Speech Technology Helps Toronto Analyze 311 Calls

Jessica Renee Napier | March 14, 2013

The study of physiognomy has been used for hundreds of years to read facial features to determine specific personality traits. Experts say that the shape of one's eyes, nose, lips, forehead and face provide clues about an individual's character.

Other types of predictive technologies have been created to evaluate weather, traffic, crime, epidemiology and more. In each case, data is evaluated for patterns so that past trends can be used to predict probable future trends.

Toronto is deploying a predictive technology that analyzes recorded voices. The city, which responds to about 1 million calls per year at its 311 call centers, is exploring the use of speech analytics to enhance call center operations and serve customers more efficiently.

"Traditionally, if you wanted to understand the voice of your customer, you would conduct surveys or focus groups," said Heather Callahan, Toronto's manager of information and business development. "If you are a contact center that records your calls — if you listen to those calls — it is often to focus on the actions of the agents rather than the voice of your customer. 311 Toronto saw the opportunity to utilize this tool to understand what our customers were saying and why they were contacting us."
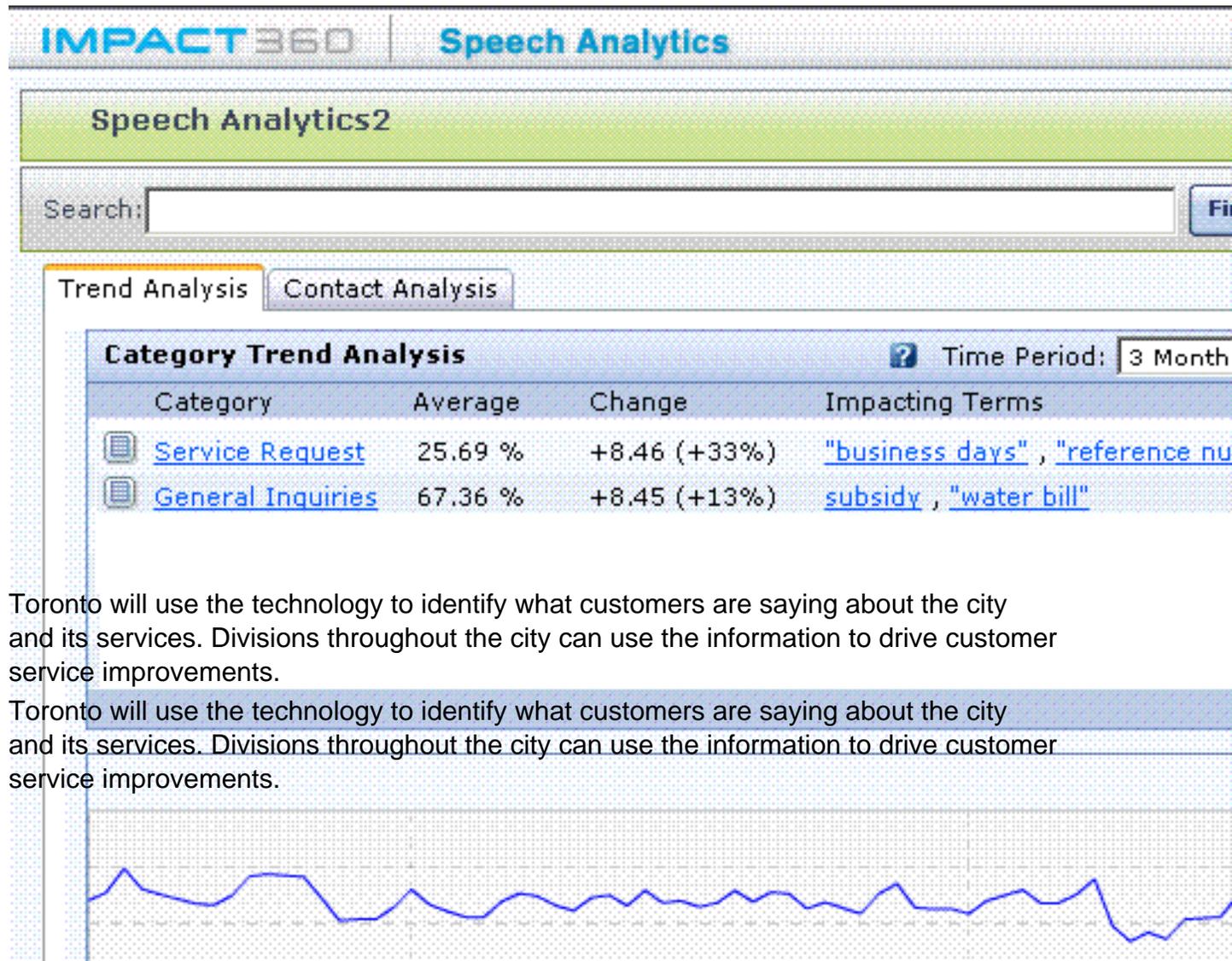
Speech analytics solutions, which have been utilized by financial institutions and other private-sector organizations for years, automate the analysis of recorded information. They analyze dialog in order to identify patterns and uncover data trends.

Toronto is working with KANA Lagan infrastructure, which provides government-to-citizen solutions that support non-emergency information calls and service requests. The company, known for its expertise in customer experience management, is providing Toronto with an open interface, which allows the city to interoperate with third-party software.

The city uses Impact 360 Speech Analytics Essentials software, which allows them to index and organize suggestions based on collected data before listening to a call.

"KANA supports ... the use of speech analytics products such as that used by Toronto," said David Moody, head of Worldwide Product Strategy for KANA Software Public Sector. "It enables the call center supervisor to focus on the important calls to determine what is really going on, so that they can make more informed decisions and drive further efficiencies."

Impact 360 Speech Analytics automatically categorizes audio interactions according to the city's objectives. Then, it identifies the most common reasons for calls within each category (screenshot below). This data helps city officials understand what is taking place at the call center.

IMPACT 360 | **Speech Analytics**

Speech Analytics2

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Trend Analysis | Contact Analysis

Category Trend Analysis   ? Time Period: 3 Month

Category	Average	Change	Impacting Terms
📄 Service Request	25.69 %	+8.46 (+33%)	"business days" , "reference nu
📄 General Inquiries	67.36 %	+8.45 (+13%)	subsidy , "water bill"

Toronto will use the technology to identify what customers are saying about the city and its services. Divisions throughout the city can use the information to drive customer service improvements.

The information gleaned from speech analytics is already coming in handy in Toronto. During a recent snowstorm, call volumes to the 311 center spiked. Monitoring caller speech allowed the city to add frequently requested information to their up-front message, helping to better manage the influx of storm-related calls.

Based on initial call speech analysis, Toronto is beginning to identify other initiatives that will help improve the customer experience for citizens. As one of the first government entities to leverage such technology, the city is also working on collaborating with other public agencies to further the use of innovative technology in government call centers.

Photo from Shutterstock

http://www.govtech.com/Speech-Technology-Helps-Toronto-Analyze-311-Calls.html