of workers who are grateful to work and employers that are happy to have access to a mature and skilled labor pool that was once unattainable. Most important, companies are now able to hire more disabled U.S. veterans, the people who have made huge personal sacrifices for their country. Hiring these veterans allows companies to bring a highly skilled agent online and at the same time provides work to an individual who fought for his or her country so we can all enjoy the freedoms we have today.

The VBTC is doing an amazing job, and the veterans who have gone through the program are in tremendous demand. In addition, three to four thousand more veterans are waiting to enter the training program. The 15-week program

consists of virtual classroom training, supervisor training, reporting and resume writing. (Readers can visit [http://www.purpleheartfoundation.org/raining\\_syllabus.asp](http://www.purpleheartfoundation.org/raining_syllabus.asp) to view the course syllabus.)

Web site visitors can read how disabled veterans feel about this program by reading a few of the messages left on the message board of the MOPH, including the following:

“The MOPH Business Center has taken my abilities as a wounded soldier to convince me that there are soldiers caring for us who have served our country and given us another chance to succeed in a field that I knew nothing about (computers). The Purple Heart restored my confidence in soldiers helping soldiers.”

“My name is Ron. I would like to share with you the wonderful things that the Purple Heart Foundation has done for me. Over the past couple of months, I have acquired many skills that will benefit me in the private sector. The time is now if you are looking to get a leg up in the workforce. The Business Program at the foundation is the answer. You will be glad to enroll in the program. Don't wait, the opportunity is just a click away.”

Program graduates are finding jobs paying between \$14 to \$22 per hour. While they are obviously competing with call center agents from other countries, to many companies, there seems to exist a greater amount of trust with a disabled veteran than when working with agents in foreign countries. In situations where identity theft or credit card fraud is a potential problem, disabled veterans have a higher likelihood of securing work when up against lower-



cost offshore labor.

On September 11, 2006, the Foundation began a new class with the name "Alpha 9/11." This class was dedicated to the 173 veterans who lost their lives in the Pentagon attack five years ago. It graduated in mid-January. At every graduation there is a commencement speaker. Many past speakers have been Secretaries of Defense, Secretaries of State and retired generals. Surprisingly, I was asked to keynote for this graduating class, and I am humbled by the request and looking forward to the honor. There are few times in my life when my professional career has evoked such feelings of happiness, satisfaction and personal pride. The general measure of success in business is growing the top and bottom line while thrashing your competition (at least that is *my* definition). It is great when you can do all of this while helping legions (pun not intended) of others in the process.

I am told that TMCnet and many of TMC's publications have become vital resources for what the Foundation is doing. I am proud to support disabled veterans and I thank them for their service to our country. I am equally proud to have been involved in the IP communications industry as it has changed the lives of so many and continues to provide opportunities to all.

We are also very excited to announce that Ken and many of the disabled veterans will be exhibiting at the upcoming INTERNET TELEPHONY Conference & EXPO (<http://www.itexpo.com>) in Ft. Lauderdale. They tell me they will have some amazing military ceremonial displays worth coming to the show to see. They will also be giving out military dog tags which double as their business cards.

To those of you in the communications market: here is a chance to see how the innovations of IP communications have improved the lives of disabled veterans around the world. I encourage you to come to the show, January 23rd to 27th (the exhibit hall will be open January 24th to 27th) and say "hello" to the fine people of the Military Order of The Purple Heart and give them your thanks and support. **CIS**

## Who Is CRM Player Infor?

I didn't think it was possible for a \$2 billion dollar software company to exist without me knowing about it, but [Infor \(news - alert\)](#) is just such a company. Infor focuses on enterprise applications such as CRM and more, and competes with the likes of SAP and Oracle. The company has grown revenue by 300 percent in the past year, and has had a string of acquisitions as of late. The result is a company with 70,000 application customers. I decided it would make sense to schedule an interview with the company's Global Director, CRM Product Marketing, Patric Timmermans, to get a better idea about what the company is and where it's going.

**RT: Before we discuss CRM, who is Infor and what are you doing different in the market?**

**PT:** Infor recognizes there has been a large gap in the enterprise software market. There are players trying to bring their heavy solutions downmarket and small companies bringing their niche solutions upmarket. Infor fills this void by providing customers of all sizes, through innovation and acquisition, with proven, business-specific solutions with experience built in, backed by a vendor with global scale and stability. Our more than 70,000 customers turn to Infor to solve their needs in CRM, supply chain, ERP, performance management, enterprise asset management and more.

**RT: Tell me about Infor CRM.**

**PT:** Our legacy in CRM comes from Epiphany as well as other best-of-breed CRM providers we acquired. Infor CRM is a strategic set of solutions that enables companies to develop and maintain a consistent and continuous dialog with their customers, and brings all channels and sources together to create one experience. To be effective, a company's CRM solution must integrate marketing, sales and service to provide a 360-degree view of the customer. Comprehensive CRM can provide real-time information about the customer and match that to the best possible service or product or next best action.

**RT: What should customers take into consideration when selecting a CRM provider?**

**PT:** When a CRM system is deployed, it will be there for a long time. With new applications being introduced every year, your CRM provider has to have the ability to integrate with any service you want to offer. This creates a mashup within CRM, and the real estate on an agent's screen becomes a combination of several applications and capabilities. The CRM system must pull all of this information together, regardless of whether it comes from legacy or third-party applications. Companies should look for CRM solutions that are agnostic to other applications in the enterprise infrastructure and are not reliant on a specific middleware platform.

**RT: What does the future of CRM look like?**

**PT:** Marketing to the consumer on their time. This is a shift from the current concept in which companies market solutions when it is convenient to them, not the customer. CRM is

evolving towards utilizing real-time information from across the enterprise to provide offers to consumers when their attention is at its greatest. For example, using a customer's calling history to offer more services when they visit the Web site to pay their bill or call the contact center. Our customers have seen dramatic increases in campaign effectiveness with this approach.

**RT: What will be the key milestones for Infor CRM in the next 12 to 18 months?**

**PT:** You will see additional functionality in our CRM solutions for b-to-b, b-to-c, and b-to-b-to-c environments as we strive to enrich the customer experience. In addition, we will continue to extend our solutions' capabilities in our key verticals such as communications, financial services, insurance, retail, hospitality, travel and leisure, and manufacturing. Infor CRM will continue to evolve and interoperate with new applications and services.

**RT: What do you predict the evolution of CRM to be over the next 10 years?**

**PT:** I see CRM evolving toward the concept of intelligent customer dialog to create one experience. Companies realize that consumers want more than exceptional service or product, they want the whole experience the brand they are buying promises, and to connect with the vision of that company. Products are so similar from one brand to another, so companies are competing on customer service. This too will become very similar and the shift will be toward the customer experience and feeling a part of the brand and company. CRM will provide the tools to help companies move beyond simple sales tactics and create this experience.

**RT: In what industries do you see the most momentum with CRM?**

**PT:** There are three industries I see as leading: communications, retail banking and insurance. All three have a strong customer vision with set strategic goals for how CRM can help them increase revenue, not just create efficiencies. The retail sector is also surging, and I see it as a good growth market for CRM. Interestingly, we also see manufacturers developing a strategy of supporting the whole supply chain from manufacturing through retail to the end customer in a b-to-b-to-c model.

**RT: What is the key ingredient many companies are missing from their CRM strategy?**

**PT:** I believe many companies overlook the ability to gain insight into the customer and act upon it. CRM is a strategic resource to turn contact centers into profit centers by using real-time analytics to reduce costs while driving new revenue by creating a customized customer experience at every touch point. This may change the way performance is measured. For example, one of our retail banking customers changed their metrics for success. Their call center agents were previously measured on call handling times and speed of entry, but now they are measured on products per household, deposit growth goals and customer satisfaction.

**RT: Thank you for your time.**

Mr. Tehrani:

We received a copy of your November *Customer Interaction Solutions* magazine, and I read your Publisher's Outlook, "The 20 Habits Of Lousy Marketers" (<http://www.tmcnet.com/414.1>).

I suspect that to some extent, you are preaching to the choir here. I agree with most everything you say. The problem is not "what" but "how."

In our case, our sales efforts have been a struggle ever since 9/11.

At one time, we used outside advertising sales reps. That worked for many years, but when the recession hit, they put in less effort and our sales dropped.

We then moved to primarily an in-house staff. We have two problems with an in-house staff. The first problem is that since we are in a rural area, it is difficult to find experienced sales people. It is impossible to find experienced media sales people locally. Because of federal and state pay requirements, we almost have to pay new people minimum wage. What often seems to happen is that instead of improving their sales skills, some people will accept the minimum wage, do virtual nothing, and again we get no sales.

The big question is how do you get people to actually pick up the phone and make calls?

- Larry Plachno, *National Bus Trader, Bus Tours Magazine*

Mr. Tehrani:

I enjoyed your article "The 20 Habits Of Lousy Marketers" (<http://www.tmcnet.com/414.1>), but I hoped you would indulge a couple of questions.

