Why Text Analytics? What Every CX Professional Needs to Know
By 2020, as much as 93 percent of all data in the digital universe will be unstructured. This includes raw text data, images, video, email, web pages, and other information that cannot easily be organized into numeric fields or analyzed using traditional business intelligence software. Unstructured data provides a gold mine of information for CX professionals, allowing them to turn digital customer chatter into actionable strategies for improving the customer experience. This report describes why text analytics can be valuable for building not only a better understanding of what customers want, but also the executive buy-in needed to deliver against newfound customer expectations.

**WHY THIS MATTERS**

Text analytics complements traditional survey analysis and lets the customer drive the conversation. The analysis of free-form text data surfaces customer feedback that might otherwise go unnoticed in traditional survey analysis. Because traditional feedback surveys rely primarily on predefined attributes, they make assumptions about what’s important to customers and what’s not, and may miss important information. Analyzing open-ended questions allows customers to talk about whatever they deem most important, in words that express their preferences and emotions.

Text analytics enables continuous feedback monitoring. Unstructured feedback flows into companies continuously in the form of online reviews, blog posts, social media commentary, and so on. With text analytics, companies can identify problems and opportunities as soon as they arise and address them quickly.

Text analytics builds empathy. Text analytics can surface compelling stories that vividly illustrate customer frustrations and the consequences of a bad experience. These stories can bring the customer experience to life. As a result, they can be a highly effective way to engage executives and build their empathy for the customer experience. By combining “big data” with “big stories,” customer experience professionals can create a convincing case for change and persuade senior decision makers to take action.

**KEY FINDINGS**
Susan, an expectant mother near her due date, walks into BABIES“R”US®, a leading retailer of baby products. A sales associate approaches her as she looks around and asks if she’s joined the online registry, which is offering a promotion that includes a 10 percent back eGift card on registry purchases. Anticipating the several thousand dollars she expects to spend on baby gear, Susan signs up.¹

But the eGift card never arrives. She calls the customer contact center and an agent opens a ticket, promising someone will get back to her. A week passes. Nothing happens. She calls again. This time the agent tells her that, regrettably, her registry was started three days before the promotion went into effect. Frustrated, Susan asks to speak to a manager, but she’s told that only someone in the gift card department can fix the problem, and there’s no way to connect her to that department.

Susan posts her exasperated version of events on Facebook and tags BABIES“R”US® as well as one of its competitors, buybuy BABY®. Within an hour, an online agent from BABIES“R”US® calls Susan. The issue is resolved, and Susan receives her eGift card.

More Touchpoints, More Channels, More Complexity

What can we learn from this customer experience snafu? One lesson is the increasing complexity of providing a smooth and consistent customer experience across a growing number of touchpoints, channels, and technologies. Because different touchpoints are often managed by different business units and influenced by different functions, creating a seamless experience can be challenging. However, while the challenges are significant, so too are the rewards. Estimates suggest that customers who use multiple channels spend two to four times more annually than single-channel customers.²

Another lesson is that customers today communicate an enormous amount of feedback digitally. Eighty-five percent of Millennials who responded to a recent Medallia survey said they write online reviews or post on social media after they’ve had a great or terrible customer experience.³ Some digital feedback is solicited directly from customers through online surveys, but much of it is unsolicited and easily shared using review sites, blogs, and social media platforms — what Wharton professor Eric Clemmons calls “word of mouse.”⁴
Today most consumer feedback shared openly online — and a lot solicited through company surveys — is free-form text, often referred to as “unstructured data.” Unstructured data is different from other types of data because it cannot be organized into numeric fields or analyzed using traditional business intelligence software. While the exact amount of unstructured data is unknown, it is undeniably huge. IDC estimates that unstructured data is growing at a rate of 62 percent per year and predicts that by 2020, 93 percent of all data in the digital universe will be unstructured (see Figure 1).

To be sure, unstructured data provides a gold mine of information for companies to use in their battle for customers. Customer commentary, shared as open-ended comments through surveys, online review sites, blogs, chat logs, social media, and a host of other sources, can produce unique insight and new ideas for product and marketing innovation. However, because unstructured data is text heavy and irregular, making sense of what is being said and how it’s being said — positively or negatively — is not for the faint of heart.

