Donna Fluss

is the founder and President of DMG Consulting LLC, the leading provider of contact centre and analytics research, market analysis and consulting. Fluss is a recognized thought leader and innovator in contact centre and real-time analytics. For over 26 years, she has helped end users build world-class differentiated contact centres and vendors develop high-value solutions for the market. She is the author of the book *The Real-Time Contact Center*, the *Contact Center QA Guide*, and many leading annual industry reports on contact centre hosting, IVR, speech analytics, performance management, workforce management, surveying/enterprise feedback management, quality management/liability recording and contact centre analytics. Fluss is a highly respected speaker and her articles and columns are carried by publications around the world.

Keywords: speech analytics, contact centre, call centre, contact centre analytics, customer retention, increasing revenue

Speech analytics thrives during the recession

Donna Fluss
DMG Consulting LLC
6 Crestwood Drive
West Orange, NJ 07052, USA
Tel: +1 973 325 2954
Fax: +1 973 325 2071
E-mail: donna.fluss@dmgconsult.com
Http: www.dmgconsult.com

New Technology Briefing

Why marketing needs speech analytics

Donna Fluss

Received: 7th December 2009

Abstract

Speech analytics solutions help enterprises retain customers and generate incremental revenue while providing an outstanding and differentiated customer experience

Journal of Direct, Data and Digital Marketing Practice (2010) **11**, 324–331.
doi:10.1057/dddmp.2010.12

Against all odds and despite the worldwide economic slowdown, the speech analytics market is booming. During 2008 it outperformed the great majority of contact centre and IT segments, and stellar results were expected again in 2009. The speech analytics market experienced its fifth consecutive year of strong growth in 2008. DMG research shows that the market grew from 25 commercial speech analytics implementations at the end of 2004 to 1,764 at the end of 2008. Despite the recession, the contact centre speech analytics market has had a five-year compounded annual growth rate (CAGR) of 190 per cent. Five hundred and twenty-two net new solutions were implemented during 2008, fuelling a 42 per cent year-over-year increase. DMG predicts that within the next 5 to 7 years, 25 to 30 per cent of all contact centre seats will have a speech analytics solution in place.

While contact centres are where phone conversations are captured, sales and marketing organizations have the most to gain from speech analytics solutions. Using speech analytics to achieve sales and marketing goals — to find new product/service ideas, identify up-sell/cross-sell opportunities, recognize ‘at-risk’ customers and detect issues negatively impacting a marketing campaign — is one of the highest-value uses of speech analytics. The payback can be as short as 3 to 6 months when speech analytics is applied to revenue generation and customer retention opportunities.

What is speech analytics and how does it work?

Speech analytics, also known as audio mining, is software that converts unstructured conversations into structured output. (The unstructured conversations can be analysed either after they are recorded or in real time.) The conversations are structured and turned into metadata; the

Figure 1: How speech analytics works
Source: DMG Consulting LLC, November 2009

Defining speech analytics

metadata output files can then be analysed and used by the enterprise (see Figure 1).

The primary output from speech analytics solutions is metadata files in two forms: phonetic representations of the conversations, or a transcript. Some of the solutions create a transcript for internal system use, but do not make it available for their customers, as they believe that it is not accurate enough.

Uses of speech analytics

At a high level, the primary uses of speech analytics today are:

1. *Root cause analysis* — understanding the reasons why people call; this is an extremely broad category. In addition to addressing ‘routine’ calls, it incorporates everything from identifying ‘at-risk’ customers to monitoring competitive activity, finding new product ideas and detecting the procedures that most annoy customers.
2. *Trend analysis* — identifying changes in the anticipated and unexpected reasons why customers call.
3. *Emotion detection* — understanding callers’ emotional state (some solutions can measure emotional changes and heightened states).
4. *Talk analysis* — measuring and understanding caller and agent talk patterns, including silences, holds, transfers, talk-over, etc.
5. *Script adherence* — monitoring how well agents follow their scripts, communicate required information, or say inappropriate phrases or words; and
6. *Quality assurance* — identifying conversations that require management attention.