1. Our charity has historically flown under the radar screen and been quite successful. Certainly we have media relationships and conduct PR, but we found our revenue was driven by marketing communications, with PR being an add-on. Recently, we have been conducting research to determine if there is a correlation between PR results and revenue. As a nonprofit, our rules might vary, but it is my feeling that, in many ways, the for-profit world is starting to emulate the non-profit fundraising world,



particularly given the fragmented media market: that is, they are target marketing to develop revenue. My question then is this: why do you think media relationships are essential to successful marketing?

2. Do you have any reading suggestions for nonprofit marketing strategies versus for-profit — or do the same rules apply?

Thanks again. I enjoy the publication and routinely copy articles to share with staff and colleagues.

- George Shadrouti, *Vice President of Communications, ALSAC/St. Jude*

Nadji Tehrani replies:

Mr. Shadrouti:

If your present marketing effort is working for you, then there is no reason to change. Also, media relations are vital to the growth of any organization.

Sincerely,

Nadji Tehrani

*Executive Group Publisher, Editor-in-Chief*







# 2007 Recommended Vendor List The TMC Seal Of Approval

The following Recommended Vendors have distinguished themselves by winning one or more of TMC's coveted awards, earning them the TMC Seal of Approval.

## CRM/Contact Center Software/Hardware

### Amcat



### Co-Nexus, Inc.



### etalk



### IEX Corporation



### Interactive Intelligence



### Oracle



### Left Bank Solutions



### NICE Systems



### Nortel Networks



### Sennheiser Electronic Corp.



### SER Solutions Inc.



### Spectrum Corporation



### Symon



### Stratasoft, Inc.



### Teleformix



### Verint Systems



### Witness Systems



## Teleservices Outsourcing

### West Corporation



### InfoCision Management Corporation



### Advanced Data-Comm, Inc.





By Tracey E. Schelmetic, Editorial Director, Customer Inter@ction Solutions

## Avidian Technologies Announces Prophet 4.0

**Avidian Technologies** ([news - alert](#)) recently announced the launch of Prophet 4.0, the newest version of its Outlook-based Contact Management and Sales CRM solution. Along with improved usability and more advanced contact management features, Prophet 4.0 extends the platform to Windows Mobile devices and Terminal Servers. Other features new to Prophet 4.0 include adoption of Microsoft SQL 2005 Express database for improved speed and .NET 2.0 technology to allow deeper integration with Outlook and better overall performance. The Prophet 4.0 product suite can be purchased as Prophet Personal, Prophet Personal Pro, Prophet Professional Server, Prophet Enterprise Client and Prophet Enterprise Server. Extensions of Prophet 4.0 include Prophet for Palm, Prophet for Windows Mobile and Prophet for Pocket PC.

<http://www.avidian.com>

## IDC Studies Expansion Of Homeshoring

**IDC**, ([news - alert](#)) provider of market intelligence and advisory services for the information technology, telecommunications and consumer technology markets, has released a study on the expanded scope of the use of "homeshoring," a home-based customer service model. The study reveals a significant migration of the types of contact services companies are willing and ready to outsource. Homeshoring, a model which is changing customer management outsourcing, is the use of home-based agents to field various types of customer care inquiries. With an estimated four million people working in call centers in the U.S., companies are turning to a home-based model to address challenges such as the need for better agent quality, high turnover and the seasonal nature of many industries. There are an estimated 139,000 home-based phone representatives in the U.S., and IDC predicts that number could exceed 300,000 by 2010. The new emphasis in customer care, IDC further predicts, will be on meeting specific metrics while still providing high customer satisfaction.

<http://www.idc.com>

## West Corporation Partners With Disabled Veterans Group To Provide Jobs

**West Corporation**, ([quote - news - alert](#)) provider of outsourced communication solutions, has announced a work at home partnership with **CORA** (Creating Opportunities by Recognizing Abilities), a not-for-profit organization specializing in providing career opportunities for disabled American veterans and their families. West's West at Home program will launch the partnership with CORA via a pilot program. The pilot program will allow disabled veterans to operate as certified customer service representatives through the West at Home platform. The work at home model developed by West currently has 262 disabled veterans working as contracted agents, and gives veterans the freedom to prepare their own schedules and work from the comfort of their homes. The work at home pilot model being used by CORA and West is a scalable design and has the ability to provide career opportunities to veterans who may not have other employment options available.

<http://www.west.com>

## MaraStar's ToonUps Available Globally

**MaraStar Communications**, ([news - alert](#)) the creators of ToonUps, 30- to 60-second customizable animations designed to deliver company messages and training with an element of fun, recently introduced a Web portal for international customers. With this new technology, customers around the world can access ToonUps from any computer with Internet access. Customers outside the U.S. and Canada can now simply download the ToonUp Animations directly from the MaraStar Web portal for use in PowerPoint Presentations, e-mails, intranets and learning management systems. Customers will also have the option to send links to the animations directly to employees through e-mail. The ToonUp product operates the same through the Web portal as for any other customer, with all the same features. Although the ToonUps animations are available in English only, there is space below each animation for additional copy. The ToonFrame animations consist of speech and thought bubbles only, with no character voices, making them easy to customize with other languages.

<http://www.marastar.com>

## Keynote Launches Online Customer Experience Research Solution

**Keynote** ([news - alert](#)) has announced the release of Keynote WebEffective 5.0, an upgraded version of its on-demand customer experience/UX solution designed to help companies improve their Web site effectiveness and online business performance by conducting in-depth, online customer experience research studies. The solution enables Fortune 1000 companies and other e-businesses, as well as interactive design agencies, to examine and improve site effectiveness and online business performance in an array of strategic business areas, including sales effectiveness, brand positioning, customer satisfaction and customer acquisition. Keynote WebEffective is a flexible research tool that captures both the attitudes and behavior of customers and prospective customers as they interact with a company's Web site or with competitor sites.

<http://www.keynote.com>

## RADVISION Chosen By Cestel To Deliver Video-Enhanced Services And Contact Centers

**RADVISION LTD.**, ([news - alert](#)) a provider of voice and video network infrastructure and developer tools for unified visual communications over IP, 3G and emerging next-generation networks, has announced that **CESTEL**, ([news - alert](#)) a major Spanish system integrator for the media and call center industry, has chosen RADVISION's Interactive Video Platform to incorporate advanced video capabilities to its contact center and IVR solutions. RADVISION's development platform offers an intuitive, smooth migration path from audio-based contact centers and IVR systems to video-enhanced solutions. The IMS-ready Interactive Video Platform enables rapid development and deployment of multiple video applications that can be run concurrently. This allows CESTEL to leverage a one-time infrastructure investment and enables delivery of carrier-class solutions that enhance the consumer experience.

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

<http://www.cestel.es>

## MySQL Database Enables Tellme To Reduce Costs And Maintain Availability

MySQL AB has announced that **Tellme Networks, Inc.** ([news](#) - [alert](#)) is benefiting from reduced database-related costs by using the open- source MySQL database. Tellme employs MySQL to power enterprise and carrier applications on the world's largest open platform for the phone. Tellme powers voice-based phone searches used by more than 35 million people every month. Like many fast-growing "Web 2.0" Internet businesses, Tellme's data load has scaled with the rapid growth in its traffic: from 500 million calls in 2004 to nearly 2 billion calls in 2006. Tellme uses MySQL in three distinct ways. First, the company relies on MySQL as a core technology in its distributed data cluster. In addition to handling more than 2.25 terabytes per week, this system processes logging data, performance tuning data, recognition statistics and billing. Tellme's second use of MySQL is as a fast, highly available data store for applications. The system is geographically redundant and can provide personalization data in milliseconds. Tellme also uses MySQL as a general data warehouse to reduce costs for several of its business efforts.

<http://www.mysql.com>

## Nortel To Open \$38M Customer Service Center In Mexico City

By Johanne Torres, TMCnet Contributing Editor

In a move to expand its operations in Latin America, **Nortel** ([quote](#) - [news](#) - [alert](#)) will invest and spend US\$38 million in a new customer service center in Mexico City. The company's new facility, dubbed the Customer Service Center of Excellence (CoE), will employ more than 300 professionals and will service providers across North America, Europe, the Caribbean and Latin America.

The new Customer Service CoE will provide assistance regarding next-generation network (NGN) engineering, VoIP solutions, multimedia, databases and radio-frequency technologies for global service providers and carriers. The team will support order management and network engineering, as well as field operations such as delivery and application of remote software integration. The company has plans to recruit recent grads from both public and private Mexican universities to staff the CoE and should have 300 employees working at the Customer Service CoE by June 2007.

"Mexico offers a great environment, with excellent professionals, universities and a diverse, well-established infrastructure in a centralized location in the Americas," said Martha Bejar, president, Caribbean and Latin America, Nortel, in a statement released on Monday. "We are very glad to continue contributing to this country by offering professional opportunities to over 300 individuals who will provide the kind of high-quality service we require for this new CoE."

Nortel's new Customer Service CoE is an addition to the VoIP CoE in Mexico. The VoIP CoE was established in Mexico over a year ago.