Companies that underestimate the value of unstructured data do so at their peril. While extracting meaning from text and other unstructured sources is complex, companies are quickly realizing the value of turning digital customer chatter into actionable business intelligence. Powerful new technologies have evolved to analyze large volumes of text that were previously unprocessable by computers. As a result, companies are now able to transform masses of unstructured information — documents, audio, video, and images — into quantifiable data that can be processed and analyzed by business decision makers.

Text analytics is one of these powerful new technologies.
Using Text Analytics to Quantify Customer Buzz

Using statistical, linguistic, machine learning, and visualization techniques, text analytics software automates the collection and interpretation of customer commentary—verbatim words and phrases that collectively represent what customers are saying about their experiences. Text analytics enables companies to more accurately interpret what their customers are saying, their wants and needs, how well those needs are being met, and what new products, features, or services might appeal to them. Without text analytics, extracting meaning from customer comments, social reviews, and other digital dialogue requires manually sifting and coding thousands and thousands of records, a process that is not only time-consuming and costly, but also prone to human error.

Text analytics can be applied to sources across the entire value chain (see Figure 2). As companies gain familiarity with the technology’s capabilities, many have started to apply text analytics to some of their biggest operational challenges.

Figure 2: Opportunities for Driving Value with Text Analytics

- **Innovation**
- **Brand Health**
- **Customer Experience**
- **Competitive Intelligence**
- **Operational Efficiency**
- **Revenue Generation**

**Source:** Medallia 2016
An independent study of 220 text analytics users, conducted by IT consultancy Alta Plana, finds that text analytics is being applied to more than 16 major business needs (see Figure 3). Topping the list of business applications are customer experience programs trying to create a seamless shopping experience and better understanding of their customers’ needs and preferences. With growing pressure to demonstrate more immediate impact, customer experience professionals have come to realize that it’s not enough to simply know more from their data. They have to operationalize the knowledge they gain so that their insights can be transformed into actions that drive business results.

**Figure 3: Business Applications of Text Analytics**

- **Voice of Customer / Customer Experience**: 39%
- **Research**: 38%
- **Brand/Product / Reputation Management**: 38%
- **Competitive Intelligence**: 33%
- **Search, Information Access, or Question Answering**: 29%
- **Customer CRM**: 27%
- **Content Management/Publishing**: 25%
- **Online Commerce Including Shopping, Price**: 16%
- **Life Sciences or Clinical Medicine**: 15%
- **E-Discovery**: 14%
- **Insurance, Risk Management, or Fraud**: 13%
- **Others**: 11%

*Source: Alta Plana, 2014*
Text analytics makes more data actionable. It gives business leaders the ability to extract customer insights from data sources that were previously too costly to analyze. These insights can be used to drive higher satisfaction ratings, greater customer retention, increased sales, operational improvements, new products and services, and other performance outcomes (see Figure 4). Given the potential for significant business impact, customer experience management may be the first frontier where text analytics strikes gold.

Take the case of a global financial services company. When the company discovered that customers were dissatisfied with the quality of its service calls, it initially thought it would have to overhaul its infrastructure and hire new agents, a multimillion-dollar investment. But, by using text analytics to dig deeper into thousands of customer surveys and open-ended comments, the company discovered that the quality problems were more localized than they originally appeared and not always attributable to its agents. With this insight, company leaders decided that it would be more cost-effective to revise training programs for certain call centers and revamp the company’s risk assessment algorithms. By analyzing customers’ open-ended comments, the company not only improved service-call quality, it also saved millions of dollars in the process.