Real-time speech analytics

An emerging group of real-time speech analytics applications analyse conversations almost as soon as they happen. (There is necessarily a slight delay of a few seconds for the application to analyse a large enough snippet of the conversations to identify some trigger for action.) Real-time analytics applications that can address both speech and written interactions (chat, email, SMS) are expected to play a very important role in contact centres in the future. These applications will provide the primary feed into a predictive analytics

engine that will rapidly assess the best approach for handling the customer interaction (ie factual or emotional), whether or not to attempt an up-sell, and if so, what to try to sell.

Benefits of speech analytics

Far-reaching benefits for the entire enterprise

The rapid adoption of speech analytics is not an accident — speech analytics provides quantifiable benefits that improve the enterprise's bottom line. It helps companies improve productivity and reduce operating expenses, increase revenue, identify 'at-risk' customers and reduce attrition, identify new product/service ideas, get rapid feedback for marketing campaigns, and provide an outstanding customer experience. Speech analytics helps marketing organizations cost-effectively achieve their primary goals of increasing revenue and retaining customers.

Customer retention

Increasing customer retention — Contact centres are on the front lines of the battle to retain customers. During an economic slowdown, this activity becomes even more important. This is because, at best, it is 8 to 10 times more expensive to acquire customers than to retain them, according to Gartner, and a challenging economy exacerbates this problem. There are situations where it can be 25 to 50 times more expensive to acquire than to retain customers, depending on the type of product. Speech analytics solutions can identify and notify management when customers are flight risks and discern the reasons why. This information can be used by marketing to proactively reach out and retain specific 'at-risk' customers, and to identify and fix the underlying issues that are damaging customer loyalty.

Increased revenue

Increasing revenue — Many enterprises invest a great deal of money in identifying new product ideas. They run focus groups to bring customers together to discuss potential new products; they survey their customers, hire research firms, set up collaboration sites, use social media, etc to solicit input from customers and prospects. The only thing they don't do is listen to what their customers, prospects and partners are telling their agents — unsolicited and free of charge — when they call the contact centre. Customers are not shy, particularly when they are on the phone and cannot see the person at the other end of the line. They frequently volunteer all kinds of unsolicited (and unstructured) input about new product/service ideas and enhancements. Unfortunately, in many enterprises today this information is shared with contact centre agents who are motivated to get to the next call as quickly as possible and do not have a process for gathering these highly valuable suggestions and recommendations. Speech analytics is the ideal way to capture this information. Even if it is used only to improve the performance of traditional research processes, it can speed up identification of new product ideas.

Enhanced customer experience

Improving the customer experience — In a recent DMG Consulting benchmark study on 2010 enterprise goals, DMG found that providing an outstanding customer experience is the number one goal for enterprises and contact centres worldwide. The challenge is that this

is a difficult goal to measure, and it is not easily translated into hard dollar benefits. For example, outstanding service is closely tied to building a company's brand. (No one wants to be known for delivering poor service.) But what is the quantifiable financial benefit to an enterprise of a 2 per cent increase in customer satisfaction? This is difficult to determine. Yet everyone agrees that delivering great service is a critical prerequisite for winning new business. Excellent service is also essential for decreasing customer attrition. If a customer on the verge of defecting receives poor service, it will be very difficult to convince them to continue to do business with the company. Speech analytics solutions can be used to identify and eliminate the impediments to outstanding service. To improve the effectiveness of speech analytics solutions, it is essential to take immediate action by fixing the identified issues as quickly as possible.

Positive impact on marketing

Improving marketing programmes — Based on the input received from speech analytics, marketing organizations can hear first-hand about messaging that is confusing customers so that they can make adjustments to correct poorly performing campaigns, or create new offers to effectively counter the competition. The solutions are also being used to identify competitive threats; in a growing number of cases the company was not even aware of a competitor until they found out about them via speech analytics. Speech analytics can also provide marketing managers with much of the same information they would get from focus groups, at a much lower cost. Lastly, speech analytics has proven to be a highly effective tool for understanding customer preferences and market trends in order to generate new product ideas and enhancements.