<http://www.nortel.com>

## Proxy Networks Introduces New Software Developer Kit

**Proxy Networks**, ([news](#) - [alert](#)) a provider of reliable, low-cost remote control and screen recording products for remote support, training, network management, compliance and collaboration, recently announced the general availability of Software Developer Kit (SDK) Version 5.10. This new release enables Proxy solution partners to integrate the latest features from Proxy Remote Control 5.10 and Remote Gateway Server 5.10 into their call center and help desk offerings. Proxy Remote Control 5.10 and Proxy Gateway Server 5.10, which were introduced earlier this fall, offer new features and enhancements to Proxy's remote control products that are installed on several million PCs and servers around the world. New features available in the SDK 5.10 include real-time screen recording and playback, centralized access and security management, enhanced reporting and multi-monitor support

<http://www.proxynetworks.com>

CallCenterComics.com

By Ozzie Fonesca

WE HAVE REACHED A 0% ABANDONMENT RATE BY HAVING THE IVR ANSWER CALLS ON THE FIRST RING, AND THEN HAVING A RECORDING OF A REP ASK THE CUSTOMER TO HOLD.



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WE FOUND THAT CUSTOMERS HANG UP WITHIN 3 MINUTES IF THEY DON'T REACH A LIVE PERSON, BUT THEY WILL HOLD INDEFINITELY WAITING FOR A REP TO COME BACK ON THE LINE



JOHN, YOU'VE BEEN ON HOLD FOR 4 HOURS. JUST CALL BACK LATER.

JUST 1 MORE MINUTE. THE LADY SAID SHE WOULD BE RIGHT BACK



©2006 By Ozzie Fonesca

## Talisma Launches Talisma CIM 8.0

**Talisma Corporation** ([news](#) - [alert](#)) has announced Talisma CIM 8.0, a solution designed to address companies' unified-channel interaction management needs. The latest edition of the offering introduces two new products, Talisma Voice and Talisma Campaign, and includes enhancements to existing channels, empowering organizations to proactively engage customers and prospects to further enhance the customer experience, improve service quality and uncover new business opportunities. Talisma Voice allows companies to offer Web site visitors instant access to a live agent using VoIP technology, providing rapid, personalized service. To use the technology, visitors simply click a button on the site to establish a voice connection with an agent. Talisma Campaign enables contact centers to facilitate a continuous customer dialog and proactively deflect inbound e-mail and telephone calls by educating, alerting and informing customers about product updates, billing notifications and profile updates. The real-time offer engine enables companies to create personalized offers to send to customers based on a customer's response to a previous campaign, the customer's profile or their current Web site activity.

<http://www.talisma.com>

## Entellium Announces Rave CRM

**Entellium** ([news](#) - [alert](#)) has announced the pre-order availability of Rave CRM, the company's new on-demand sales optimization solution geared toward helping independent sales professionals and small businesses sell more effectively. Rave CRM is a complete sales productivity solution that features a rich, visually immersive user interface powered by Sparkle, Entellium's UI platform. Rave's visual interface is a departure from limiting tab-based structure, replacing traditional tabs with a sleek, icon-driven layout. Rave incorporates features popularized in many Internet applications, such as its exclusive zoom in-zoom out timeline views, the ability to "drag and drop" to create sales activities and palettes that float around the screen to display information where it is preferred. Built on Entellium's on-demand workflow engine, Rave is a "smart client" application that leverages the power of the PC to create a rich user experience, as well as business intelligence and fast access to client information. At the same time, Rave offers all the benefits of a browser-based application, including fast deployment, Web-based data sharing, online reporting and real-time data back-up.

<http://www.entellium.com>

## GMT Unveils GMT Planet 9.5

**GMT Corp.**, ([news](#) - [alert](#)) a provider of enterprise workforce and cash optimization solutions, has announced its newest GMT Planet, version 9.5, which was created to extend the functionality of its workforce optimization system. Driven by extensive customer input, the new enhancements include an agile staffing decision support tool, support for shift bidding and tour-based scheduling, as well as a new business modeling function that enables customers to further streamline business operations, reduce costs and improve customer service throughout the enterprise. With the new features, contact centers and retail banks can respond more quickly to change and manage their staff to more effectively serve customers. New automation functions enable managers to more closely monitor staffing requirements and ensure that the right level of personnel is available at the right time to deliver a better customer experience at the lowest cost.

<http://www.gmt.com>

## SER Receives Two U.S. Patents For Audio Data Monitoring And Mining

**SER Solutions, Inc.**, ([news](#) - [alert](#)) a provider of call management and speech analytics solutions, has received two U.S. patents for methods and apparatus using speech recognition technology. The first patent is for audio data monitoring and evaluation; the second patent is for audio data analysis and data mining. SER's inventions use natural speech recognition combined with business rules to analyze customer conversations, transforming the spoken word to retrievable data. The invention enhances call monitoring by automatically evaluating conversations and initiating actionable events. The use of a computer program to automate this process makes it economically feasible to review 100 percent of recorded calls, not just a select few. This patented technology forms the foundation for SER's speech analytics solution, SERTAINTY, which performs accurate, automated evaluations of all customer interactions. SERTAINTY enables companies to unlock the information stored in call recordings to identify key trends such as an increase or decrease in customer satisfaction levels, competitive mentions and product receptivity. SERTAINTY also analyzes and scores recorded calls for overall call quality, script adherence and fraud detection.

<http://www.ser.com>

## Aspect Launches New Version Of Web Powered Agent 10.1

**Aspect Software, Inc.** ([news](#) - [alert](#)) has announced the release of Web Powered Agent 10.1, a thin-client agent desktop for Aspect Spectrum ACD, a complete inbound solution that includes robust queuing, routing, reporting, agent empowerment and modeling capabilities. Web Powered Agent is a thin-client agent desktop application that provides integrated communication for managing all customer interactions. The latest version, Web Powered Agent 10.1, includes greater agent productivity, increased scalability, improved management tools and enhanced security. It also enables the agent desktop to be customized as work tasks change, it can be viewed in various formats including as a slim toolbar, and enables supervisors to control and limit views depending on each agent's role. In addition, Web Powered Agent 10.1 includes parity with the Aspect Software Convergence agent desktop solution — removing migration barriers to the new version.

<http://www.aspect.com>

**ATTENTION VENDORS!** Send your **News** and **Product Releases** via e-mail to [cispress@tmcnet.com](mailto:cispress@tmcnet.com).

Whenever possible, please include high-resolution (minimum 300 dpi) color graphics (.BMP, .EPS, .TIF, or .JPG).



### Symon Releases Enterprise Server 9.1

**Symon Communications, Inc.**, ([news - alert](#)) a provider of real-time operational performance, productivity and communication applications, announced the release of Symon Enterprise Server (SES) 9.1 software. SES 9.1 is a robust software engine that powers Symon products for use in various markets such as digital signage, corporate communications, contact center and supply chain management. The SES 9.1 software instantly communicates to a client's preferred medium, distributing data and content to flat panel displays, televisions, wall-boards, PDAs, e-mail and the desktop. Included in SES 9.1 is the new Symon RSS Data Collector. RSS is an XML-based Web feed format that allows users to subscribe to their favorite Web sites and view the latest updated content such as stock quotes, weather forecasts, sports scores and news headlines by selecting their preferences through a simple interface. Client applications such as Symon Design Studio then use these data to create broadcast multimedia content and deliver it to digital and broadcast displays.

<http://www.symon.com>

### Chordiant Offering Fraud Detection And Lending Platform

**Chordiant Software, Inc.**, ([news - alert](#)) a provider of customer experience software and services, recently announced the release of a software application designed to empower financial institutions to automate fraud investigations and recovery processes while strengthening compliance with association rules. Chordiant Fraud Manager, created under Chordiant Mesh, increases the efficiency of investigation representatives and minimizes the impact of financial losses by helping card issuers determine the best course of action in fraud cases. Chordiant Fraud Manager evaluates data in industry-standard fraud detection systems to build cases and determine appropriate next actions. The application recommends the appropriate disposition for each transaction in a case based on industry best practices, specific card-issuer processes, the value of the customer and association rules. Each transaction can be processed as a chargeback, write-off or customer-liable. Chordiant Fraud Manager provides case management, a unified workbench, step-by-step guidance and integration with enterprise back-office and third-party systems to automate back-end processing.

<http://www.chordiant.com>

### Vertical Launches Comdial DX-120 Phone System

**Vertical Communications**, ([news - alert](#)) a provider of next-generation, IP-based phone systems and applications, has announced the availability of the Vertical Comdial DX-120 Business Communications System. The DX-120 continues the legacy of its predecessor, the DX-80 system, which has been widely adopted in numerous customer sites ranging from the private sector to state and local governments. The DX-120 system lets companies easily expand their telecommunications capacity, realize productivity gains with hundreds of built-in calling features and keep pace with operating costs as their businesses scale. The modular architecture of the DX-120 scales from a base of four CO lines, eight digital stations and four analog stations up to a 40 x 80 x 8 configuration that includes economical T1 or ISDN-PRI trunking. Both T1 and ISDN-PRI trunking options reduce phone service costs and also support up to 100 Direct Inward Dialing (DID) numbers to boost efficiency. These numbers can be assigned to any endpoint such as a fax line, company greeting, directions or hours, and hotline for improved customer service. Calls can also be completed without a live attendant. The DX-120 system also lets callers transfer incoming DID calls to pre-defined external numbers so that users are always reachable.