**Figure 4: Impact of Text Analytics**

- Higher Satisfaction Ratings: 19% Measure, 16% Achieved, 33% Plan to Measure
- Increased Sales to Existing Customers: 21% Measure, 12% Achieved, 33% Plan to Measure
- Ability to Create New Information Products: 15% Measure, 19% Achieved, 31% Plan to Measure
- Higher Customer Retention and Loyalty: 17% Measure, 8% Achieved, 37% Plan to Measure
- Improved New-Customer Acquisition: 17% Measure, 9% Achieved, 34% Plan to Measure
- Reduction in Required Staff / Higher Staff: 13% Measure, 12% Achieved, 29% Plan to Measure
- Higher Search Ranking, Web Traffic: 14% Measure, 12% Achieved, 29% Plan to Measure
- Fewer Issues Reported and / or Service Complaints: 12% Measure, 9% Achieved, 29% Plan to Measure
- Lower Average Cost of Sales, New and Existing: 14% Measure, 6% Achieved, 30% Plan to Measure
- More Accurate Processing: 11% Measure, 7% Achieved, 28% Plan to Measure
- Faster Processing of Claims / Requests / Casework: 11% Measure, 10% Achieved, 24% Plan to Measure

*Source: Alta Plana, 2014*
Using Text Analytics to Improve the Customer Experience

Consumer decision making has changed dramatically over the past 15 years. Online resources and access to the Internet have increased, and consumers are using social review sites, blogs, social media, and other online outlets to share their experiences and learn from other consumers. And they appear to trust online resources: A 2013 Nielsen survey found that nearly 70 percent of global consumers trust consumer opinions posted online, making online reviews one of the most trusted sources of brand information, second only to recommendations from friends and family. In the face of these changes, companies leading the way in customer experience management are building capabilities that go well beyond customer service. They are carefully tracking each customer’s experience, understanding the reasons for that experience, and then rapidly responding to what customers say and want. With a faster, deeper understanding of their customers’ experience, companies can more readily identify opportunities to improve existing offerings and create entirely new ones. Gartner predicts that by 2017, 50 percent of product investment projects will be redirected to customer experience innovations. Similarly, a Walker Research study of B2B companies suggests that customer experience will overtake price and product as the key brand differentiator by 2020.

To remain competitive in today’s customer-driven markets, companies have little choice but to embrace the game-changing technologies that can help them gain a deeper understanding of their customers. While text analytics will not replace traditional customer feedback surveys, it can yield more information than traditional surveys and a more refined understanding of that information, including a better understanding of customer sentiment. More importantly, it opens the door to radical new discoveries that would never have been possible using numeric ratings alone.

Text analytics applied to unstructured customer feedback complements traditional feedback analysis in at least four ways.

1. Ultimate Flexibility

While surveys are administered at discrete times, many sources of unstructured feedback flow into companies continuously in the form of online reviews, blogs, emails, social media posts, and other feedback loops. According to Forrester, companies that get the most from text analytics are those that take advantage of its always-on nature. Analysts can look for themes and patterns whenever issues arise, unconstrained by a predefined survey structure.

Text Analytics in Action

Improving customer interactions. Text analytics can be applied to open-ended comments in customer surveys to identify opportunities for improving the service experience. In addition, using text analytics to capture customer feedback from review and social media websites helps companies listen to customers more fully, engage with them, and drive service optimization. For example, using text analytics, one major retailer discovered that customers were consistently complaining about messy dressing rooms, something the retailer had failed to ask in its regular surveys. The retailer addressed the problem, and customers became more satisfied with their shopping experience.
2. The Customer Voice Dominates

Traditional approaches to collecting customer feedback make assumptions about what's important to customers and what's not, like “courtesy of the service agent” or “time it took to resolve the issue.” While these certainly may be important, they may not be what customers really care about. Open-ended questions, social media posts, and other text-based responses let customers talk about anything that's important to them, in words that express their preferences and emotions.

Numeric ratings tell only part of the story. Numeric ratings indicate how customers felt about a specific aspect of their experience, but they don’t tell us why they felt that way. Text analytics uncovers details customer survey ratings can’t explain. One reason for this is that customer comments often differ in surprising ways from their ratings in terms of the sentiment they express, the importance they place on a given aspect of the experience, and what they are looking for from the experience in the first place. A Cornell study of hotel reviews found that negative comments influence a guest’s numeric ratings more than positive comments do. In other words, when guests take the time to comment on a poor experience, it tends to have a greater impact on their ratings than when they comment on a positive experience. This uneven weighting indicates that a simple average of positive and negative ratings may not provide an accurate representation of a customer’s actual experience or opinion.