Market maturity

Opportunities and challenges in a maturing market

The speech analytics market, vendors and products are maturing at a rapid rate. There is a great deal of ongoing investment and innovation, indicating that this market is not yet commoditized; nor is this likely to happen in the next three to five years. Speech analytics remains a visionaries' market in which each of the leading competitors has built a unique solution based on their view of what speech analytics can and should do. This creates both opportunities and challenges for end users investing in these solutions. The opportunity is a reflection of the tremendous amount of creativity and innovation being built into many speech analytics products. The challenge is that, because the vendors have been striving to innovate rather than reach functional parity, important areas like reporting are weak in many of the solutions.

There is still great opportunity to enhance these solutions further by making them easier to implement and manage, enabling them to deliver relevant results more rapidly without elaborate tuning or ongoing manual effort, improving standard and ad hoc reporting, and providing more preconfigured horizontal and vertical packages. Of course, all users would also like to see a reduction in the price, time and resources that it takes to implement these solutions.

Enterprise-wide benefits

The greatest impediment to successful speech analytics implementations, however, is not the technology itself, but organizational politics. As speech analytics increases in popularity, the debate about which department should own the application grows. Since speech analytics uses call recordings (and is starting to use real-time conversations), the easy answer is that it should be owned by the contact centre. The flaw in this approach is that findings and insights from speech analytics solutions can help many other departments, particularly marketing organizations.

Speech analytics can identify customers' needs, wants and issues. This information is useful to many departments within the enterprise if they are aware of its availability and are given prompt and easy access to the data. Managed properly, speech analytics can be an enterprise solution. While the findings and insights from speech analytics need to be shared throughout the company, one organization still needs to 'own' the application. To put it in enterprise terms, one specific department has to pay for the solution and its maintenance, and be responsible for operating and managing it on a day-to-day basis.

Speech analytics requires dedicated management

Speech analytics is a truly cross-functional solution. It's one of a new category of solutions that has to be managed by one organization, but needs to support and supply information to many departments within an enterprise. If your enterprise does not yet have an individual or group that is responsible for customer analytics, it's time to create one. This person or team must be responsible for customer analytics and not the enterprise data warehouse. It's important that this group or individual be positioned to influence and drive change in other departments throughout the company. In other words, whoever manages the speech analytics solution and other customer-centric analytic applications should be expected to effect change throughout the enterprise. Specifically, they need to be evaluated based on their ability to rapidly identify and communicate important and actionable findings.

Speech analytics case studies

Making speech analytics real with case studies

DMG has analysed many implementations to find a few that best illustrate the far-reaching benefits of speech analytics for marketing departments, their enterprises and, of course, customers. Speech analytics solutions are valuable, and yield a rapid payback when used properly, because they help enterprises while giving customers what they want. Here are three case studies that reflect and quantify their benefits for marketing organizations.

Customer retention

Customer retention case study: Reducing customer churn in the telecom industry

Challenge: To provide an outstanding customer experience and keep attrition rates low. (Number portability is a regulation requiring that customers be allowed to keep their phone numbers when changing

telecom providers. This regulation makes it much less burdensome for cell phone users to change service providers, and has been observed to substantially increase the rate of customer defections.)

Goals: To use service as a means of differentiating the provider's brand and enhancing their image, and to minimize the increase in customer churn resulting from number portability coming into their region.

Solution: An international cell phone service provider implemented a series of internally and externally focused proactive measures and systems to protect and retain their customer base. Internally, the company invested in training and quality programmes to improve agent knowledge, communication skills and responsiveness. To further enhance the performance of their QA programme, the company moved from traditional quality management to precision monitoring. A speech analytics application was implemented to review all calls and identify those that required additional management attention. Looking externally, the cell phone provider built a Predictive Churn Model to identify 'at-risk' customers so that they could proactively reach out to them via phone calls or emails, before the customers called to cancel their service.

The speech analytics system identified who called, why they called and their emotion level. These insights, combined with information from the customer relationship management system, data about customer usage and many other proprietary inputs, enabled the company to accurately predict which customers were at high risk of defecting. Within 24 hours of the initial contact, the company's outbound group was busy proactively calling all of the 'at-risk' customers to take the necessary actions to keep their business.