<http://www.vertical.com>

### ASC Releases MARATHON EVOLUTION XXL

**ASC**, ([news - alert](#)) a provider of communications recording and quality monitoring solutions for contact centers, financial institutions and public-safety and government organizations, has announced the release of MARATHON EVOLUTION XXL, a new product for high-end communications recording. It records up to 480 phone lines simultaneously. The product is specially designed for companies with numerous telephone, VoIP or security-related communications. It also offers hybrid recording for mixed VoIP and TDM environments and is compatible with other applications requiring high channel numbers. The solution comes in one rack-mountable 19-inch chassis and is scalable and expandable for future needs. Users may preserve up to 280,000 hours of recordings online and on two additional storage systems. The Linux-based solution provides security and open-source flexibility for clients in a cost-effective package.

<http://www.asc telecom.com>

### Interior Concepts Launches Completely Mobile Station

**Interior Concepts Inc.**, ([news - alert](#)) furniture provider to the call center industry, has announced the release of its Traveler mobile, battery-powered desk. This latest innovation will allow complete mobility for managers and supervisors on the call center floor. The Traveler has a built-in battery, so it fully embraces the wireless environment, and there's never a need to stay within reach of an electrical outlet. The battery is powerful enough to run a laptop for the entire work week, then recharge during the weekend. Each battery has a 7 to 10 year lifespan, at which point it can be safely recycled. Traveler is made of non-hazardous materials and is UL-approved. Optional plug-in power is also available. The mobile desk is the first piece of the Traveler furniture line. Interior Concepts plans to expand the line with a mobile, battery-powered presentation unit.

<http://www.interiorconcepts.com>

### Interested in learning more about call center technologies?

Be sure to check out TMCnet's Whitepaper Library, which provides a selection of in-depth information on relevant topics affecting the call center, CRM and teleservices industries. The library offers white papers, case studies and other documents which are free to registered users. You can find TMCnet's Whitepaper Library at <http://www.tmcnet.com/tmc/whitepapers>.

# Salesforce.com And Multitenant Integration



On-demand solutions provider Salesforce.com has formally announced ApexConnect, a family of multitenant integration solutions created to revolutionize and simplify integration for CIOs and IT departments at customers of all sizes, according to the company.

I recently got a chance to speak with Kendall Collins, [Salesforce.com's](#) ([quote](#) - [news](#) - [alert](#)) Senior Vice President. Collins referred to ApexConnect as "a family of solutions designed for integration success."

"Integration has been an enormous headache for companies," said Collins. "Thirty percent of costs are tied to integration, according to Gartner. Forrester Research has found that in only 29 percent of CRM employments are people who are satisfied with deployment. It's not getting any easier. More applications means greater demands on IT departments or integration. But everyone needs to keep costs down and stay simple."

Getting more out of less seems to be a recurring mantra, particularly in the call center industry, where companies expect stellar customer service from a call center that is expected to be a boost to, not a drain on, an organization. Yet costs are being continually trimmed, putting pressure on organizations to make much

more out of much less.

ApexConnect is made possible by the multitenant architecture of the Apex platform, which reduces complexity in IT integration.

Collins continued, "Single-tenant solutions haven't really met the need for integration. The big problem with Microsoft CRM for example, is that it's very complex, fragile and closed. If you look at the interdependencies, what you'll find is so many moving parts. If any one of these pieces is to be upgraded, you break a lot of your customizations and integrations. Integration isn't just a bug that hits one time, it comes back every time you do an upgrade. Multitenant integration allows companies to deal with a single version, single code base and centralized API. Apex Connect, which is based on our Apex API, will allow a new level of success for

IT departments, and will enable a number of new features and capabilities."


ApexConnect is being offered to provide customers a comprehensive family of solutions for on-demand integration success, including the new ConnectOut feature of the Apex on-demand platform, an on-demand outbound messaging API; the new ConnectOracle for integrating Salesforce with Oracle 11i; and a new ApexConnect category of integration partners on the AppExchange.

"ApexConnect is a multi-tenant aspirin for the headache of application integration that today's CIOs have inherited from their predecessors," said Marc Benioff, chairman and CEO, Salesforce.com. "Single-tenant vendors are a major source of integration pain as they continue to force upgrades that quickly break customers' existing integrations. Multitenant integration with ApexConnect is designed for customer success on The Business Web."

I asked Kendall Collins what kinds and sizes of businesses the new multitenant platform would appeal to most. He commented, "I think it appeals to companies of all sizes. We started with smaller companies that operated with

By Tracey E. Schelmetic

Editorial Director, *Customer Interaction Solutions*



less resources. Then, larger companies realized they were overspending; they wanted to save money and resources, as well. That's where you've seen the gradual market ascension of Salesforce.com to larger companies. We see multitenancy serving customers of all sizes. As you move up in company size, you see more complexities happening in integration."

Collins said, "According to a best practices survey, the average company maintains over 55 applications. It takes a huge chunk of the IT budget to maintain upgrades. There are many companies who say they'd love to take advantage of new applications, but are unwilling to break anything they've got installed already to do so."

I asked Kendall to speak more in-depth about the new ConnectOut outbound feature and what it entails. He said, "Now, you'll have the ability, when an event happens or changes are made, to trigger an outbound message. All of

our API transactions were inbound calls on the Salesforce.com service. It's an asynchronous process between messages. Outbound will now be able to dramatically increase the type and volume of transactions that people will be able to deliver through the API. You can now support real-time processes triggered through Salesforce.com." He continued, "Think about creating an order or quote within Salesforce...you may want to validate that against another system. In a manufacturing space, you may want to pass it to SAP or start a billing process. It's a great way to initiate outbound processes from Salesforce. It could be outbound services to things like Google, eBay and Amazon...we increasingly see companies tying their businesses in through these channels." **CIS**

For more information about [\(news - alert\)](#) ApexConnect, visit <http://www.salesforce.com>.

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# Queuing Up Performance:

## How To Apply A Virtual Queuing Strategy In Your Contact Center



Virtual queuing is a strategy for reducing ASA and trunk/toll costs. The methods are not as well known as CRM, workforce management or IVR self-service. A new concept a decade ago, virtual queuing has come into its own as a proven technique for improving contact center performance. Now is a good time to examine this technology, understand how it works and outline what managers can expect if they implement a virtual queuing strategy in their contact centers.

### Callback Systems

Voice-mail-based callback systems have been available for many years. The IVR asks callers to leave a message and telephone number and announces that their call will be returned in a reasonable time period. Usually this is a few hours, although it's hard to know exactly, which is why reconnection rates with customers who use this service are so low. Productivity is lost when agents take time to listen to these messages as well.

Other agent-reserved callback systems save a customer's place in line and call them back when it's their turn. A screen pop with the customer's account information is presented to an agent who is prompted to initiate the callback. This preview process, as well as the dialing process, both falsely accrue as talk time, thus lowering the productivity of the agent. A system with FIFO (first-in, first-out) capability that allows callers to receive the callback in the same amount of time that they would have waited on hold is preferred by customers because it sets the best expectation and addresses the customer's needs as quickly as possi-

ble. Once the customer enters this virtual queue, he or she is afforded the opportunity to be more productive, whether at home or at the office. It is called virtual queuing because the software inserts a virtual placeholder in the queue.

### How Virtual Queuing Works

From a technical point of view, the virtual queuing solution has to do a lot of tricky things such as monitoring call flow, anticipating agent availability on a skill-by-skill basis and interfacing with other systems in order to collect CTI information. All the contact center manager needs to know, however, is how virtual queuing affects call flow.

The virtual queue sits quietly and waits for a spike in call volume. During peak call volume, the customer is educated of the expected wait time and is promised a return call in the same amount of time as if he or she had waited on hold. When this option is selected, the system uses a virtual placeholder

to mark the customer's place in line in the ACD queue. Moments before it is the customer's turn to speak with an agent, the system predictively places the return call, connects with the customer and transfers him or her to the head of the line as a the properly skilled agent is concluding the preceding call. This approach keeps agents highly productive, because there is no lag between calls and no agent intervention required to process the virtual queued call.

If the customer chooses to wait on hold, he or she may get frustrated, hang up, and try again. In contrast, a customer waiting for a virtual queue return call cannot abandon. Therefore, with a virtual queuing strategy, the abandon rate is dramatically reduced and, as a result, so are the total calls offered to the contact center. This, in turn, has a positive effect on workforce management tools because of a reduction in repeat calls and the capturing of true, unique caller demand.

