Humana Inc. CX Innovation Award Nomination (Entry 1)

Innovation Title
Humana Real-Time VOC Program

Describe the Innovation: Why and What was the idea that this organization was trying to change or create to bring value or resolution to a customer’s pain point?

For the last three years in the respected annual Forrester Customer Experience rankings, Humana has been recognized as one of the two highest-rated U.S. health insurance companies. In 2017, Forrester commented that “Humana understands the importance of, and consistently invests in, improvements to customer service.” The Real-Time VOC initiative was born out of a desire to further improve our customer experience using new and more targeted metrics.

Call center operational metrics such as Average Handle Time reflect a specific business need but offer little insight into the customer experience. Other common CX metrics like NPS, Call Quality, and Customer Effort better measure the experience but are typically received on a small percentage of customer interactions and only when it’s too late to help those customers. And none of these really get to the heart of a customer’s emotional experience. How do they feel – in real time – interacting with our company’s representatives? What kind of experience keeps them loyal to our brand?

To solve this, Humana’s Consumer Experience FastStart lab partnered with Cogito Corporation on a proof-of-concept project to learn how their artificial intelligence engine can help call center associates improve the customer experience. Based on strong results, the program is now rolling out across all Humana Pharmacy call centers with training for more than 2,000 customer-facing frontline employees.

The tool uses behavioral science, artificial intelligence, and high-performance computing to analyze conversational dynamics and biologically-based “honest signals” in the human voice and to immediately signal the agent when a customer is becoming frustrated or needs an empathetic response. Viewing the tool’s on-screen dashboard, agents are notified on how they can change their speaking behavior to make the experience better, or even if the customer just needs a little extra empathy. This might happen when the agent talks too fast or speaks over customers, not letting them finish a sentence, or when there is extended dead air without any interaction.

In a call center conversation, the level of emotional connection achieved between the frontline representative and the customer can lead to better outcomes for both the customer and the business. A 2016 article in Harvard Business Review said: “On a lifetime value basis, emotionally connected customers are more than twice as valuable as highly satisfied customers. These emotionally connected customers buy more of your products and services, visit you more often, exhibit less price sensitivity, pay more attention to your communications, follow your advice, and recommend you more.”

A successful program requires more than just introducing new technology. The FastStart Lab launched a campaign of briefings to get leadership buy-in and set the stage for incremental culture change that would facilitate better conversations with Humana’s customers. This effort built on work done two years prior with a homegrown Empowerment Immersion program that boosts the ability of our call center agents to resolve customer needs on the first call. This initiative has improved first-call resolution – and NPS scores – across our Humana Pharmacy call centers. In addition to making agents’ jobs easier, the tool makes it simple for supervisors to find and listen to calls that have extreme emotion scores, facilitating one-on-one coaching with their teams.
Describe how this organization did things differently as part of identifying, testing and implementing the idea considering the following:

- **Methodologies and tools used**

**Methodologies and tools used**
Humana partnered with Cogito Corporation to deliver in-call coaching to frontline agents using an AI-based behavioral analytics tool. In real time, agents receive VOC feedback that allows them to immediately change course based on customer perception of how well the call is meeting their needs. Cogito’s original research began at MIT’s Human Dynamics Lab, where they proved the power of social signals in human voice communication and developed the technology to analyze patterns that could be reported in real time. The research showed that how people say something is a better predictor of outcomes than what people say.

Identifying the need
Data proves that empowered frontline agents resolve more issues on the first call and in shorter conversations. Equipping agents with the tools they need, including the Real-Time VOC program, helps them make emotional connections with customers and improve operational metrics.

Testing
In 2017 we launched a Real-Time VOC pilot with a sample of 200 of our 2,000+ Pharmacy call center agents. At the same time, a control group that did not receive the tool or training provided the baseline metrics to score improvements. The pilot involved executive briefings and advocacy, management and frontline training, initial data analysis, and program revisions.

Implementing
Based on positive pilot results, the Real-Time VOC program has begun rolling out to more than 2,000 representatives and their leaders across Humana’s Pharmacy division. The test-and-learn protocols remain in place for continuous improvement with both the call center management and Cogito.