The benefits

The company's customer-centricity strategy, supported by their Predictive Churn Model and speech analytics solution, provided the following benefits:

1. 'at-risk' customers were identified within 24 hours of the initial contact, instead of either days later or never;
2. within just 9 months, the overall accuracy rate of the Predictive Churn Model was at 75 per cent and increasing;
3. eighty per cent of the customers identified by the Model had not been picked up as being 'at-risk' by agents or other systems;
4. twenty-five per cent increase in overall company satisfaction ratings (based on survey results);
5. twenty per cent increase in satisfaction with customer service;
6. fifteen to 20 per cent increase in first-call resolution rates;
7. fifteen per cent reduction in repeat calls; and
8. over 600 per cent increase in the number of agent evaluations performed each month, from 700 to 5,000.

Up-selling

Up-sell case study: An online financial services organization

Challenge: An online financial services company offering home mortgage, home equity and auto loans, along with high-yield savings and certificates of deposit, had no systematic method to measure each agent's sales effectiveness.

Goal: To examine the sales process and employee performance in order to increase revenue. The key metric the company wanted to improve was the application-to-call ratio, which is the number of loan applications an agent generates relative to the number of calls they receive.

Solution: Speech analytics was used to measure agents' sales skills to determine whether those who followed a specific process generated more sales. The company was able to validate the effectiveness of their current sales process and identify the skills that differentiated top performers, resulting in more sales. The calls were then analysed to determine which skills were most important in closing deals. The skills identified as resulting in high sales conversion rates were building rapport, probing to uncover customer needs, and educating customers about the lending process. The organization then coached poor performers and trained new agents to enhance these key skills.

Benefits:

- forty-one per cent improvement in the sales conversion rate; and
- \$2 million in incremental annual revenue.

Revenue growth

Increasing revenue case study: A European banking group

Challenge: A European banking group with 180 branches and offices lacked an automated way to select the most appropriate sales calls for evaluation and training. (The bank had a unionized working environment that made it difficult to change the compensation plan to encourage sales of more profitable products.)

Goal: To increase revenues by increasing sales of higher-margin products.

Solution: Speech analytics was used to automatically categorize calls to identify: sales attempt rate by agent, how often each product was being offered to customers, how agents handled customer objections and the sales conversion rate. Calls were also analysed to find best practices used during sales attempts, including the best techniques to handle customer objections. Non-performing agents were also identified and given targeted training, including the sharing of best practice calls, to help them improve their performance.

Benefits:

- 35 per cent increase in average monthly sales for the targeted agents.

The market landscape

Market competitors

Sixteen vendors currently offer speech analytics solutions, and five more vendors are in the process of rolling out their initial offering. Nine of the current vendors have built the majority of their solutions in-house, while seven are using a partner's technology. Among the vendors that have built their own speech analytics offering, seven are offering speech analytics either on a stand-alone basis or as part of a suite: Autonomy etalk, Aurix Limited, CallMiner, Nexidia, NICE Systems, UTOPIA and Verint. The other two vendors, BBN Technologies (whose acquisition by Raytheon is expected to close in Q4 2009) and eLoyalty, offer an analytical suite that uses speech analytics. Over the next few years DMG Consulting expects additional application providers, partners and resellers to enter this market. In the future we expect to see the Enterprise Resource Planning vendors enter this sector, as speech analytics begins to be perceived as an enterprise application.

A bright future for speech analytics

The future

The overall outlook for speech analytics over the next few years is extremely positive. Users should expect to see significant product enhancements that will help them address new opportunities and realize greater benefits from existing investments. Prospects can look forward to solutions that are more targeted, easier to implement and come with a lower price tag.

Within 6 to 10 years, speech analytics will become a mission-critical enterprise application. What makes these solutions unique is their ability to contribute to many of the operating and business groups within the enterprise. Marketing organizations will find them invaluable in improving the company's brand, image, retention efforts, sales and marketing strategies, internal procedures, the customer experience, product and service quality and much more.

To learn more about the speech analytics market, see *DMG's 2009–2010 Speech Analytics Market Report* at <http://www.dmgconsult.com/services/speech/abstract.asp>. This is a 400-page guide that analyses the vendors, products and market, and provides best practices to help users succeed with their implementations. This Report helps managers differentiate between solutions and promises so that they can pick the right offering for their company, at the right price.