One question that people ask is, how often is the customer there when the system calls back? If the proper expectation is set with an accurate estimated wait time announcement, then the return call reconnection rate has been shown to be well above 90 percent. Good estimated wait time calculations are very important to a virtual queuing strategy, and it's important to note that there is no "one formula fits all" for contact centers. You may have slow-moving queues with long talk times,

By Eric Camulli  
Virtual Hold Technology





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*Marketing Director: "Our customers aren't buying, and I don't know why!"*

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you may have fast-moving queues, or you may have both. This is likely why your ACD's calculation of expected wait time is accurate only some of the time. A virtual queuing strategy offers algorithm flexibility based upon the dynamics of your contact center.

gence of APIs and adapters for a wide variety of ACDs, enterprise routers and workforce management software. A smartly implemented virtual queuing strategy preserves the current investment in existing systems. It should maintain load balancing and

#### Key Metrics For Contact Center Performance

A contact center manager considering a virtual queuing strategy should know how it will affect performance and what the key metrics are:

**Toll time.** Eliminating hold time saves toll costs. At two cents per minute, the cost savings for a mid-sized contact center is typically \$5,000 to \$10,000 per month.

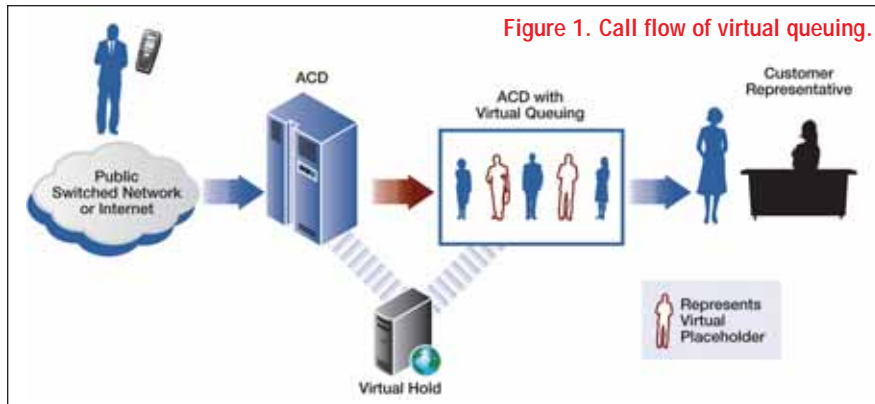
**Abandon reductions.** Abandoned calls are typically reduced 25 to 50 percent. Every abandoned call is a sign of customer dissatisfaction. More than 40 percent of call centers have an abandon rate of 1 to 5 percent (supportindustry.com, 2003).

**Talk time reduction.** Contact centers using virtual queuing report a decrease in venting and call durations, typically in the range of 5 to 15 seconds. This increases the call handling efficiency of the agent labor pool.

**Average speed of answer.** A 2003 study by supportindustry.com indicates that 25 percent of call centers answer a call in 6 to 15 seconds, and nearly 20 percent take more than a minute to answer calls. ASA is sensitive to the longer wait times encountered during unpredicted spikes in call volume.

**Service levels.** Some call centers report greater than 50 percent improvement.

**Workforce management.** Because virtual queuing reduces abandoned calls and repeat calls, it optimizes contact center efficiency and improves the



*Customers enter the queue in the order that their calls were received. If a customer requests a callback, his or her position in the queue is held with a virtual placeholder.*

#### Benefits Of Virtual Queuing

Virtual queuing addresses customer satisfaction because waiting on hold is a major source of customer complaints. According to a Call Voice study, 64 percent of American consumers feel that the companies with which they frequently interact are not very respectful of their time.

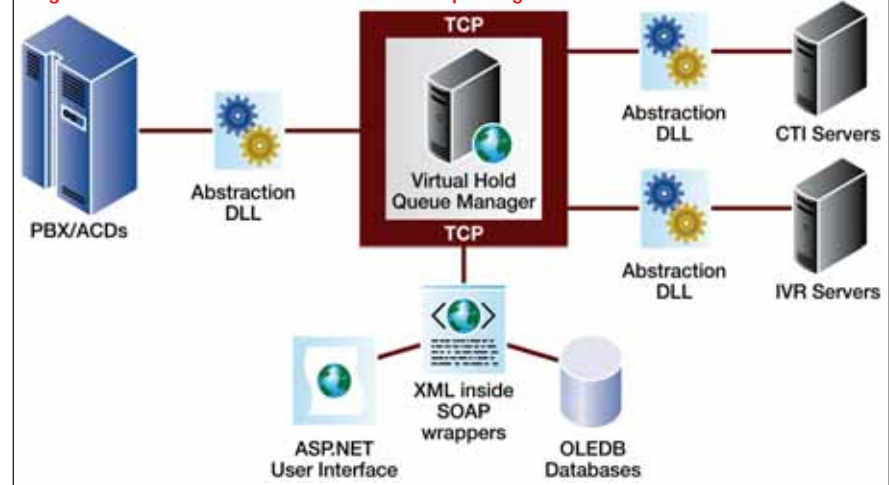
Virtual queuing eliminates this source of frustration by giving customers choices and the freedom to do other things while waiting until it's their turn to speak with an agent. Often, customers will comment that the system makes them feel like the company appreciates the value of their time. Contact centers using virtual queuing have also reported a decrease in customer venting and call durations. They also see a 10- to 12-point boost to service levels during peak times and increases in agent efficiency.

#### Implementation

Unlike plain old callback, virtual queuing must be integrated with contact center technology to ensure a seamless call flow and the best customer experience. Much of the difficulty has been removed by the emer-

skills-based routing, preserve the CRM data associated with voice calls, provide integrated statistical data that allow agents and managers to see both live and virtual calls in queue, and improve the accuracy of workforce management tools because of a decrease in abandons and increase in first-call resolution. In addition, some vendors provide technology that offers virtual queuing for Web-based contact as well, which may be integrated with voice calls in a single, unified queue. Finally, your contact center is a dynamic environment and the solution should enable the call center manager to adjust parameters on-the-fly, without needing to consult a technician.

Figure 2. The basic architecture of virtual queuing.





accuracy of workforce management forecasts.

Of course, virtual queuing is not appropriate for every contact center. If the strategy is to answer every call on the first ring and the contact center can afford to over-staff in order to achieve a 100 percent service level, then virtual queuing will not be helpful. This approach is sometimes practiced by catalog retail sales businesses. The main consideration is how much unpredictable peaks in call volume adversely affect operations and customer satisfaction.

**Table 1. Actual examples of the impact of virtual queuing.**

*Consumer goods company*

Service level improvement = 42 percent  
Talk time reduction = 17 seconds  
Abandon reduction = 52 percent  
Toll minutes saved = 570,000 (per month)  
Payback period = 4 months

*Insurance company*

Service level improvement = 56 percent  
Abandon reduction = 58 percent  
Toll minutes saved = 1,125,000 (per month)  
Payback period = 4 months

*Telecommunications service provider*

Service level improvement = 64 percent  
Talk time reduction = 21 seconds  
Abandon reduction = 48 percent  
Toll minutes saved = 605,000 (per month)

**Case Study: Utility Uses Virtual Queuing To Master The Peaks**

Let's take a look at an actual application of virtual queuing and its impact on contact center performance, cost control, and customer satisfaction.

Atmos Energy is one of the largest public natural gas distributors in the U.S., serving 1.7 million residential and commercial customers in 12 states. The company operates call centers in Texas and Louisiana. Together, the two call centers' 180 agents handle more than two million calls per year related to billing, collections, new accounts, service and emergencies. Call volumes, call durations and customer complaints

reach their peaks during the winter heating season.

During the 2000 to 2001 season, which was the coldest winter on record for Atmos Energy, the cold weather, combined with tight natural gas supplies, acted to push up energy prices. The impact on the customer support was a 15-fold rise in calls, forcing Atmos Energy to set up additional call centers and use field office staff to answer and return customer calls. The overflow calls were handled by a manual return-call system in which unskilled staff recorded the information and promised a callback. The regular agents were inundated with calls, and to prevent callers from receiving busy signals, Atmos Energy contracted with its long-distance service provider to queue the calls until an ACD trunk line was available. Toll costs increased from \$13,000 for a typical January to \$600,000.

After this experience, the company decided to implement virtual queuing as a strategy for managing peaks in call volume without adding additional staff. The system included both hardware and software, and it was integrated with the ACD and IVR at each contact center through the use of software adaptors.

After installing a virtual queuing system, the company found that approximately 60 percent of callers accepted the option to receive a callback, and more than 97 percent of the callbacks were completed successfully. Atmos Energy contact center agents reported that customers were

much happier after the system was installed. Because there was less "venting" about long hold times, the average handle times for answered calls decreased by 10 percent, which alone generated \$163,000 in savings.

