CRMXchange

Speech Technology/ CRM/ Customer Experience:

- Developments
- Directions
- Discussions

TOPICS OF DISCUSSION

Speech technology

- Artificial Intelligence
- Automatic Speech Recognition (ASR)
- Natural Language
- Text-to-Speech (TTS)
- Voice Biometrics
- IVR
- Knowledge Management
- Performance Testing and Monitoring
- Virtual Assistants

CRM/Customer Service

- Analytics/Data Analysis
- Business Intelligence/Business Process Management
- Cloud Contact Center Software
- Compliance
- Customer Engagement
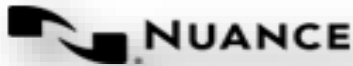- Customer Feedback
- Omnichannel

Overview

The trio of annual events, SpeechTEK, CRM Evolution and Customer Service Experience, covered a broad range of information in three co-located conference programs. On the Customer Solutions Expo exhibit floor, suppliers demonstrated offerings designed to help organizations stay a step ahead of the rapidly evolving needs of their customers, ensured that their systems are operating efficiently on all touchpoints, and took ideas that started in the contact center to new horizons.

CRMXchange met with a number of the innovative vendors. Some were introducing new products, others were tweaking existing applications or unveiling upgrades. A handful of international suppliers were seeking to establish a presence in the North American marketplace.

In this summary, we will look at the latest products, explore some of the directions that the industry is taking and of course, examine key trends and technologies.

Speech Technology

Advances in speech technology have always been the engine that drives both the educational and product aspects of the event. Most industry insiders still consider "SpeechTEK" its overall umbrella descriptive title. Improved natural language applications have paved the way for vastly improved, and far less frustrating, interactive voice response (IVR) systems.

When coordinated with automatic speech recognition (ASR) and text-to-speech (TTS) applications, natural language also fuels the development of sophisticated virtual assistant solutions. Voice and language solution provider **Nuance** now handles more than 14 billion customer engagements annually. 80% of Nuance OnDemand deployments utilize its natural language understanding and 1.7 billion mobile and Web conversations are processed via its virtual assistant solutions.

Nuance has also expanded its portfolio to help companies better manage self-service and provide alternatives to phone interactions. They view SMS text messaging as an important customer communication channel, using their natural language capabilities to enhance its effectiveness. For example, Delta Airlines had been following FAA regulations by informing fliers of scheduled changes, but when people called in, agents were often unaware of the initial transaction and left customers frustrated by asking what they were calling about. Nuance worked with them to ensure that the context was shared across channels and agents were instantly prepared to help callers make the necessary adjustments. http://www.nuance.com

TREND

Moving towards self-service applications by creating more human-like interactions with technology

Artificial Intelligence

With origins in Barcelona, **Inbenta**, worked with the Spanish city's Chamber of Commerce to become involved with the Plug and Play Tech Center, a global accelerator for start-ups. Its innovative natural language technology helped attract several million dollars in funding from Chilean investors. Inbenta now offers Hybrid Customer Support Chat in which customer conversations with a virtual assistant can be forwarded to a live agent, when necessary, with context preserved. Customers can either get an automatic call back or continue chat with a live agent using the same window, with color-coding to indicate which type of agent is responding. Speech-to-text enables mobile conversations.

Inbenta's specialty is intelligent semantic search using AI technology to improve online customer support. The solution goes beyond existing keyword search applications. Users can create answers for most common issues, and Inbenta uses natural language to process the information which allows the knowledge system to index content that can be used as Dynamic FAQs on the web or to support contact centers. Unlike existing knowledge based solutions that require costly external programming to make changes, Inbenta users have total freedom. Internal knowledge managers can make updates with minimal training or need for IT involvement. Once the client has created the content, Inbenta's lexicon provides the intelligence to make it readily available to its customers. The total information solution can be deployed within weeks as opposed to months. The company recently added Japanese to the long list of languages it supports. http://www.inbenta.com/en

TREND

Provide a better online customer support strategy, but have agents readily available.

Massachusetts-based **Interactions** also employs ASR and TTS as well as the potential for voice biometrics with its natural language processing suite to enhance the capabilities of its virtual assistants. The company builds conversational self-service customer care solutions based on its proprietary Adaptive Understanding Technology, which combines artificial intelligence with automated speech recognition and Human Assisted Understanding to provide conversational customer services across channels.

