BUSINESS ANALYTICS
NUMBERS AND NUANCE

As the tools to process and analyze business data improve exponentially, enterprises are challenged to find professionals with the right skill sets to leverage the best of these solutions. Learn how three leading organizations are making the most of business intelligence.

BY DENNIS McCAFFERTY

A CAR-RENTAL GIANT SEEKS SOLUTIONS TO GET fast, accurate information about customer comments. A health care benefits provider is utilizing IT tools to obtain a complete picture of patient medical histories. And a global nonprofit is deploying the same technologies to ensure that donor contributions are well-spent.

Like many companies, these three organizations are discovering new ways to deploy business intelligence and business analytics tools. By now, using BI/BA is nothing new. What is new, however, is the eagerness of CIOs to seek out an ever-expanding list of capabilities and applications for this kind of technology, and to use them across the enterprise.

This interest is fueling considerable demand: Worldwide BI software sales are expected to reach more than $11.3 billion by 2012, up from just over $9.7 billion this year, according to research firm Gartner.

New solutions are emerging that allow for improved change-data capture, management and cleansing. And there are more self-service tools to make it easier than ever to access and use the data throughout the enterprise. For CIOs, however, a frequent and possibly more perplexing challenge goes beyond finding the right technology. The real challenge is in finding and retaining top BI/BA talent.

Leveraging BI/BA, after all, doesn't simply require high-end aptitude for data analysis, reporting and management. It demands a deep understanding of the intended business process, says Steve Cranford, a director in the advisory practice of PricewaterhouseCoopers, a global professional services firm. "These 'hybrid' qualities are usually found in individuals with several years of business knowledge who
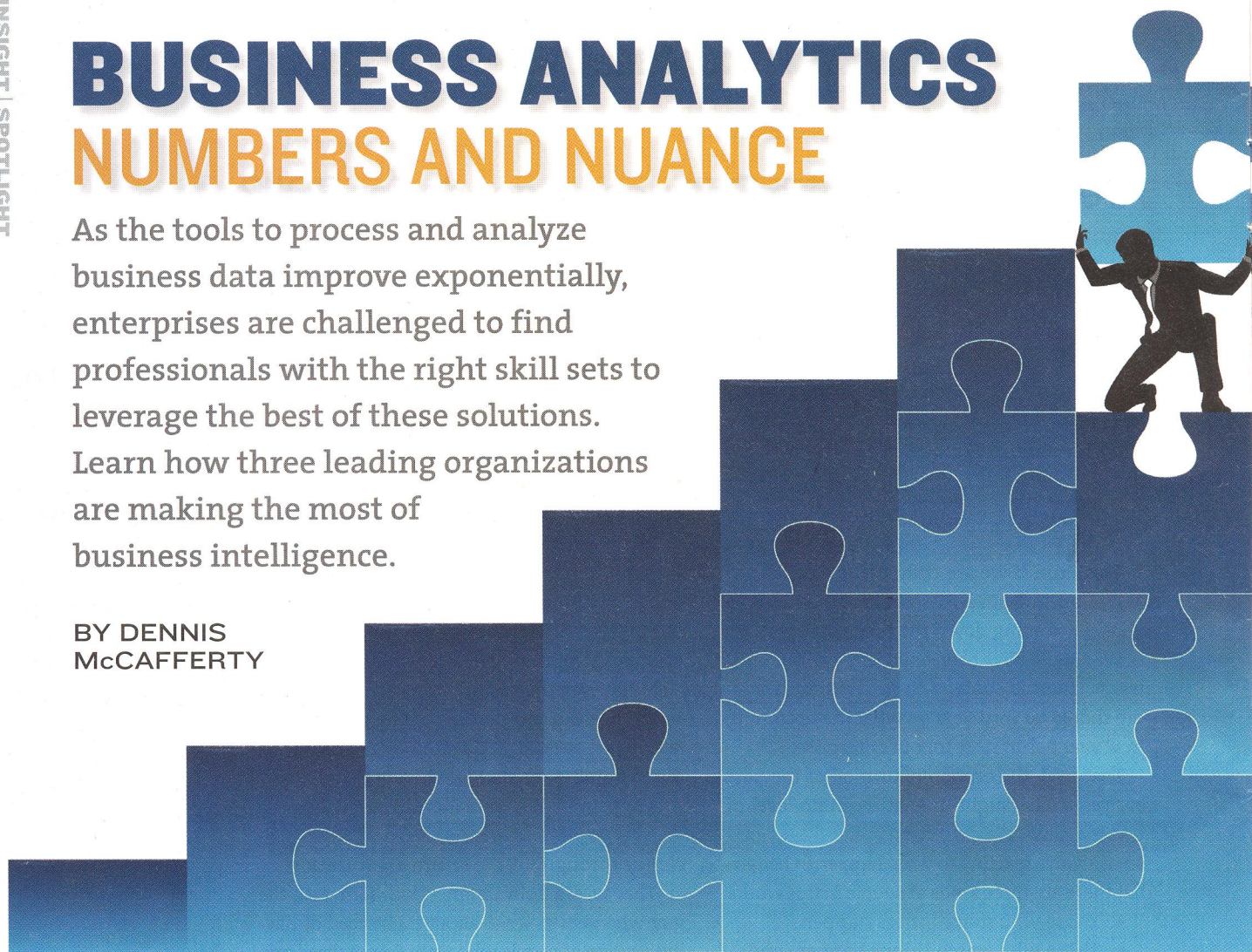
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Creating a Total Picture