During the next peak heating season, Atmos Energy was able to reduce staff by the equivalent of 17 agents. Moreover, the cost per call was 39 percent lower than during the previous season, primarily because the toll costs from calls waiting in queue decreased by 93 percent. Judged against these cost savings, the virtual queuing system paid for itself in four months. **CIS**

*Eric Camulli is Director of Technology for Virtual Hold Technology. (news - alert)*

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# Teleconferencing And Distance Learning: An Inside Look



Distance learning is defined by The U. S. Office of Technology Assessment as the “linking of a teacher and students in several geographic locations via technology that allows for interaction.” One more definition is also necessary: Satellite teleconferencing is “technology used to send a one-way video broadcast from one site to many sites through the use of satellite equipment,” according to the definition used by the Texas State Library. Basically, it’s a one-way video broadcast, and if you throw telephones and fax machines into the mix, it’s interactive — becoming a one-way video, two-way audio (denoted 1V-2A) experience in which participants “can see and hear the presenter, but cannot be seen by the presenter and can interact with the presenter only through the use of other audio media such as telephone or fax.”

This one-way video capability differentiates “satellite teleconferencing” from “videoconferencing,” which is a two-way video, two-way audio (2V-2A) technology where everyone can see and hear everyone else in real time.

That’s but one advantage for education professionals conducting distance learning via teleconferencing, and it doesn’t require too much imagination to think of others. As Praful Shah, VP of Corporate Development, [EagleACD \(news - alert\)](#) and Eagle Teleconferencing wrote recently, “A growing number of U.S. schools and companies are adopting audio conferencing to achieve an effective presence abroad without distance travel.”

Heck, if you want, you can trace distance learning back to when Marco Polo published his travel memoirs. College correspondence courses and teleconferencing over speakerphones were earlier technological methods of distance learning. From teleconferencing via modem and transporting still pictures along with interactive audio, we’ve come all the way to two-way, full audio, full

video communication.

Distance learning can be seen as an adult outgrowth of the burgeoning home-school movement in the United States, where students study at their own pace and tailor their curriculum to their strengths and interests. Of course, homeschoolers rarely use teleconferencing, but it represents a possible competitive advantage for homeschool curriculum providers.

Rural school districts and overseas elementary and secondary schooling could benefit from teleconferencing for distance learning (he said from experience; this reporter lives in Istanbul where his children are being educated at home with standard New Zealand curriculum modified for distance learning. Teleconferencing opportunities would be distinct benefits.)

Evangelist Billy Graham once pointed out that, via television, he could preach to more people in an hour than St. Paul preached to his entire life; today one university lecture can be beamed out to more students than are enrolled in any

one university in the world. Such economies of scale have allowed the University of Phoenix to become the self-proclaimed, “largest private university in the U.S.,” with 145,000 students, more than 63,500 of who are online students.

It’s an interesting chicken-and-egg question of whether distance learning is booming because of teleconferencing, or if teleconferencing is being pressed into service of a boom in 25+-year olds returning to higher education. According to industry observer Nourisha Wells, the Census Bureau and the U. S. Department of Education report, “adult learners are the fastest growing educational demographic, growing 35 percent from 1970 to 2000. Today, more than 60 percent of all college students are 25 and older.”

In addition, “The 2004 Learning Circuits E-Learning Readiness Survey” found, as Wells points out, that “57.1 percent of all distance learners use an asynchronous (self-paced) courseware. The ability to read textbooks, take tests or complete homework when their schedule permits makes distance education more appealing to those short on time or juggling many responsibilities, such as family and work.”

Certainly, distance learning wouldn’t be anywhere near the growth industry it is today without advanced teleconferencing capabilities — remember Open University on television? Ever meet anyone who framed their Open University diploma in their office? While sacrificing some of the amenities of the traditional four-year college experience, distance learners gain tremendous advantages of cost, time and focus.

Even if the frat parties aren’t quite as boisterous or rife with social possibilities.

By David Sims  
TMCnet Contributing Editor

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# The 2006 *Customer Inter@ction Solutions* Product Of The Year Awards, Part One

Each year, *Customer Inter@ction Solutions* magazine bestows its Product of the Year awards on companies that have demonstrated excellence in technological advancement and application refinements. Listed here are products and services that we've judged to have gone the extra mile to help improve both the customer experience and the ROI for the companies that use them. It is these companies' contributions that lead the way in making the contact center technology industry the dynamic field that it is today.

Here, we present Part One of the winners' list. Part Two will appear in the February 2007 issue of *Customer Inter@ction Solutions* magazine. Please visit <http://www.tmcnet.com/425.1> for more information about the winning solutions and the companies that provide them.

Congratulations to the winners.

— Tracey E. Schelmetic, Editorial Director,  
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# Managing Speech Projects For Maximum Efficiency

So you're ready to use speech to enhance and personalize the customer experience — now what? To get started, it is critical to understand the elements of a speech project and how best to manage them.

## Upfront Considerations

As a starting point for the project, there are a several decisions to be made. Speech projects require a diverse set of skills including project management, voice user interface (VUI) design, application logic development, grammar development, telephony programming, system integration, usability testing and more. You'll first need to analyze your in-house skills and determine whether you need to bring in additional talent to augment your team, or if you want to have your solution developed by a company that specializes in speech solution development. If you decide to work with a development partner, look for an organization with a strong track record in your industry and experience deploying the latest open, standards-based speech solutions. If you choose to develop the solution in-house, consider using specialized development tools to augment your capabilities and lower overall development time.

Next, you should decide if a premise-based or hosted solution is right for you. Many contact centers today are choosing hosted solutions to lower upfront costs, gain greater flexibility and shorten deployment time.

## Getting Started

Create a cross-functional team with representatives from the management team, business unit, contact center management, agent pool, sales, marketing, IT, telephony and development. Obviously, the business and contact center managers have a great deal of knowledge. Technical people will have good input on what type of data is available and how the information can best be used. Agents provide important information on customer attitudes and needs. A management team representative understands how the project can help meet corporate goals and objectives. With a cross-functional team where all involved parties have a voice, you're one step closer to success. It ensures that everyone is invested in the project from the start, making it more likely that each group will meet their individual deadlines and review materials in a timely fashion.

Upfront research is extremely important — conduct a thorough review of both your business processes and cus-

tomers interactions. Listening to actual customer conversations can give you a fresh perspective on their needs. Look at existing IVR call data to better understand how customers are using your automated services and where they could be enhanced. Look for new automation opportunities and ways to streamline menus. Consider increasing contact center efficiency with speech-enabled call steering. Matching customer needs with a business process flow chart will further illuminate speech opportunities and how your solutions can be structured to best serve everyone.

This may seem like a daunting project, but the effort will pay off down the line with higher automation rates and superior customer experience. If you are working with a professional speech solution development organization, get them involved from the start and be forthcoming with information. They can show you how to conduct the discovery process and provide important insight into how speech has been successfully used on other projects.

With your discovery complete and your team assembled, you are ready to host the project's kickoff meeting. It is extremely important that all team mem-



By Christoph Mosing  
Envox Worldwide



bers and selected vendors attend. During the meeting you will be defining the scope of the project, determining what services to offer, working out technical details and deciding on the persona of the solution. It is extremely important that the entire team be educated on all aspects of the project. Business executives do not always understand all the technical details and developers can create more effective solutions when they truly understand the organization's business model and objectives. Set clear goals at the beginning of the project (offering new services, offloading x percent of calls, lowering costs by y percent, etc.) and make sure they are agreed to by all. Create and communicate realistic timelines and ensure that everyone understands what they need to deliver and when.

Many organizations fail to engage the right people and have the right conversations at the kickoff meeting. This results in project managers being shocked later in the project: management doesn't like the chosen persona, data cannot be accessed as specified, etc. To ensure success, continually check that everyone's expectations are in sync, provide major stakeholders with regular updates and get buy-in from all parties

as you go. While this may seem obvious, it is easy to skip these steps while in the middle of a project.

#### Defining The Project

Now you are ready to create the functional specification for your speech solution. These specifications are a formal description of the application's intended capabilities. They provide a blueprint from which the developers will work. Address as many details as possible in this document to eliminate surprises along the way and ensure that your final solution functions as you envisioned it. A strong functional specification should also include:

**Voice user interface specification.** The voice user interface (VUI) specification defines how the caller will interact with the speech solution. It should contain a call flow diagram with as much detail as possible on prompts, grammars and error handling. It should define how and when live assistance will be introduced. It should also specify the level of speech needed for the project and include details on the solution's persona.

**System requirements specification.** This is a technical document that defines the network layout of speech

servers and details how the speech solution will integrate with data sources including the input/output parameters.

**Deployment plan.** The deployment plan is extremely important in detailing how the solution will be tested, tuned and deployed.

Once the project has been carefully specified, the development work can begin. The elements that you will need to manage during the process include VUI design; call flow and application development; systems integration; prompt recording and audio production; application tuning and testing. Of all these elements, the voice user interface design is the most critical. Many speech solutions fail to make the grade with customers because best-practice principles were not followed in the design process. Make sure your solution is fast, friendly and easy to use. Look to see that the grammars carefully match prompts to generate higher recognition levels and create a better customer experience.

Be sure to use open, standards-based development methods and deployment platforms. This ensures portability and a smooth integration with existing contact center, IT infrastructure and business applications. Check for pre-built grammars and packaged applications that match your solution needs to speed development. Where possible, leverage existing application development efforts. Today's speech solutions are more flexible than older, legacy IVR systems. It is much easier to create a speech interface for existing Web and business applications than to completely re-write a solution. This approach also simplifies the work needed to upgrade and enhance your solutions.