The company had previously licensed Watson technology and has now purchased the entire lab, taking people from AT&T with locations in New York City and New Jersey.

Interactions' main focus remains the omnichannel customer care space, but they're also taking steps to bring their virtual assistant technology into play in such sectors as connected cars and connected homes. The company is leveraging an interface to the Internet of Things (IoT) which they see as a natural progression with far-reaching implications. http://www.interactions.net

Verbio originates from Spain as well. It has both an existing customer base and a growing list of channel partnerships for their ASR, TTS, voice biometrics and natural language applications. They have 60 major customers, including some of the biggest banks in Brazil. While they serve both large and small companies, they are now focusing their strategy on Fortune 2000 organizations. While they do deploy virtual assistants, it's not on the same scale of their Spanish counterpart, Inbenta, for whom they provide ASR to enhance their contact center capabilities. http://www.verbio.com

Voice Biometrics

Poland based **VoicePIN**, offers an easy-to-implement voice biometrics solution with a highly adaptable API interface, which makes it simple for integrators to set up and for partners to deploy. The solution provides end users with accessible and highly effective security. Using unique voice characteristics, VoicePIN allows access to personal data without the necessity of remembering burdensome logins or passwords and diminishes the risk of data hijacking and identity theft. The company's slogan is 'your voice is your PIN'. End users must repeat a phrase three times to create a voice print. The solution can also support passive enrollment from a previous recording, but can also distinguish attempts to log on via a recorded voice via PAD (playback activity detection). VoicePIN can be provided either on premise or as a SaaS solution.
http://www.voicepin.com

TREND

Mouth movement biometrics and smart phone position adds functionality and additional security for mobile apps.

IVR Omnichannel

In keeping with their slogan "Change the Channel, Keep the Customer", **Jacada** is laser-focused on helping their clients reduce customer effort via omnichannel service that offers seamless connectivity of channels. Customers can now contact a company anytime, from anywhere, from any device, to resolve issues. Jacada finds that many prefer to skip the traditional call center experience and communicate in ways that are more personal and support technology-enabled dialogue. Jacada has the capability to blend digital channels with contact center and voice interactions to quickly solve customer inquiries with a higher degree of satisfaction. Understanding their customers are not in a position to scrap legacy applications, Jacada works with them to integrate their existing systems so agents can serve multiple customers and maintain multiple contexts. They continue to educate the market on how Visual IVR can improve self-service resolution and dramatically decrease incoming call volume.
http://www.jacada.com

IVR Performance Testing & Monitoring

Cyara, a global provider of an omnichannel customer experience testing and monitoring platform, launched Cyara Crawler, automated software with the capability to explore, map and document IVR applications and create its own test cases. It replaces tedious, manually-intensive processes with automation and can reduce both time and cost to enable improved customer experience (CX). With organizations frequently needing to make changes in IVR applications, Crawler's functionality is of particular value. Employing sophisticated speech-to-text technology, it operates by placing simulated calls to an existing IVR, creating a graphic interactive map of call flows. The solution

eliminates much of the risk involved in modifying an IVR without knowing how it was designed.

When companies either merge with other organizations or change vendors, Crawler's capacit for automated discovery makes it possible to either safely upgrade legacy IVRs or migrate to new systems. Crawler is an outgrowth of Cyara's regression testing capability that took shape when the company saw a market need for SaaS products which could transform a process that often took two years to complete, into one that can now be accomplished within three months. http://www.cyara.com