Text Analytics in Action

**Developing omnichannel solutions.** Ensuring a consistent multichannel experience has become a leading priority for companies. Text analytics makes it possible to integrate and analyze data collected across the full set of customer touchpoints, including online surveys and reviews, contact centers, website transactions, and in-store interactions. A Wharton study found that customers using the most channels — on average 2.5 — tend to be the wealthiest shoppers across segments and spend the most. These multichannel shoppers are also the most engaged with social media and the least likely to return to the same retailer for their next purchase. Using text analytics, companies can look for themes within and across channels to develop solutions that may provide a more seamless and attractive experience for these challenging shoppers, perhaps increasing their loyalty and repeat purchasing behavior.
3. Opportunities for Innovation

Emerge

Analyzing customer comments can also lead to unexpected ideas for new product or service offerings. When clothing retailer Tommy Bahama examined open-ended comments from customer surveys, executives saw a recurring theme.

When asked what the retailer could do to make their experience better, customers repeatedly mentioned “complimentary margaritas.” Seeing a way to reinforce the brand and make their customers’ experiences more memorable, the executives decided to test the concept in some larger stand-alone stores. If they had relied solely on customer survey ratings, they would have missed this novel opportunity to provide new value.

4. Empathy at Scale

When companies deal with millions of consumers, there is a temptation to stereotype or depersonalize customers. They become numbers, survey scores, transactions, or data points. While summary statistics may be useful for making sense of data, they don’t work well for building empathy or understanding the emotional impact of a customer’s experience. By identifying themes and surfacing stories, text analytics can bring issues and problems to life and motivate decision makers to take actions that are more connected to their customers.

Text Analytics in Action

Generating new market insights. Text analytics provides a portal into hidden markets. Food Genius, a leading food service data provider, uses specialized algorithms to identify emerging trends. The company combines social listening and market intelligence to identify food items experiencing growth that individual restaurateurs may not be attuned to. Analyzing textual data from menus across different markets, Food Genius looks for foods that are generating a lot of buzz and tries to understand the conditions that have contributed to that buzz. For example, chorizo chili initially generated a lot of buzz in New Mexico and part of the Mountain West, probably because of the large Latino immigrant community and its influence on local tastes. However, this condition was not unique to New Mexico—Chicago also has a large Latino immigrant community. By analyzing textual data from menus in Chicago and combining it with other market data, Food Genius determined that Chicago had not yet experienced the chorizo chili trend but would be highly receptive. Like Food Genius, other companies are quickly finding that combining text analytics with other market intelligence can be a powerful way to unearth scalable market opportunities.¹⁴
Conclusion

Text analytics provides companies with the potential to mine customer feedback for insights hidden deep within millions of customer comments. With the ability to mine and interpret large quantities of unstructured data, CX professionals can learn well beyond the questions they think to ask on customer surveys. Text analytics also makes it possible to learn from customers and others who may not respond to surveys. Monitoring customer comments shared via blogs, social media, chat rooms, and other online sources can reveal valuable information that has traditionally been unavailable or too difficult to analyze manually.

But realizing that potential is not a given. While text analytics brings big data capabilities to customer experience management, early adopters are still figuring out how to use these new capabilities most effectively. According to a 2014 Forrester report, many practitioners believe “it’s easy to get mired in text analytics without delivering value to their organization.”

To learn how CX professionals are successfully using text analytics to get a deeper understanding of customer experience and, more importantly, to drive customer-centered change throughout their organization, read our white paper "The Big Story Behind Your Big Data: Six Practices for Making an Impact with Text Analytics."
Sources


About Medallia

Medallia, the leader in Experience Management cloud technology, ranked #15 in the most recent Forbes Cloud 100 list. Medallia's vision is simple: to create a world where companies are loved by customers and employees alike. Hundreds of the world's largest companies and organizations trust Medallia's cloud platform to help them capture customer and employee feedback everywhere they are, understand it in real-time, and deliver insights and action everywhere—from the C-suite to the frontline—to improve business performance. Medallia has offices worldwide, including Silicon Valley, New York, Washington DC, Austin, London, Buenos Aires, Paris, Sydney, and Tel Aviv. Learn more at www.medallia.com.

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