#### Testing

Everyone understands the need for testing once the application is developed, but there are several things you can do before the developers get started to ensure success. For new self-service solutions, consider providing agents with the dialog scripts to determine caller acceptance of the "prompts" and gauge their responses. For complex, "say anything" speech solutions, Wizard of



Oz (WoZ) testing is a great way to monitor responses to a variety of prompts with subtle differences. Here the VUI designer plays chosen prompts to the caller to simulate an automated call. By hearing the actual responses, the designer gains a better understanding of which wording and prompt combinations will work best.

Once the application is developed, be sure to run it through an extensive QA program. Assemble an internal test group with multiple dialects and accents to ensure that your solution accurately understands a wide range of input. Then create a pilot program that allows you to divert a small portion of calls to the test site to better understand the "tuning" required to perfect each solution. Be ready to adjust call flows, prompts, speech grammars, thresholds and other parameters as testing continues. Be ready to repeat this process even after your solution is launched to ensure the greatest usability over time. Many organizations try to make up for project delays by cutting the testing and tuning time, only to end up with more problems down the road.

Pre-launch training is important as well. Make sure that everyone is aware of the scope and goals of your speech project before it goes live and be certain to educate contact center personnel on

how to handle confused or irate customers.

As always, plan now to ensure future success. Create and analyze customer satisfaction surveys to better understand what your customers need from your self-service offerings. Tweak prompts to shorten navigation as users become more sophisticated, enable barge-in to allow users to more quickly get to where they want to go. Continue to analyze the solution from an IT perspective to reduce latency and update grammars as needed. Look for new ways to expand your self-service offerings to give your customers more of what they want.

For years, call centers have heard about the benefits of using speech technologies to improve the customer experience and increase contact center efficiency. Implementing speech in the contact center is complex, yet far from impossible. Working with an experienced partner will take much of the uncertainty out of the process.

As with all new initiatives, planning is the key to success. Upfront research and a productive kick-off meeting with a strong, diverse team enable you to fully flesh out how a speech solution can best serve your customers. Many companies are quick to jump into development and start working on design elements before the scope of the application is fully

defined. Avoid this temptation, it will save you a lot of time and rework headaches in the long run. Another temptation to avoid is skimping on testing. Organizations that try to make up time by shortening the testing and/or tuning phase will end up with an inferior solution. The tuning phase is critical to creating speech solutions that are both engaging and have high recognition rates. As with all aspects of your customer care operation, ongoing evaluation and evolution of your speech solutions is necessary and will ensure superior customer interactions.

A great speech solution tells customers that you value their business and helps to reinforce your corporate image and branding efforts. By following these guidelines, your resulting speech solution will boost customer loyalty, increase contact center productivity and lower operating costs. **CIS**

*Christoph Mosing is Vice President of Professional Services at Envoy Worldwide (news - alert) (<http://www.envoy.com>), a provider of voice solutions. The company's software products and related services, including Envoy OnDemand, reduce the time, cost and complexity of creating voice solutions and empower enterprises and service providers to reduce operating costs, improve customer satisfaction and retention and generate new revenue streams.*

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# Managing Successful Speech Projects:

## Ten Mistakes To Avoid Along The Way

Speech technologies offer call center managers important opportunities to improve customer satisfaction and reduce costs. According to industry analysts at Forrester, good speech-enabled phone self-service systems offer interaction advantages that even well-designed touch-tone systems can't match. Speech projects, however, introduce complexities — even risks — that must be carefully managed by the team developing and deploying the system.

What are some of the common mistakes, and how can project managers and other team members work to avoid such challenges?

As with any project, speech recognition installations require a comprehensive methodology to eliminate risk and simplify the design, development and management of the project. One example of this process is the Nuance Global Engagement Methodology (GEM), a process that ensures optimal results at



each phase of the lifecycle — from discovery of caller, business and system requirements through application design, development and optimization. For speech projects, a heavier focus is put into the discovery and optimization phases, as there are unique elements that drive subtleties in design from a caller's perspective, requiring additional attention while gathering requirements and rolling out the solution.

### The Discovery Phase

At the discovery phase, speech teams define the enterprise voice strategy and create the solution blueprint. In this phase, the organization identifies business, caller and system requirements and defines the relationship among the three.

In identifying business requirements, organizations must clarify specific business rules, list organizational and application goals and specify the metrics that will define application success.

By Deanne Harper  
Nuance Communications



End user, or caller, requirements demand a detailed examination of the range of callers: what do they know, what do they want to accomplish, and what expectations do they bring to the call?

System requirements, of course, specify what the system must provide in order to accomplish the business and caller goals most effectively.

### ***Mistake #1: Insufficient education.***

Insufficient education may be the first mistake team leaders make. A voice-enabled application requires many complex tasks and several important skill sets. When incorporating a speech-enabled system into a call center environment, organizations are most effective when team members understand the theory and best practices underlying each task. Even if your team relies on experienced industry professionals to do much of the work, managers and team members will need to be conversant in the various tasks and technologies in order to contribute to the overall process and make informed decisions.



Project managers must understand the details of each project task and the work each task requires to estimate effort appropriately during the scoping stage. Knowing what it takes to develop a speech application helps managers see dependencies and determine the critical path in the project plan. Understanding the tasks allows a manager to bring together the right members for the project team. Understanding the skills required for each task allows managers to match tasks to skill sets when assigning project tasks and to plan for additional education where necessary.

Many people on a speech team have backgrounds in touch-tone IVR systems or Web interface design and development; they may assume that a speech application is a simple extension of what they already know. Their prior knowledge is certainly valuable, but conversational applications require knowledge of human factors, engineering, linguistics, design and programming. Successful project managers will define and initiate an education strategy for themselves and their team members as early in the discovery phase as possible.

***Mistake #2: Failing to have the right people and the right discussion at the kickoff meeting.*** Another big mistake is sometimes made as early as the kickoff meeting. A kickoff meeting is notable, of course, as it represents the handoff of a project from sales to services and as it initiates the process of formal requirement gathering. If critical staff members aren't in attendance or if meeting leaders assume that everyone understands speech-related tasks, the meeting will not meet its full potential.

Project managers should ensure that the following representatives attend and actively engage in the kickoff meeting:

- Stakeholders;
- Decision makers;
- Voice user interface designer(s);
- Marketing representatives;
- Call center managers; and
- Systems administrators.

Discussion at the meeting should cover a series of topics, including project expectations and methodology, metrics

and logging, and testing and tuning. Managers will need to explain *what* they need and *when* they need it.

***Mistake #3: Creating design elements before the requirements are clear.***

Rushing design decisions without addressing a comprehensive series of design questions increases risk. A good design is caller-centered. It recognizes and addresses caller needs and expectations. It incorporates strategies to optimize recognition accuracy. Without clear requirements defined in advance, a system design will yield confusing or misleading prompts, as well as an inconsistent prompt style and error handling strategy. It won't contain the functionality specified in the requirements. The net result is that users may experience difficulty using the system.

**The Design Phase**

In the design phase, organizations transform critical requirements into specification documents that guide implementation, testing and tuning. The speech team selects the voice and personality traits that identify the solution and help define the client's relationship with their callers. You may even consider a custom test-to-speech voice to deliver dynamic information. Scripting a call flow that nonetheless adapts to various caller behaviors requires careful use of social psychology, linguistics and human factors and also a solid understanding of the limits and potential of speech technology.

***Mistake #4: Creating prompts that are inconsistent with voice user interface (VUI) design principles.***

Successful speech systems adhere to the core principles of VUI design. The design includes a desirable persona speaking carefully worded prompts that guide the caller yet adapt to the caller's input. Good designers ensure efficiency and clarity by avoiding unnecessary words or complex sentence structures. They encourage barge-in so that callers can proceed when *they* are ready.

Good designers also aid accuracy by thinking ahead to grammar develop-

ment as they craft prompts. They identify "natural language" parts of speech that a caller may offer in addition to the necessary information, such as, "Let's see, I'd like to return on October 27, please." They avoid similar-sounding responses in the same state; for example, "review" or "preview." They anticipate synonyms or relative phrases that callers are likely to speak: "January 17" may also be "Wednesday" or "tomorrow."

Good designers aid graceful error recovery through careful call flow design, as follows:

- Systems acknowledge that something went wrong: "My mistake," and that something went wrong again: "My mistake again."
- Systems respond when a caller makes a one-step correction, "No, the 18th."
- Systems are designed to offer context-specific help prompts or DTMF fallback to help callers continue through difficult collection contexts.
- Designers ensure low cognitive load by avoiding short lists that sound like yes/no questions, by avoiding long lists that are hard to track, and by avoiding confusing constructions.

