US Airways Reaches New Heights in Customer Service with a Fast, Personalized Self-Service IVR System Powered by Nuance

The U.S. domestic airline industry's first natural language understanding IVR system delivers a superior caller experience while reducing operational costs

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About the Company

US Airways, along with US Airways Shuttle and US Airways Express, operates more than 3,200 flights per day and serves more than 200 communities in the U.S., Canada, Mexico, Europe, the Middle East, the Caribbean, Central and South America. Together with its US Airways Express partners, the airline serves approximately 80 million passengers each year.

US Airways began in 1939 as All-American Airways, and over the course of its rich and colorful history, evolved into Allegheny Airlines, US Air, and finally US Airways after a number of buyouts and mergers. Thanks to the support of its hard-working employees and loyal customers, US Airways has grown to become the fifth largest domestic U.S. airline.

Customer
US Airways

Nuance Solutions
Speech-enabled IVR self-service solution hosted on Nuance On Demand, featuring natural language call steering and personalized call handling with proactive information delivery.

Results
- Improved customer experience
- Increased call containment 5%
- Millions of dollars in annual savings

GET INTERACTIVE:

This eBook contains embedded interactive resources like audio files. Please make sure your computer speakers are set to "stereo" mode.

The Business Challenge

As a result of various buyouts and mergers, US Airways's contact center operation was using multiple interactive voice response (IVR) systems. The systems had nine different voices and a variety of touchtone and speech menus which were inefficient, cumbersome and difficult to navigate. They were running on outdated technology, lacked computer telephony integration (CTI), and offered little insight into key performance metrics like call containment, deflection, and average hold time. What's more, US Airways's agreement with the Airline Customer Service Employee Association (IBT/CWA) required on-shoring of all reservation agents by November 2011, a transition that would require more integrated and cost-efficient IVR support.

That's why in December 2009 US Airways issued a Request for Proposal (RFP) for the design and deployment of a completely new self-service IVR system. The goals for the system were to increase call deflection, decrease call handling time, and improve the overall caller experience. Specifications included a single branded voice, improved prompting, additional self-service options, and comprehensive performance monitoring and reporting.
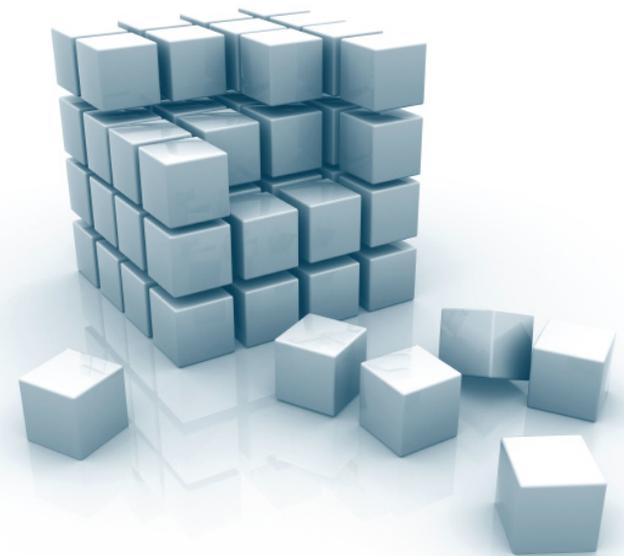
Selecting a Partner

After receiving initial proposals, US Airways quickly narrowed the short list to a handful of vendors, all of whom were proposing Nuance technology as the foundation of their solutions. After careful evaluation of top finalists, the airline ultimately chose to partner with Nuance directly based on its:

- Clear vision of how the IVR solution could deliver a great caller experience while laying the foundation for multi-channel interactions in the future
- Leading speech recognition and natural language technology that would enable them to leapfrog the competition
- Unparalleled expertise and demonstrated skills in designing and delivering a world-class caller experience
- Hosted platform that would enable US Airways to scale their IVR and to take advantage of the newest innovations in conversational speech recognition
- Proven ability to deploy successful solutions for handling both inbound and outbound customer care interactions
- Mobile care solutions that enable wireless callers to complete self-service requests and transactions at anytime, from anywhere using their mobile phones

The Solution

In July 2011, approximately one year after the project kick-off, US Airways and Nuance successfully launched a new speech IVR system on Nuance's hosted platform, Nuance On Demand, featuring various innovations to improve the caller experience. These innovations include natural language call steering, personalized call handling with proactive information delivery, automated collection of trip information to shorten hold time for agents, and a new voice leveraging improvements in Nuance Vocalizer, a spoken output engine.

