Obtaining deeper insight about customers is top of mind for executives across a range of industries, a recent study by TDWI Research found. Business and IT executives ranked predicting trends, understanding customers and predicting behavior to be among the most important drivers for deploying predictive analytics (see Figure 1, “Top 5 Reasons to Use Predictive Analytics”).

Meanwhile, research by Aberdeen Group suggests that telecommunications business leaders face even more pressure than their counterparts in other industries to make data-driven business decisions—and make them faster. These executives are also more reliant on analytics to improve operations (see Figure 2, “Why Telecom Executives Want Analytics”).

WHAT DO CUSTOMERS WANT NEXT?

Based in Atlanta, Cox Communications is privately held by Cox Enterprises, a $15 billion company whose 50,000 employees serve 6 million customers in 18 states. The firm sells digital video, high-speed Internet and voice services, along with home security systems and business networking technology. As the third-largest cable entertainment and broadband provider in the United States, Cox has been honing insights into its customer data for years to deepen relationships with them, retain existing accounts and acquire new ones more effectively.

That’s a usual script for marketers, says Parimala Narasimha, director of advanced analytics at Cox, but executives realized that the company “had to up its game” to compete. That meant understanding customers at a very detailed level—which became the impetus for predictive analytics.

MARKETERS HAVE ALWAYS AIMED TO DELIVER the best-targeted messages and most relevant offers to the right customers. At Cox Communications, employing predictive analytics is gaining the company deeper insight into which customers are most likely to respond favorably to a particular offer. And the predictive models are proving their worth through increased sales.

That is an essential proof point, especially in the telecommunications industry, where consumers have a constantly evolving set of choices for video, high-speed Internet and telephone services. They can switch providers easily and are apt to notice the differences in the quality of customer service. Retaining current customers, and finding ways to capture a larger share of their media and communications spending, is a top priority for telecommunications companies, says John Lucker, global advanced analytics and modeling marketing leader at Deloitte Consulting.

Marketing teams feel pushed to target their campaigns more effectively using insights into customers. By collecting data on customer behavior, performing analysis and correlating these results with other data, such as demographic data, syndicated research and social media data, they can identify promising offers and pinpoint potentially profitable market niches. Marketing executives have bought into this vision: Spending on marketing analytics is expected to increase by 73 percent in the next three years, according to The CMO Survey.¹

FIGURE 1 Top 5 Reasons to Use Predictive Analytics

1. Predict trends
2. Understand customers
3. Improve business performance
4. Drive strategic decision-making
5. Predict behavior


1. http://cmosurvey.org/results/
Cox decided to use predictive analytics to identify business drivers for growth in general, and then to pinpoint existing and prospective customers to cultivate with new offerings. “We have a lot of reports, like most organizations, and we actually have pretty good data,” Narasimha says. “But we have to go one step above reporting. We need to understand what our customers are going to do next.”

Business leaders want to know what inspires customers to act—both when choosing Cox and when making a different choice. For new customers, the key questions include who is likely to buy high-speed Internet and what type of customer is likely to buy a specific product: “What kind of demographics do we know about them? Have they bought our product before? Do they use data a lot? Do they use it for email or downloading movies?” Narasimha asks.

“And on the flip side,” she adds, “if they are already a customer, you want to know: Why are they leaving us? Is it because their promotional offer ended? Or is there a better offer in the market? Did they have trouble with our product? We need to understand both sides.”

Narasimha’s centralized marketing analytics team supports regional marketing groups. She says Cox needed a predictive analytics system that didn’t add much overhead for IT managers or analysts. It had to handle a heavy data load; Cox has millions of transaction records describing observations about market conditions and customers’ behavior. The company uses and analyzes more than 800 variables to create its predictive models.

At the same time, Cox wanted to automate the management of all this data for analysis and to improve its process for creating predictive models. Because it comes from so many different sources, the company’s data requires preparation before it can be analyzed. Narasimha says her small team needed to automate this process as much as possible.

Retaining current customers, and finding ways to capture a larger share of their media and communications spending, is a top priority for telecommunications companies.

—JOHN LUCKER, GLOBAL ADVANCED ANALYTICS AND MODELING MARKETING LEADER, DELOITTE CONSULTING

FIGURE 2 Why Telecom Executives Want Analytics

<table>
<thead>
<tr>
<th></th>
<th>Telecomcommunications</th>
<th>Other industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many decisions are based on inaccurate/incomplete data</td>
<td>43%</td>
<td>30%</td>
</tr>
<tr>
<td>Need to make critical decisions in less time</td>
<td>32%</td>
<td>28%</td>
</tr>
<tr>
<td>Data is too fragmented</td>
<td>24%</td>
<td>15%</td>
</tr>
</tbody>
</table>


They see benefits of using more data, more quickly.