***Mistake #5: Failing to coordinate prompts and grammars.*** In specifying the grammar for each state, a designer should aim for broad coverage coordinated with prompts. Grammars must be revisited whenever the prompt wording is modified. The risk here is that a failure to understand the relationship between prompts and grammars may result in insufficient allocation of data or time resources. Grammar decisions must be tested on a sufficient number of potential callers. The test group must be truly representative of the actual caller demographics.

That said, good designers avoid *total* grammar coverage, since complexity can affect speed and performance. A better option is start with a basic grammar coverage and expand it based on real user data. To successfully coordinate prompts and grammars, choose the

most appropriate grammar (or grammars) for each state and accommodate all reasonable caller input. And be sure to sufficiently test grammars and call flow.

#### The Realization Phase

To realize an application, organizations develop, test and deploy the solution. This phase involves grammar and application development, voice recording, database and telephony integration, functional testing, usability studies and staged deployment.

#### ***Mistake #6: Failing to coach the voice talent or tune the text-to-speech engine.***

Amateur voice talents and voice talents who have worked only on touch-tone systems may not be suitable for speech applications. Someone on the team should be prepared to coach the voice talent to ensure that the recordings effectively create the designed persona, that each prompt is spoken clearly, and that the progression from one prompt to the next produces a consistent and smooth effect. If an organization selects text-to-speech applications, individual recordings should be analyzed for quality, and time should be allocated to tune the output, if necessary.

#### ***Mistake #7: Shortening testing cycles.***

Given the complexity and cost of speech systems, some organizations are tempted to make up for time or budget slippages by shortening the testing phase or performing different tests in parallel (rather than sequentially). This strategy is a mistake that results in an incomplete, buggy or untested system.

Pre-deployment testing is critical at several milestones:

- Wizard of Oz (WoZ) tests are useful to validate the design concept and/or research callers. In WoZ tests, a human acts in place of an application; callers call what they think is an automated system, but the human is actually recognizing the input and directing which prompt is played next. Thus, these tests can be run very early in the design phase and the knowledge

gained can save time and money later in the project lifecycle.

- Lab-based usability studies — onsite or via telephone — are critical tests for the system's effectiveness with callers. These tests require the application and grammars to be developed and the prompts to be recorded, though they are not real calls and no actual transactions occur. Any modifications defined post-usability must be implemented before regression and QA testing begins.
- Dialog traversal testing, regression testing, logging validation, and backend queries are critical for QA, as is load testing.

Testing should be addressed at the kickoff meeting, and the test plan should be prepared early in the process with frequent schedule reviews. Project managers ensure the system meets the original user requirements, validate early sizing and load estimates, and test in a production environment.

#### The Optimization Phase

At the optimization phase, organizations should monitor ongoing solution performance, which includes application tuning, grammar updates and business performance assessments. Ongoing optimization is critical to ensure a superior customer experience and peak usability.

#### ***Mistake #8: Failing to recognize the importance of pilot phase tuning.***

By identifying and resolving issues prior to full deployment, organizations can minimize the risks of caller dissatisfaction, costly rework and service disruption. But if organizations fail to develop a detailed plan with success criteria and a clearly defined end, the pilot phase can be plagued by insufficient data or documentation, data logging issues, or time and resource constraints.

Tuning improves an application's performance since it requires a careful analysis of field data, resulting in recommendations for improvement in one or more elements of the application. The best speech systems leverage the pilot phase as an opportunity to analyze the application's prompts and grammars, to

consider the effects of recognition parameters, to consider overall system resources, to identify and correct pronunciation problems, and to re-evaluate dialog flow.

As it can be difficult to anticipate and exhaustively test for every potential situation and condition before a speech system goes live, you can expect to make changes. Your organization should have processes in place to identify and rapidly resolve the production issues identified during tuning. This process will minimize your callers' exposure to negative elements in the application.

#### ***Mistake #9: Poorly documenting elements among team members.***

Overseeing the communication and interplay among team members through every stage of the project lifecycle is critical for the overall success of any speech project. The VUI design specification document should always document what's in the application, so it should be updated regularly as changes are made to call flow, prompt wording, grammar elements, user-defined logging, database queries and so on.

***Mistake #10: Underestimating the complexity of building a speech application.*** Speech can be complex. Launching a successful conversational speech application requires more than tools and software. Exceptional project management, strategic planning, application development and testing know-how, along with specialized expertise in areas like human-computer dialog, speech and signal processing, and speech acoustic modeling are essential to building effective speech solutions.

However, a proven model for managing successful speech deployments is to shadow an experienced project team and learn to emulate their proven deployment methodology. That way, your team will soon develop the skills they need to balance the art and science of deploying speech solutions. **CIS**

Deanne Harper is manager of Speech University for Nuance Communications ([news - alert](http://www.nuance.com/news-alert)) (<http://www.nuance.com>).



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By Tracey E. Schelmetic  
Editorial Director, Customer Inter@ction Solutions

## Speech Technology: Great Gain For Just A Little Pain

I hate to use the word “holistically” (or its even cheesier, more new-age spelling, “wholistically”) since it was one of the most overused words of the 1990s, referring to everything from business processes to herbal supplements to snack foods, but it applies to the call center industry so, well, wholly, that it merits dragging out of retirement. There are areas of the call center that ought to be planned holistically but sometimes aren’t (traditional IVR menu design, for instance), areas where process are seldom applied holistically except in the best contact centers (CRM, for instance) and areas where the process must be holistic or it just won’t work. Speech technology falls into the latter category. If it’s not planned right from start to finish, it will represent the equivalent of lighting up hundreds of thousands, or even millions, of dollars with a butane lighter and watching the money burn. In a speech implementation, if each department has different ideas and requirements and they don’t get involved in the multi-step process from start to finish, they will be left out, and the company will find an end result that suits, at best, one department. At worst, the finished product will suit no department at all, and will leave your customers baying for your blood.

This month, we have two excellent articles on speech application development and design. The first was supplied by Christoph Mosing, VP of Professional Services at Envoy Worldwide. Writes Mosing, “Many organizations fail to engage the right people and have the right conversations at the kickoff meeting. This results in project managers being shocked later in the project: management doesn’t like the chosen persona, data cannot be accessed as specified, etc. To ensure success, continually check that everyone’s expectations are in sync, provide major stakeholders with regular updates and get buy-in from all parties as you go. While this may seem obvious, it is easy to skip these steps while in the middle of a project.”

The most prophetic words in the call center industry are, “While this may seem obvious...” Immersed in the call center industry as most of us are, armed with information and knowing what we know, it’s immensely shocking when we (regularly) run into call centers that continue to make mistakes that are explained in the first chapter of the most basic call center management book.

Do you have a poorly designed billing system? You’re bound to hear about it from your customers, but it probably won’t keep most of them from doing business with you. Bad CRM? Considering there was no CRM (at least, it wasn’t called that) 10 years ago, you might be able to limp by as a third-rate company without it. Bad IVR menu tree design? That’s more serious. You’ll start to lose customers. Poorly designed and implemented speech solution? Customers? What customers? You won’t have any.

Testing is the key. As Mosing of Envoy writes, “Many organizations try to make up for project delays by cutting the testing and tuning time, only to end up with more problems down the road.” That just may be the understatement of the year.

The complexities of speech and the necessity to get it right have scared a lot — if not most — call centers away from speech. This is a shame, since call center technology follows life: the greater the risk, the greater the reward. A well-done speech implementation in a call center can bring effective and efficient automation that outdoes the automation potential of all other call center technologies put together.

Deanne Harper, Manager of Speech University at Nuance points out that the problem is often that rather than designing a speech application for callers, a faulty system will try and design the callers to fit around the speech application. She writes, “Rushing design decisions without addressing a comprehensive series of design questions increases risk. A good design is caller-centered. It recognizes and addresses caller needs and expectations. It incorporates strategies to optimize recognition accuracy. Without clear requirements defined in advance, a system design will yield confusing or misleading prompts, as well as an inconsistent prompt style and error handling strategy. It won’t contain the functionality specified in the requirements. The net result is that users may experience difficulty using the system.”

Users may experience difficulty using the system. That’s a nice way to say, “Your customers may end up screaming at your system into the phone, pulling their hair out in hanks and gibbering in rage.”

Errors in IVR menu trees become rather obvious rather quickly because of the limited number of options presented to callers. With the complexity of speech and the almost limitless way people can express themselves to more advanced natural language processing systems, mistakes won’t be so readily apparent, and will certainly make themselves known only after the launch of the application, at which time they must be corrected as soon as possible.

Says Nuance’s ([news - alert](#)) Harper, “As it can be difficult to anticipate and exhaustively test for every potential situation and condition before a speech system goes live, you can expect to make changes. Your organization should have processes in place to identify and rapidly resolve the production issues identified during tuning. This process will minimize your callers’ exposure to negative elements in the application.”

And thus, minimize your exposure to torrents of obscenity-sprinkled customer abuse and its resultant lost business.

I’m a great believer in the exercise mantra, “No pain...no pain.” But the potential gain that can be realized via speech for a call center is staggering, and today’s implementations — some of them via hosted solutions that greatly reduce responsibility and headaches on the call center’s part — can help greatly minimize the potential pain. **CIS**

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