

Posted on Fri, Nov. 03, 2006

## 'Emotion detectors' help to guide customer service

By Annys Shin  
Washington Post

Consumers have the space program to thank for smoke detectors, invisible orthodontic braces and football helmet padding. One day, they may thank the security and intelligence-gathering industry for better customer service.

Over the past several years, technology designed for eavesdropping has found a new home in corporate call centers, recording and analyzing millions of phone conversations between customer service agents and consumers in an effort to better digest and organize what customers are saying.

Forrester Research estimates that annual sales of the emerging technology, known as "speech analytics" and "emotion detection," amount to about \$400 million and growing.

The building blocks of speech analytics have been around for about eight years, said Donna Fluss, president of DMG Consulting LLC in West Orange, N.J. They can be found in automated phone trees and in "Julie," Amtrak's automated reservations agent.

Emotion detection, which tracks volume and pitch, grew out of voice verification technology, Fluss said.

The technology enabled FedEx, for example, to search calls from customers for the word "wow" to suss out really good, as well as really bad, customer experiences.

Every speech analytic and emotion detection system is slightly different, but the same basic features apply.

They all record and transcribe conversations and categorize them by words and phrases.

Wisconsin Physicians Service, a health insurance provider, searched its phone calls for "Medicare" combined with "confused" to find calls from seniors who were having trouble understanding the new Medicare prescription plans.

More-subtle systems are designed to understand that "this is the last straw" means the caller wants to bolt, said Roger Woolley, vice president of marketing for eTalk, of Irving, Texas, one of several companies selling speech analytic software.

Some programs combine word searches with emotion detection. NICE Systems spent tens of millions of dollars developing algorithms that measure a baseline of emotion in the first few seconds of a phone call. If the customer's voice deviates from that baseline, a supervisor is alerted.

Companies want to dig deeper into calls in response to the "super-empowered angry customer," said Keith Dawson, editorial director of Call Center Magazine.

"The Internet gives you the ability to amplify your anger or distaste. It is evening out the playing field, and some

companies are getting caught short," Dawson said. Now they're trying "to better understand consumers on an individual basis, and ... what is motivating each one."

Wireless carriers, financial services firms and insurance providers are hardly rendered helpless by angry consumers. But many of them are beginning to realize that they're not hearing what customers are saying despite having armies of customer service agents.

Most companies that use call centers sample a small percentage of conversations to make sure agents are following scripts and for general quality and training purposes. Being able to analyze all calls can offer a more complete picture of what customers are saying, such as why they are defecting to a competitor.

"Agents aren't recording that. Senior management never hears it. ... Surveys don't do it. Quality monitoring doesn't do it," said Ted Lubowsky, president of worldwide sales for Utopy Inc., a speech analytic vendor in San Francisco. "They're not listening to the customer, and the customer is dropping all this wisdom."

One simple way speech analytics can help consumers is by making it easier for companies to figure out whether a complaint is isolated or part of a systemic problem. For instance, if a company starts getting a lot of calls about a defective product, the company knows it has a problem, said Bill Andrews, general manager of self-service speech solutions for Convergys Corp., a leading outsourcer of call centers.

"By addressing the root cause, you can eliminate calls coming into the contact center," he said.

Janet Ryan, call center director for AAA of Washington/Inland, which operates a travel agency in Washington state, had heard complaints about a vendor AAA buys travel services from but had nothing to substantiate those concerns. Using software by a Melville, N.Y., company called Verint Systems Inc., she searched calls mentioning that vendor and found that the average duration was 30 minutes because her agents were being put on hold.

AAA has asked the vendor to change its Web site so AAA agents can make changes online without having to wait to talk to a person.

The question is whether any of these technologies will make the customer service experience better for consumers, Dawson said.

Some customer service experts have heard many of the same promises before and are skeptical.

"What's prevented the same improvements from cascading down earlier?" said Scott Broetzmann, president of Customer Care Measurement and Consulting. "They had the same tools before, albeit in a different format."