Describe how innovative the idea or solution is considering the following:

- **How unique or different the idea or solution is across the industry**
- **How has it advanced CX and awakened others’ inspiration and interest in CX?**

**How unique or different the idea or solution is across the industry?**
This is one of the first deployments of the Cogito AI tool in a large-scale service call center. As an early adopter, Humana is working with Cogito as an iterative partner to develop a customized approach to our customers’ needs. We found a vendor willing to partner with us on customization, system revisions, and tracking metrics to give us the flexibility we needed to refine and scale the Empowerment 2.0 AI-based pilot.

**How has it advanced CX and awakened others’ inspiration and interest in CX?**
Based on promising proof-of-concept results, Geeta Wilson, VP of Consumer Experience at Humana, presented “Artificial Intelligence and the Future of Customer Experience” at Dreamforce 2016, an annual conference on technology and cloud computing attended by 135,000. Her talk focused on how the Humana FastStart Lab, the CX incubator she founded, uses methodologies developed in the lab to validate the impact of real-time AI coaching on the customer experience, including the ability to measure emotion.

The Humana FastStart team has made similar presentations, including at the 2017 CXPA Customer Spark conference and the 2017 Gartner Application Strategies & Solutions Summit, to inform and inspire other CX practitioners about the practical uses of AI in a call center environment.
Initially we had to convince our senior leadership of the value of this tool, both to our customers and to our business. Their curiosity and interest were present from the start and was cemented when we documented strong results. [See Section 12 for metrics.]

Our call center representatives faced a number of hurdles before fully embracing the AI tool. Learning a new tool can be daunting and using the Cogito product required that Humana reassure its associates that artificial intelligence is meant to improve the customer experience and boost their performance, not just more actively monitor them (e.g., the Big Brother effect). They also needed to get used to checking the Real-Time VOC dashboard on their already very active computer screens filled with multiple open databases, files, and apps.

Our interactive on-site training addressed these concerns, and agents soon reported a growing comfort level with using the tool. They now report a greater emotional connection with customers, feeling inspired, and as one agent put it, “less like I’m doing a job and more like I’m helping people.”

**Describe the benefits achieved and/or CX improvement of the innovation considering the following:**

- *What factors were used to quantify and measure the improvement success?*
- *What impact did the product or service have on the customer and how was this measured?*
- *What impact did the product or service have on the employees, and how was this measured?*
- *As a result of the innovation how did it change the business operating norms?*

**What factors were used to quantify and measure the improvement success?**
Notification intensity, change in emotion score, and metrics including improved Net Promoter Score (NPSt) and issue resolutions. More detail below.

**What impact did the product or service have on the customer and how was this measured?**
An analysis of more than 400,000 calls – handled by test groups using the AI tool as well as control groups not using the tool – showed positive impact to our transactional Net Promoter Score (NPSt). Our findings are demonstrating improvements in issue resolution as reported by the customer at the time of the call and First Call Resolution in which customers do not call back for the same issue. Also, these calls are counterintuitively shorter, which can be good for the customer and the business. Humana is analyzing these metrics as potentially leading indicators for other improved business outcomes, such as industry standards scoring and employee retention.

In recognizing the Temkin Group’s 2017 Customer Experience Trends, we have noted that the Humana Empowerment 2.0 AI project is at the leading edge of three of these trends:

1. Operationalizing Emotion
2. Embracing Employee Engagement
3. Tapping Into Speech Recognition

**Operationalizing Emotion**
The Humana Consumer Experience CoE FastStart lab has partnered with Cogito to deliver real-time Voice of the Customer (VOC) analysis of member and agent emotions during their conversations. The AI tool serves as an early alert system, providing on-screen VOC feedback that enables agents to immediately course-correct, interact more empathetically, and reduce escalations. This is allowing the company to operationalize the emotional connection that is critical in developing and maintaining consumer trust and loyalty. Operations leaders now have metrics that track the impact of improving the emotional connection made by employees during customer interactions.
Embracing Employee Engagement
It’s challenging for employees to perform at their peak and remain engaged while watching the clock or other performance metrics. Empowered call center associates, who are trained in the AI tool and are given the resources to resolve issues, are now focused on first-call resolution and making sure the customer’s issues are handled more quickly and effectively. Many report appreciating the dashboard-style feedback (see image) that helps them change their pacing or tone while talking with the customer. A new Empathy Cue, which shows signs of a customer’s emotional state (positive or negative), has been especially popular with agents, who can recognize an opportunity to express sincere empathy while continuing to focus on resolving the issue.