For patients in upstate New York, the path to improved health care may have been inspired by ... Pop-Tarts?

Long before BI/BA emerged as an IT industry buzz phrase, Linda Navarra had a "Eureka!" moment that involved the popular snack. "It was 15 years ago," she recalls. "I was getting targeted ads from Walmart promoting strawberry Pop-Tarts before snowstorms. And I thought, 'Walmart must know that its customers are going to want to load up on Pop-Tarts before a winter storm. Why are they able to come up with this kind of useful knowledge and, in health care, we don't?' What we're doing is about life and death, after all."

Now the CIO of the Capital District Physicians' Health Plan (CDPHP) in Albany, N.Y., Navarra has taken the initiative to deploy BI tools for this very purpose. CDPHP uses BI solutions from HP to take data from financial, claims, clinical and third-party systems to come up with a "total patient picture," with the intention of providing the best health care possible for its 340,000 members. "We can build this picture around years of medical services, lab results, prescriptions and other information," Navarra says. "It allows for faster and more accurate assessments on the part of our physicians [than was previously possible]."

When Navarra arrived at the 800-employee CDPHP four years ago, there was no way of tracking a patient's entire medical history, given how often each patient switched coverage through the years, and how disparate various hospital record-keeping systems could be. HP's solution allowed CDPHP to build a model that essentially "connects the dots" with respect to the far-flung data. This is far from a completed effort.

"We want to see the day when a system will know, for example, when a patient was given a prescription but never went to the pharmacy to pick it up," says Navarra. "Or when a system will know whether a patient is taking medication as prescribed and, if not, send us an alert so we can let the doctor know. This would allow us to make the appropriate intervention."

Following the Money

The Washington, D.C.-based Elizabeth Glaser Pediatric AIDS Foundation raises more than $119 million a year from diverse sources, including the Centers for Disease Control and Prevention, Disney, CBS, the Bill and Melinda Gates Foundation, the U.S. Agency for International Development, the NBA, actor Harrison Ford, IBM and members of the public.

Carrying on the work started by Glaser—who passed away from the disease in 1994—the foundation provides health care services for more than 2 million women at 3,700 locations around the world. As with other nonprofits, Glaser employees must provide detailed reports to donors about how funds are used, such as how many people have been tested for HIV and how many are being treated successfully.

Traditionally, the process of gathering such massive data on a global scale was a cumbersome, manual one. Workers—some in remote locations—typed reports into Excel spreadsheets and attempted to e-mail or fax them to centralized locations. Data integrity was often poor. Slow Internet connections, frequent power losses and limited technical know-how further hindered the process. Sometimes, workers resorted to phoning in the latest numbers, which could increase the likelihood of inaccuracy.

"The data wasn't readily available," says Mark Reilley, director of IT for the foundation. "We didn't have the policies we needed in place to designate proper access. We couldn't be assured of its accuracy. We needed a solution that addressed all of these concerns."

Reilley and his team went with a .Net application from Acumen Solutions to consolidate and make use of the data. It allows each international site to automate reporting on a Web-based platform. At the headquarters level, the BI/BA solution provides a previously unavailable and valuable perspective on the intricacies of the funding impact. It can cross-track sites and their funding levels with the number of patients being treated. It can tap into the foundation's travel database and pinpoint which areas have been visited most often, and whether those regions have made a large impression on the quality of local health care.