Natural Language Call Steering

US Airways is the first among domestic US airlines to offer natural language call steering. With natural language, callers are simply prompted to say what they're calling about in their own words. The system understands their freely spoken requests and responds appropriately, making the interaction more like a natural conversation.

This experience compares to traditional speech systems, where callers might ask for things that aren't on the pre-programmed list of expected responses. Natural language technology eliminates this problem by teaching the IVR

GET INTERACTIVE:

Listen to how the US Airways IVR system allows the caller to speak their request in their own words and then, using information about that caller, anticipates the trip about which they are calling.
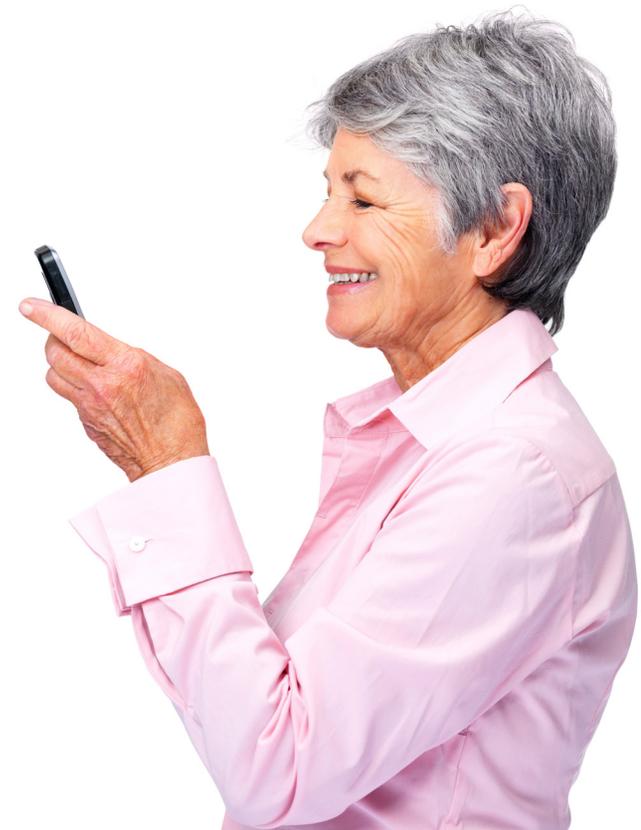
system to recognize the callers intent regardless of the specific words used. As a result, callers are able to interact with the system using words that are most comfortable to them.

In addition to providing a faster, easier call experience, the benefit of natural language call steering is that when callers can express their request in their own words, they are more likely to finish tasks within the automated system. This leads to higher containment rates and frees live agents to focus on more complicated caller issues.

Personalized Call Handling with Proactive Information Delivery

From the outset, US Airways wanted to personalize its new IVR system to distinguish it from other airlines' systems. To accomplish this, Nuance designed the IVR to proactively use information about callers and their trips to deliver a personalized and streamlined call experience. Callers who are members of US Airways's frequent flyer program, Dividend Miles,

GET INTERACTIVE:

Listen to US Airways IVR system deliver a personalized greeting and proactively provide relevant trip information.

are identified based on their phone number. Then, they experience a personalized experience in the following ways.

- **Callers are greeted by their name.** The impact of this personalization feature was that callers had a more positive overall perception of the automated system. In usability testing, people who were greeted by name rated the system higher than those who were not.

- **Information about their trip is proactively provided without them asking for it.** For example, the caller may be notified if they were recently upgraded to first class.

- **The system anticipates the reason for their call to help speed the interaction.** For example, if the call is placed four months prior to the flight, the caller is likely looking to change a reservation. If the call is placed a week before a flight, he might be calling about an upgrade. If the call is placed just hours before a flight, he is probably checking whether the flight is scheduled to depart on time.

NUANCE

> *"The more we know about our customers and the reason for their calls, the more efficiently we can provide the assistance they need and allow them to get on with their day. We have worked closely with Nuance to develop a service experience that provides an intelligent understanding of our customers and their travel needs. By integrating those insights with cutting-edge speech recognition technology, we are providing our customers with the convenient, quality care they have come to expect from US Airways."*
>
> *– Kerry Hester, Senior Vice President, Operations Planning and Support at US Airways*

Proactively delivering information and anticipating the reason for a call is driven by underlying business rules based on an intelligent trip lifecycle. Nuance voice user interface designers built the underlying business rules based on a thorough understanding of US Airways's business and its customers. Depending on where the caller is in the trip lifecycle, the system then gives the caller relevant information or prompts to significantly streamline the interaction.

