Two of the world's biggest tech companies make their living by knowing as much as possible about their users. Those companies, Google and Facebook, derive 84 percent and 98 percent, respectively, of their revenue from advertising. They can do that because they both have the data to know which ads will resonate with which users.

But it's not only the Valley giants that can use such data to drive revenue. According to the management consultancy McKinsey, companies that analyze customer behavior outperform their peers’ sales growth by 85 percent and more than 25 percent in gross margin.

Customer service organizations large and small have the potential to understand their customers better than ever before. In this, the second of our series of automation in customer communication, we’ll explore how you too can profit from getting to know your customers better.

**Make Omnichannel Work For You**

Google and Facebook's advertising businesses succeed because they squeeze every last drop of value out of the information they hold on pretty much every web user.

Omnichannel communication presents similar opportunities, albeit on a smaller scale. To understand how, let's look at the way our understanding of customers has changed over the past 60 years.

- **1950s**: A retailer might rely on surveys and feedback from staff members to get a picture of who their customers were.
• **1970s:** Mail-order service and telephone customer service would allow for building a picture of what some customers bought and even what their individual complaints and requests might be.

• **1990s:** Computer-powered loyalty programs enabled nuanced, data-backed, customer segmentation.

Today, such a retailer could draw on megabytes of data per customer, including but certainly not limited to:

- Audio recordings of customer service calls
- Emails
- Tweets and other social media interactions
- Website click tracking, purchase history, and so on.

But even the most profitable company couldn’t justify the army of analysts necessary to process such data by hand. Instead, to get the value from those sources, we need text mining.

### Intro to Text Mining

Computers need data in predictable formats. Intelligence, though, allows humans to be more forgiving; we can still make sense of a sentence if, for example, it isn’t grammatically correct (not that I would ever ask you to do such a thing—but you could).

Text mining allows computers to extract useful data from otherwise messy human language. It’s a form of analytics that uses linguistics, statistical methods, and machine learning to turn text into structured, computer-friendly data.

With text mining, a computer can take a body of text and analyze it for content, sentiment, categorization, summarization, and more. Some of that no doubt sounds familiar; social media sentiment analysis tools are common, for example. But how many customer service organizations apply such analysis to every scrap of communication with their customers?

An omnichannel communication strategy means that an organization already has all its customer communication in one place. What, in the multichannel world, was previously spread across multiple systems, is now easy to analyze.

### What Text Mining Can Do For You

So, you have a body of customer communication data—emails, automatically generated transcripts of call recordings, text messages, web chats, interactions with bots, and so on—but what can you do with it?

The applications of text mining fall broadly into reviewing the past, improving the future, and automation:

- **Reviewing the past:**
  - *Discovering failure points in the customer journey:* Do customers tend to contact you at certain friction points and, if so, why?
  - *Disaster analysis:* Similarly, text mining can help to identify what led up to a specific bad customer interaction, enabling you to make changes as necessary to avoid repeats.
Evaluating agent performance: Rather than listen to one in a hundred call recordings, compare every interaction of each agent against all the interactions of every other agent.

Improving the future:

Customer behavior prediction: Text mining can show whether certain types of interaction and/or language from a customer tend to lead to a particular outcome, such as churning or upgrading.

Demand prediction: Analysis of the full body of customer communication might inform you of upcoming events that could put a greater strain on your contact center.

Automation:

Query marshaling: Using semantic analysis and categorization, text mining can send queries to the right team automatically; think of it as an IVR for the omnichannel age.

Bots: Text mining is an essential part of the process that enables bots to work with human language and you can read more in the previous installment of this series.

These are all things that, with any budget and headcount, most organizations could have done before automation. However, text mining makes the costs trivial and the turnaround times near instant.

Ethics and the Law

In the age of the GDPR and general consumer unease around personal data use, it’s vital to strike the right balance between respecting the rights of your customers and building a more effective business.

Thankfully, most of the applications of text mining are just as useful even when the data is anonymized. Searching your communication history for the sentiments that tend to lead to a bad outcome, for example, is just as valuable without customer names.

However, where personally identifiable information forms a core part of the data or you can provide a better customer experience by analyzing individual customer data, then you need to ensure that your privacy policy allows for automated analysis. Europe’s GDPR, in particular, has an entire section devoted to automated decision making and it requires you to be upfront about how you plan to use customer data.

The situation becomes trickier when you use publicly available data and combine it with data you hold on your customers. As a relatively benign example, what if you mined customer social media accounts to give you additional lifestyle insights? If your text mining tool sees that a customer tweets a lot about the 49ers, should your contact center agent be prompted to mention the recent 49ers win next time that customer calls?

These questions go beyond ethics and into what is legal and what is not, so check with your legal team. However, even if something is legal be sure to consider whether customers will appreciate it or if it will do greater damage than any value it brings.

Strike Customer Insight Gold with Text Mining
Text mining is at the heart of many new technologies that are already having a strong impact on customer communication. However, as well as being a part of what makes bots and virtual assistants possible, for example, text mining can give you powerful insights into what your customers need, how they behave, and the ways in which your customer communications should respond.

Please fill out the form and we will be in touch with you shortly.

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