IR recently acquired contact center solutions provider **IQ Services** who will now be known as the **IR Testing Solutions Group.** IR is an international company whose focus is on Unified Communications and the contact center. The IR Prognosis solution, which allows performance and availability of all channels to be proactively monitored and addressed, is complementary with IQ's automated testing as a service. Prognosis is the bridge between the two companies. IR realized that they could offer a combined solution that they believe no one else has available. Performance companies didn't perform testing; testing companies did not measure performance. Together, they can now identify when something is not working properly and inform customers with automatic alerts, as well as pinpoint what is broken with forensic analysis. IR Testing Solutions Group is continuing the work they began as IQ Services; creating a tool for testing WebRTC (Real time Communication) which emulates the browser and executes the protocol to ascertain that the program is working when multiple users are engaged. The solution is still in the adoption phase as companies determine how to best use and monetize WebRTC. http://www.ir.com
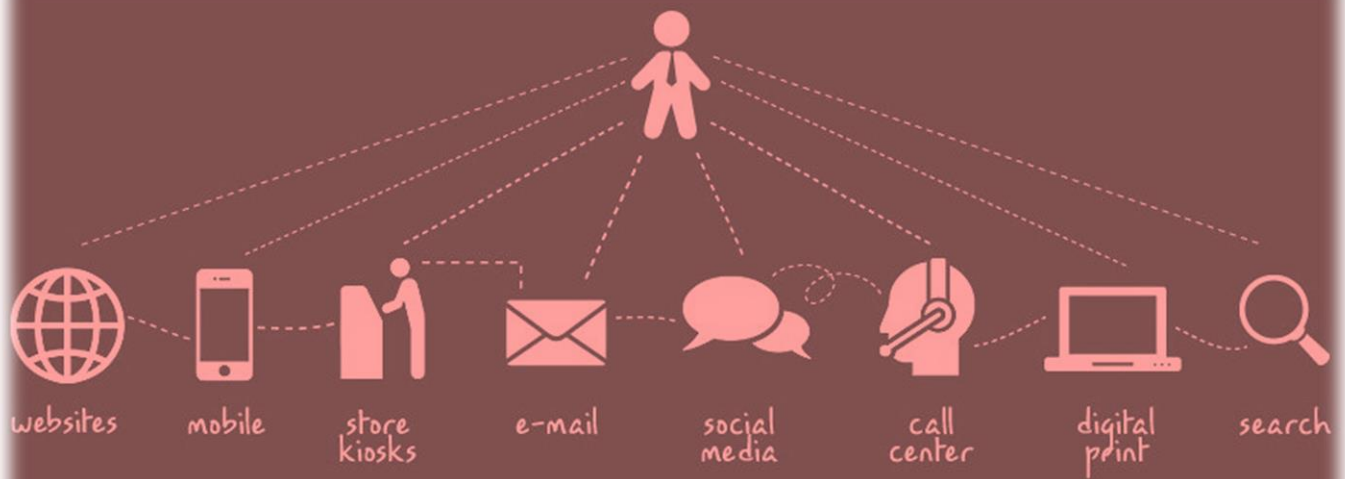
Versay continues to cover all aspects of designing, improving, operating, and analyzing the performance of speech IVR application solutions in premise-based, hosted or hybrid environments. The company leverages its experience working with advanced speech technologies including SLM-based natural language (NL) and voice biometrics to help companies design, build, and manage better IVRs applications to improve their contact center operations. With their CUE Analytics solution now in its second year, Versay has used feedback from their customers to make improvements that help these companies more effectively monitor the customer journey and measure what the caller experience has been before they hang up the phone. Faster parsing of data has been enabled and redundancies have been eliminated. While CUE has also been made more accessible, Versay works with its clients to help them better understand how the solution is best used and determine how it can be optimally deployed.

Versay and its parent company, Vail Systems, demonstrated how people could better communicate with machines. They used Communicator, an application providing cloud-based telephony and messaging services initiated on Amazon Echo, to create a solution to the universal problem of misplacing a mobile phone. Instead of using a landline to call your device, they demonstrated how people could quickly use Echo with a simple command to Amazon's virtual assistant: "Alexa, tell Communicator to find my phone." http://www.versay.com

CRM AND CUSTOMER SERVICE

Analytics Omnichannel

8x8 sees personalization as one of the most important direction in the marketplace. Contact center analytics are a vital part of a larger strategy to drive customer experience personalization (CXP). With consumers having the ability to change brands at the click of a mouse, time consuming deployment of IT solutions can't keep up and investments in technology are increasingly moving into the hands of LOB (line of business) professionals who are closer to the customer.

To help organizations cope with the increasing need for actionable data to personalize the customer experience, they're offering Virtual Office Analytics, a suite of web-based tools which provide enterprise-level analytics that can be used to rapidly provide the insight necessary to enable better informed business decisions.

