# Expert Tips: Using Big Data to Improve Customer Experience in the Contact Center

By Arnab Mishra

In today's Big Data Age, companies are grappling with more data than they know what to do with. The challenge facing businesses is figuring out how to properly turn big data into a profitable resource, especially since much of our customer data is siloed from other business metrics.
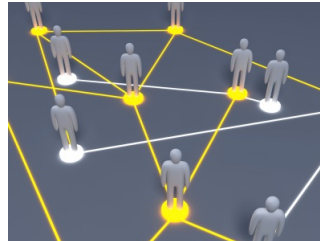
When done properly, data analysis can provide invaluable insights into customer behavior, help companies anticipate customer trends, and make customer experiences more relevant and timely. B y treating Big Data as a business asset, companies will have the competitive advantage they need to innovate, increase revenue, improve the bottom-line and keep customers happier.

At the contact center level, how can you use Big Data to improve business results, such as operational effectiveness, customer support and personalization?

Here are my three tips for managing and capitalizing on Big Data to enhance the customer experience:

1. Use agent data.

In the contact center, the first way you can begin using Big Data to create a better customer experience is to better understand your own agents. From historical call records and customer-agent interactions, you have extensive data about your agents' strengths, weaknesses and specialties.

Armed with this wealth of knowledge, you can create a scoring system that matches callers with the best agents to handle their issue. You will also be able to highlight your top performers, as well as provide support and training to boost lower performers.
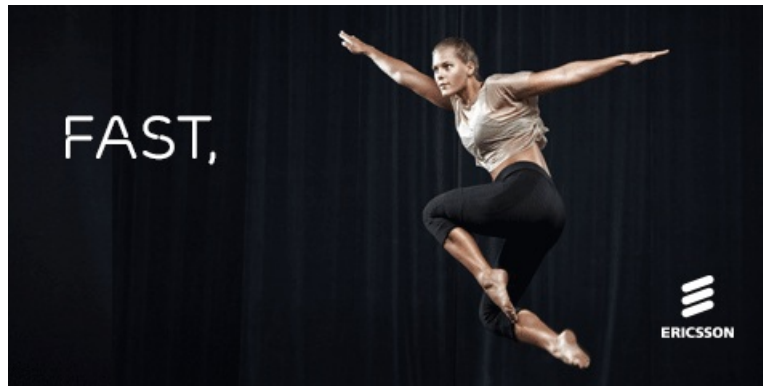
Another benefit of having data informing you where your agents excel is that you will be prepared when an unexpected crisis hits your call center, such as a product recall, seasonal call overload or a new product promotion. Some agents will naturally be gifted at handling crisis calls, and having the right data to identify them helps everything run more smoothly as other agents manage day-to-day operations.

To make the best use out of agent scoring data, contact centers should also select a system for automating the process of scoring and ranking their agents. Analyzing agent data is a time-consuming task when left to individual contact center managers, and automation allows everyone to make better use of results. By automating the agent scoring process, it is easier to adapt to changing business needs, as well as act more quickly on the results of agent data analysis.

2. Implement predictive analytics.

Predictive analytics is a powerful resource you can use to evaluate risks and opportunities potentially affecting the future of your business. One study recently conducted by Opus Research reported that contact centers can analyze their historical data to determine the drivers that have the most effect on peak contact center performance. When you select the best analytics products and apply them to the contact center, you have the ability to improve your customer experience and your bottom line.

Predictive analytics is an emerging trend that has already made strides in drastically improving business results for a variety of industries. For contact centers, that means the power to know how to increase the effectiveness of your agents, decrease problems related to turnover and incorrect agent staffing, and make your customers happier overall.

In selecting the best product to perform predictive analytics on your data, there are three important factors to consider: clustering, stability and variance analysis, and what-if analysis and simulation modeling.

- **Clustering** allows you to discover commonalities within your data, such as optimal levels of performance for agents and behavioral propensities for customers
- **Stability and variance analysis** can be used to evaluate the data set size and factors necessary to create dependable predictive models.
- **What-if analysis and simulation modeling** allow for testing of various hypotheses to determine which factors most impact your business outcomes. This includes scenario analysis to optimize how calls are routed, how customers and interaction types are prioritized, and which scripts, offers and resolution approaches are used. Simulation is a very effective tool to quantify the outcomes and ROI of implementing different strategies.

3. Analyze customer engagements across social, web and calls.

Contact center agents utilize as much as 12 different modes of interaction with customers, including call, email, white mail, customer portal, social media, text messaging, forum, mobile business applications, virtual chat, mobile service applications, video and virtual agents.

Because communication between agents and customers span such a wide array of systems, it is critical that customer data analytics be applied to each of these 12 channels. According to Richard Snow, Vice President and research director of research firm Ventana, consumers today report an average use of 7.5 of these 12 channels. This is a stark contrast to 10 years ago, when the average number of communication channels used was only two to three. In the future, businesses must continue to take the growing number of communication options into account as they select a system to analyze customer data.

Because customers have access to brands via social media, sites like Facebook, Twitter, LinkedIn, and Instagram are no longer just "social" but also serve a business purpose. They contain an abundance of data regarding what your customers want and how they feel about your products. In order to make use of social media customer data, it is crucial to dedicate resources to managing a social media strategy. Ideally, a business will have a social media manager or team to monitor customer interactions and recommend product improvements.

At the end of the day, Big Data is at your fingertips, and you have the power to use it to improve customer experience in your contact center. By utilizing agent scoring data, applying predictive analytics and analyzing how your customers engage across a multitude of communication channels, you are already on your way to happier customers and a better bottom line.