"It lets us see where the dollars are going," Reilley says, "and what kind of value we're getting."

To take this "next-level" tool to an even higher level, Acumen and Reilley envision coming up with a next-generation version that can analyze data not just for numbers, but nuance. One nation may, for example, receive more travel funding than another but produce lower results for some reason. Perhaps there was a higher rate of clinic turnover there and new employees needed extensive training. Reilley looks forward to the day when these kinds of "special circumstances" can be crunched into the numbers.

"To find out that sort of thing now, you usually have to pick up the phone," he says. "What we need from these systems is to have the information come up automatically, so we can make quick conclusions that are also the correct ones." ⊕

have emerged from either the business or the technology organization," he says. "They also have experience with the BI processes, methodologies and tools that are driving the decision processes of the organization. Given the drought of top BI talent, these qualities become a 'perfect storm' retention challenge as adoption of BI increases in the overall marketplace."

Traditionally, BI/BA tools have been used to target a specific campaign, market segment or other niche. But the current push is to incorporate BI/BA into the day-to-day operations of an organization so that it's routinely applied at all levels. This means that the BI/BA process must be collaborative across the enterprise, says John Lucker, principal at Deloitte Consulting.

"CIOs should look for ways to actively participate in the process," he says. "They must team with business groups to find new ways to do things and new approaches for analysis. They should look for new tools to make things easier or possible, and new external data sets to augment institutional data."

What CIOs really need are BI/BA solutions that can bring their companies to "next-level" business performance. It's about more than simply gathering and analyzing data. It's about maximizing the value of data throughout the enterprise. *CIO Insight* recently spoke to three top technology executives at high-profile organizations—Hertz, Capital District Physicians' Health Plan and the Elizabeth Glaser Pediatric AIDS Foundation—to learn more about what "next-level" BI/BA solutions mean to them. Here are their stories.

Immediacy of Data

Like many car-rental companies, Hertz seeks as much feedback from customers as it can. It wants to know if its vehicles ran well, and whether the fleet was clean and appealing. It encourages customers to indicate whether there were any mechanical problems, and how the sound system fared. And, if a service-counter employee was extra accommodating, the company is interested in these details as well.

Accessing such information in a timely fashion has always been troublesome. There have been thousands of paper surveys mailed to customers, toll-free phone conversations and comments posted on the company's Web site. "It could take three weeks to gather all the information and have someone aggregate it and try to see if there was a trend there," says Joe Eckroth, CIO for Hertz, which is based in Park Ridge, N.J. "Then, there was the question of, 'What the heck do you do with this information?' By the time you figured it out, the customers had moved on to other things."

By using Mindshare Technologies and other tools from IBM, Hertz has shifted its BI/BA capabilities into the fast lane. The resulting solution package is mobile-focused, collecting and aggregating massive streams of comment data delivered to the company by customers using smartphones and other wireless devices. The solution can distinguish and provide special analytical focus according to specific topic points—Clean or dirty car? Helpful or unhelpful staff? Long or short wait at the counter line?—as well as geographic region.

Local managers now get daily performance feedback. If a customer has a particularly negative experience, managers must address and resolve the problem within the day—no later than a 24-hour period. "That makes a huge impression, when a manager indicates that he wants to help you resolve a situation so quickly," Eckroth says. "It makes a great deal of difference when it comes to customer retention."

IN SUMMARY

WHO: IT leaders from PricewaterhouseCoopers, Gartner, Deloitte Consulting, Hertz and the Elizabeth Glaser Pediatric AIDS Foundation, among others

WHAT: Discussing how to leverage business intelligence and business analytics

WHY: To transform business processes and introduce near real-time decision making

Available tools also help Hertz get a sense of whether features such as satellite radio and iPod-friendly sound systems deliver added (and salable) value to the customer. Sentiments being expressed "out there" in the social media universe, such as Twitter feeds, can also be monitored and analyzed.

The efforts are paying off: Hertz's performance on the Net Promoter Score—the industry standard of customer-satisfaction assessment tools—has risen steadily since the company made significant investments in BI/BA. Every monthly score in 2010 has seen a notable improvement over the same period in 2009, and Hertz has approached what amounts to industry best-in-class scores in four out of nine months.

"In our business, it's all about the customer experience," Eckroth says. "This technology is allowing us to get a clear and immediate picture. With customers being as fickle as they are with all the choices they have, you need to be ahead of the data, not behind it."