The company has built a Big Data infrastructure with a Hadoop layer. The Virtual Office Analytics suite allows historical and real-time information associated with all extensions and devices in an organization to be collected from these different sources after a call. In multiple views of their cloud-based PBX, companies can see how many calls are coming in, which calls are not being answered and how many are going to voice mail. While the company considers themselves highly proficient at Omnichannel applications, they prefer "Any media" as the ability to enable customers to connect on the channel they are in and get a personalized experience with context maintained. The company also acquired QM specialists QSC and their Quality Rocket solution as well predictive dialer supplier DXI.

89% of 8x8 customers indicated that personalization is one of their three key strategies with
60% making investments to improve personalization. http://www.8x8.com

Data Analysis

PolyVista uses what they call a "combination of technology plus talent" to help companies understand what their data is telling them. They believe that unless a company has analytics specialists on staff, available data is not easy to access. The company uses a three-part strategy: a powerful analytics engine, the scientific expertise to interpret the complex data it produces, and a choice of user interface or delivery. PolyVista offers a choice of non-intrusive and easy-to-use tools with dashboards and interfaces that allow their customers to extract, analyze, deliver, and communicate valuable insights. PolyVista's data analysis application is available as a hosted platform called PolyVista Pro.

Customers can use their SaaS application to access advanced analytics. Since there is no need for IT involvement, no hardware and no installation, companies can rapidly digest data via a dynamic visualization engine. PolyVista has the capability to apply data solutions they've developed from one vertical to another. To help companies see their value, they accept one-time projects and month-to-month contracts to supply and interpret analysis using analytics professionals. They claim that 80% of organizations who work with them on this basis go on to collaborate again on additional projects.
http://www.polyvista.com

SAP is restoring CRM to its original definition: Customer Relations Management. People now think "legacy" when you use the term, but CRM starts with data. The issue of how to use the data must be better resolved to meet customers' needs. It's important that all data is available to form a 360 degree view of the customer in real time, which can be accomplished either in the cloud or on-premise with SAP HANA.

Today's customer is internet-savvy. Research indicates that 57% to 70% of the buying process has been completed before a salesperson becomes involved. Companies need to understand how the search process works and that

information must be consistent with what sales is saying. Companies need to go beyond marketing automation and build a contextual platform for 1-1 engagement. The SAP Hybris YaaS platform has the matrix service architecture that enables the development of relevant apps for these purposes. SAP strives to educate customers on ecommerce. http://go.sap.com/solution/customer-engagement.html

TREND
Redefine KPI measurement to conform to current customer needs

Sailthru helps organizations optimize customer lifetime value with an integrated platform that combines omnichannel data collection, automated personalization and predictive intelligence that enables users to achieve a single customer view and accurately predict behavior. Sailthru's Sightlines solution gives companies access to data-driven forecasts on predicted volume of messages, click rates, page views the probability of customers opening a message, opt-out possibilities, probability of making a purchase, value and expected revenue. The company was initially focused on email transactions, but has been moving rapidly into all channels, including mobile, onsite and social to help create consistency across all touchpoints As opposed to the traditional 80/20 rule- 80% of business comes from 20% of customers - Sailthru sees the true ratio to be 95/5 and is committed to helping businesses go beyond segmentation to deliver the right 1 to 1 experience to the vital 5% of customers who drive their results. The company plans an integration with Salesforce sometime in Q4 and offers Sailthru Compass which gives clients turn-key access to a complete ecosystem of technologies and solution partners. http://www.sailthru.com

TREND
Applying the right skill sets to meet current needs to increase personalization.

Business Intelligence/Business Process Management

Bpm'online achieved a high number of implementations for its process-driven CRM platform across Eastern Europe and is now making its mark in the US with a new office in the heart of Boston. They announced the release of their latest version 7.6 at CRM Evolution. The BPM platform is the core of the CRM solution which enables quick and easy business process configuration – with no tech specialist or coding involved.