The AI application is helping Humana investigate how we can align employee ownership and retention with customer loyalty. We’ve found, for example, that the AI tool is delivering good customer outcomes while actually making calls shorter. Empowered employees are far more engaged, increasing productivity, resolving issues more quickly, and resulting in greater potential for career retention.

Our call center associates and frontline leaders have given us valuable feedback, including these comments:
“I now understand when I’m over-talking, or when I’m speaking too quickly. I have a chance to notice when I’m doing that and improve.” – Customer Care Specialist

“This feedback has helped me calm down ... It helps me change up in the middle of the call.” – Customer Care Specialist

“The AI tool helps me reach out to associates to remind them of dead air. When I’m doing live listening, I send them an IM and they begin to fill the air by building rapport.” – Call Center Supervisor

Tapping Into Speech Recognition
Although the Cogito AI tool analyzes voice patterns and “honest signals” rather than recognizing specific words, use of the technology falls into the realm of this overall trend. Imagine you are having a conversation with a customer who is trying to describe an immediate need. In sincerely trying to help, you might inadvertently talk over the customer, change your pacing, or start researching while leaving dead air on the line. The customer’s voice might indicate increasing stress, and while you are busy trying to locate information, perhaps you don’t recognize rising frustration in the member’s speech patterns.

A quick glance at your on-screen AI dashboard shows that the call is getting off-track. In real-time, you see various indicators of how you can improve the pacing of the call, your perceived empathy, and your communication frequency. The software is analyzing the hidden “honest signals” in the human voice that can be imperceptible without the help of voice recognition – and more importantly, analysis – technology. Picking up on these cues displayed on your screen, you get the conversation back on track and end the call with a happy customer.

Real-time VOC notifications
Energy cue: Your voice sounds flatter than usual.
Speaking slowly: Increase your pace.
Speaking quickly: Slow down.
Slow to respond: Customer may be waiting for a reply.
Empathy cue: Think about how the customer is feeling.
Continuous speaking: Finish your thought. Ask an open-ended question.
Extended silence: Let the customer know you’re there.
Extended overlap: Pause and let the customer finish their sentence.
What impact did the product or service have on the employees, and how was this measured?

In recent years, management has grown increasingly aware of the linkages between call center metrics and customer experience. Sometimes, operational metrics and CX metrics end up at odds with each other. Tools like this help us investigate how we can align employee ownership and retention with customer loyalty. Agents also benefit from heightened emotional intelligence and fewer repeat calls.

As a result of the innovation how did it change the business operating norms?

The Cogito tool allows supervisors to intervene in real time instead of after the call and gives performance measures on 100 percent of calls. By doing this, it has helped Humana operationalize the understanding and measurement of customer emotion.

Please describe the 'before' and 'after' success metrics that were used to determine this newly innovative approach was successful:

An analysis of more than 400,000 calls across pilot test groups and control groups showed that the AI-based tool delivered improvements by increasing or decreasing key metrics:

**INCREASES**
- Net Promoter Score (NPS), transactional
- Issue resolution
- Perfect Call*

**DECREASES**
- Handle time
- Repeat calls
- Dead-air notifications

* Humana’s Perfect Call metric reflects when the customer gives the top score on agent knowledge, agent courtesy, and overall agent satisfaction - and also reports that they issue was resolved.

Which types of work is the innovation focused on? (select all that apply):

- Customer-Centric Culture
- Voice of the Customer, Customer Insight and Understanding
- Organizational Adoption and Accountability
- Customer Experience Strategy
- Experience Design, Improvement and Innovation
- Metrics, Measurement and ROI
- Use of AI and customer emotion in a CX application
- Employee retention improvement related to a CX program