A LIFT IN PERFORMANCE

With the predictive analytics tools in place, Narasimha says Cox can build and evaluate hundreds of models each month, using a process that can complete in a week what otherwise would take several weeks. That means her team can put more campaigns into the field, as well as measure the effectiveness of different offers and marketing techniques to different customer segments.

In consumer-facing industries like telecommunications, executing predictive models in a routine way represents a best practice that is not easy to accomplish, Deloitte’s Lucker says. Organizations must change both their business processes and the technologies underpinning them to take action on the new insights delivered. “It takes a long time to do that,” he says, “and companies run the risk of being beaten by a rival.”

At Cox, the analytics team has set up processes to support the work of marketing colleagues who execute campaigns. Analysts rank the results of various campaigns in the market, and then work to refine the selection of customers who are more likely to respond to certain campaigns. It’s a marketer’s interpretation of the “80-20 rule,” in which a portion of the customer base yields the greatest rewards.
“What we are really trying to do is to provide business value,” Narasimha says. “You don’t have to send an email to, or call, 100 percent of your customer base. The model guarantees that by reaching only a small section of your customer base, say 30 percent, you can reach something like 80 percent” of the people who make purchases.

One of the first campaigns Narasimha’s team ran using the predictive models, in 2008, resulted in a 14 percent increase in products bought per household. Recent campaigns have generated an 18 percent increase in customers responding to the promotion. The models are used in direct mail, email and telemarketing campaigns.

As it experiments with new offers, Cox analyzes what drives purchases, looking beyond usual factors such as recent purchases, frequency of purchases and money spent. Other variables include emails opened, the duration of Web site visits, mobile device and Web browsers used, spending patterns and call center support calls. As the company refines its approach, it considers new questions: not only whether a particular customer would be interested in a premium cable channel, but also if that customer would prefer to learn about a new offer by direct mail, email or a different channel. Picking up signals from the data narrows the list of customer prospects to contact (see Figure 3, “Sharp Reception”).

Marketers are continually in search of new data sets from external sources, including syndicated research on consumer buying patterns and other demographic trends, to provide additional insights that could help them create new offers targeted to the right customers. Having standard and efficient processes for data preparation and model building helps, delivering an additional benefit. Using the analytics solutions deployed at Cox Communications, Narasimha can evaluate whether a new data set being offered to her adds a statistically significant boost to the work her team is doing already. “If it adds 10 percent more value to your existing knowledge, you should buy it,” she says.

**FIGURE 3 Sharp Reception**

<table>
<thead>
<tr>
<th>Source: Cox Communications</th>
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</thead>
<tbody>
<tr>
<td>Some data about Cox Communications’ predictive analytics efforts.</td>
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</table>

This technique of evaluating new data is the kind of practice that, along with ongoing evaluations of marketing campaigns and efforts to find the right offers for customers, represents the cumulative value of predictive analytics, Narasimha says. In a competitive environment, those gains have made a difference.

“That,” she concludes, “is where we get the lift, where we get really good value for the business.”

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Customer Centricity: Put Customers at the Heart of Your Organization

Forbes Insights interviewed Byron Banks, Global Vice President, Analytics, at SAP on transforming organizations to become customer-focused.

What does it mean to be a customer-centric organization?
Customer-centric organizations focus on engaging consumers across all channels, including sales, service and marketing. They focus on one-to-one customer relationships, recognize the power customers have to make choices and interact with customers on their terms. These organizations use real-time intelligence to become more informed about who their customers are and what they need.

What is your best advice to companies that want to make this transformation?
To truly transform their business, companies should focus on one-to-one customer engagement and leverage predictive analytics to achieve it. Customer-centricity requires a cultural shift, along with the right technology to support it. Companies need to put the consumer at the heart of the business, and then build a workforce that believes in this purpose and is empowered to deliver it. To make real-time decisions, organizations need to break down their silos and collaborate across—and beyond—the enterprise. They have to close the gap between the analysis of customer information and their ability to engage customers in context in real time. If customers’ specific needs aren’t met, they can quickly and easily move on to other options.

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