Bpm'online products enable its clients to manage the complete customer journey from lead to order, with proactive account maintenance. The company has built a US direct sales force and is also actively targeting channel partners. Their target partnerships are companies with more than 50 employees, their own sales/marketing component and consulting/implementation expertise. Bpm'online has experienced success in a number of verticals including financial services, telecom, and travel, with particular strength in the real estate. They have a robust real estate CRM application and are rolling out applications for commercial and retail banking companies, including smaller regional banks and credit unions. They find that potential customers appreciate the ability to use one single platform across the board to better handle all processes as opposed to a CRM that requires bolted-on additions. http://www.bpmonline.com

Microsoft Dynamics CRM saw CRM Evolution as an "off-Broadway opportunity" to test its message, an ironic strategy for an event held in the heart of the theater district. One of their key directions was making the shift from multichannel to omnichannel services. They deliver a complete solution that enables companies to

communicate with customers on all key touchpoints. For example, Service by Microsoft Dynamics provides personalized, proactive, and predictive experiences across all channels. Agents are empowered with a single unified experience, enabling them to connect with customers effortlessly. They are able to use different platforms, employing platform-agnostic productivity tools that embrace all devices and give them the ability to take their customers all the way through business applications. They recently acquired IncentGames, developer of Fantasy Sales Team, an innovative sales gamification platform to boost sales productivity, drive revenue and improve CRM adoption through collaboration and team-based competition. Their previous acquisition of Parature enabled them to improve their customer engagement capabilities with dashboards, case management and agent desktops. http://www.microsoft.com/en-us/dynamics/crm.aspx

Customer Engagement

Oracle is focused on creating tools to help their clients deliver outstanding customer experiences in marketing, social, ecommerce and service. The company introduced their new Community Self-Service solution which responds to the reality that self-service has overtaken the phone as the preferred method of resolving issues. Now in beta, Community Self-Service lets companies build on the capabilities provided by the Oracle Social Cloud and Service Cloud, allowing them to monitor private data on online communities, which customers increasingly use to gain knowledge and incorporate private data from chat logs, contact center logs and surveys. The solution helps correct disconnects between web self-service (FAQ) and communities, where company content had not always been available and provides moderation tools for organizations to respond. It addresses and honors the ongoing trend where customers want to have more control.

Oracle also recently announced they are one of the customer service partners chosen to work with Twitter, which now represents about 80% of customer requests for help on social media. This partnership will help the community

manager better understand which issues are going viral, and when to escalate to the call center so they can respond. The ability to do text analysis on private sources allows companies to see what customers are saying in order to head off upcoming problems, identify at-risk customers, drive business opportunities and deliver high touch, high value service. The key is ensuring that customers feel their concerns are important and will be addressed.
https://cloud.oracle.com/service-cloud

TREND
Customer service has become the most important business differentiator in today's hyper-competitive global market

Customer Feedback

Vocalabs collects transactional feedback via real-time surveys and selected live interviews. They can trigger contact at any point in the context of a customer journey and deliver feedback to their client in real time to enable them to take immediate action for a resolution. They now offer hybrid feedback allowing their customers to combine automated interviews and survey results targeting in-depth analysis. They did a recent project for USAA which examined the most desirable level of personalization in greetings, by conducting interviews and surveys on preference for formal greeting by rank, informal greeting by first name or no greeting at all. The results were instrumental in helping the organization make a definitive decision on which way to proceed.
http://www.vocalabs.com

Cloud Contact Center Software Compliance

Five9 supported its recent Freedom Release, which focuses on helping agents handle more complex multichannel interactions without the need to use multiple applications. Developers explored common pain points and took a strong

approach to agent empowerment to help attain the higher goals expected in delivering better customer experiences. The impetus was to simplify interactions and avoid the need for unnecessary escalations. Agents can now bring all channels and conversations into one place in a single, easy-to-use desktop, using either Five9 Agent Desktop Plus or their existing CRM interface with Five9 embedded into the CRM desktop. Updates are available for Oracle and Salesforce integration.

In response to the FCC ruling handed down on July 10th, Five9 has worked with its outside legal counsel and Compliance Point, a 3rd-party TCPA compliance vendor, to ensure that the Five9 Manual Touch Mode solution continues to comply with the latest TCPA regulations. They currently have 80 customers on their TCPA solution, which is hosted on a completely separate server, removing any "capacity" to auto dial, and requiring the agent to manually initiate the call. They've also put in change management controls for QA and engineering so that no one can alter the code. They also removed 'click-to-call'; feature which lawyers found to be a gray area, so customers and agents now have to dial the number. http://www.five9.com

SpeechTEK

CRM evolution

CUSTOMER SERVICE *experience*
deliver exceptional customer care across all channels