Automated Collection of Trip Information to Reduce Call Time With Agents

US Airways's IVR system also aims to help shorten the call time with agents when making or changing a reservation. It does this by asking callers tailored questions about their trip and then transferring that information to an agent via CTI screen pops.

This approach of automating the collection of reservation information before speaking to an agent has been well received by customers. Shortly after the new IVR system launched, a US Airways customer posted on FlyerTalk, an interactive online community for frequent flyers, "… the time previously spent on hold is now used by the computers to pull up your records … I'm going to call it a win."

GET INTERACTIVE:

Listen to Wally introduce the company's earnings call.

Listen to how a traditional IVR sounds 'choppy'.

Listen to natural sounding concatenation leveraging Nuance Vocalizer.

The New Voice of US Airways

The new IVR system was part of a larger US Airways corporate rebranding effort aimed at improving market perception and strengthening customer loyalty. To ensure that the new single voice of the IVR system accurately reflected the US Airways brand, Nuance delivered their Voice Identity Program, a service offered by its Business Consulting group.

Through this program, Nuance consultants review the company's brand guidelines and then identify which attributes a voice persona aligned with this brand should convey. Then, they solicit voice talent auditions and narrow over the candidates to finalists. Finally, they conduct a survey in which participants representing the company's target demographic evaluate how well the voices of the finalists convey the brand attributes.

For US Airways, "Wally" emerged as the voice talent of choice. This new voice persona is such an important part of the US Airways brand, that US Airways senior executives proudly had "Wally" introduce the company's Second Quarter 2011 earnings call.

Wally's automated voice also features new innovations to Nuance Vocalizer, Nuance's spoken output engine which dynamically concatenates pre-recorded audio prompts with computer-generated speech. The result of these innovations, which help to gracefully morph syllables, words or phrases into the sounds that precede or follow them, is smoother, natural sounding audio. This improved sound differentiates the US Airways IVR system from other self-service IVR applications in use today.

Nuance On Demand: A Platform for the Future

US Airways chose to deploy its IVR solution via Nuance On Demand, Nuance's hosted technology platform for delivering the highest quality contact center and self-service applications. Nuance On Demand was the clear choice for US Airways because it uniquely combines three things. First, it directly offers Nuance's entire technology stack, including conversational speech recognition, natural language call steering, voice biometrics, outbound notifications, CTI, ACD, and so much more. Second, because new Nuance technology and solutions are quickly available on Nuance on Demand, it provides innovations not yet available in other platforms. This enables customers to rapidly deploy these innovations to remain a market leader. Third, Nuance's experienced voice user interface designers are committed to ensuring that applications on its hosted platform provide a world-class caller experience.

To support continuous improvement, Nuance On Demand also provides reporting and analysis tools that enable US Airways to gain practical insights for improving the caller experience and for informing business decisions. Accessed through a secure Web portal, interactive views provide clear visibility into key metrics such as containment rates, transfer rates, error rates, task completion rates, and dominant paths for driving higher levels of IVR performance and customer satisfaction.

A Successful Lift-Off

In July 2011, US Airways deployed the new IVR system over a two-day period, and it handled 100 percent of incoming call traffic without a single glitch. Then, just a month after launching the system, US Airways experienced a dramatic spike in call volume as travelers contended with flight delays, cancellations, and airport closings due to Hurricane Irene. The Nuance On Demand platform handled the additional call volume with ease and the new IVR system performed flawlessly. An assessment of airlines' hold time during Hurricane Irene conducted by STELLAService even showed that US Airways had the lowest average hold time among the top 10 airlines.

After only five months in operation, and the addition of new automated capabilities for itinerary confirmation and seat assignments, the US Airways self-service IVR had already increased call containment by as much as 5%. The increased containment yields millions of dollars in annual savings for the airline.

In addition to reducing costs, US Airway's new IVR system is delivering the kind of fast, friendly and personalized caller experience that makes US Airways the airline of choice for so many travelers.

"The project development and launch was one of the best planned and executed I've seen. Our partnership with Nuance has allowed US Airways to offer our callers an industry-leading IVR and CTI platform designed to deliver cost savings for the airline while improving our customers' experience."

– Tim Lindemann, Vice President Reservations and Customer Service Planning at US Airways

About Nuance Communications, Inc.

Nuance is a leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with information and how they create, share and use documents. Every day, millions of users and thousands of businesses experience Nuance's proven applications and professional services.

For more information, please visit: www.nuance.com.