



## 4 Keys to Building an Analytical Workforce

February 2012

**Experts offer their advice on how financial institutions can build a workforce equipped to compete in an increasingly data-driven industry.**

U.S. banks know they have to hire a more intelligent workforce to remain competitive. Along with other North American organizations in other industries, banks realize they need to invest more in business intelligence and analytical talent as big data becomes a growing concern, according to recent research from the Accenture SAS Analytics Group.

This past fall, the group — a combined effort of New York-based consulting firm Accenture and Cary, N.C.-based analytics solution provider SAS — surveyed 258 business professionals across several industries. Seventy-two percent of the participants said they plan to increase spending on business analytics in 2012. While exact industry breakdowns have not been released, the group said bank executives are among those planning such investments and noted that financial institutions are more eager to invest in data analytics than organizations in other sectors.

But the critical investments in optimizing big data aren't just about software and infrastructure. A key component to making information truly actionable is a workforce with the right skills to make it happen. Here are four simple ways banks can find new talent and resources — and leverage the talent that they already have in-house — to help take business intelligence to the next level.

### **1. Put talent before technology.**

Although technology tools are an essential part of gathering, managing and analyzing data, they're nearly useless to a bank if it does not have staff in place with the skills and knowledge to effectively use them. But the Accenture SAS Analytics Group survey indicates that getting the right analytical team in place before making major technology investments is something that many organizations don't do, according to Pamela Prentice, chief researcher at SAS. "Companies are rushing out to buy software to perform the analytics before they have the right talent in place," Prentice notes. "What's happening is that they're not getting the most out of their analytic investment so they're trying to catch up in acquiring talent and hiring. It's sort of like putting the cart before the horse." On top of that, many executives don't even know how many people actually are involved in business intelligence and analytics at different levels within their organization, says Stacy Blanchard, talent and organization lead for analytics at Accenture. "Companies are just starting to get their arms around what kind of analytical talent they have, where it is in the organization and how it is organized today," she explains. The type of talent needed to effectively leverage big data can be broken down into three main categories, according to Jordan Cao, senior technical marketing manager for big data at SAP, whose U.S. headquarters are near Philadelphia. Financial institutions, he says, need data scientists to define a model and bring technical and mathematical knowledge into the picture.

Data analysts are necessary because they contribute the skills "to use the different tools to make the product real, build up the model, individualize dashboards and make data available to users," Cao continues. And business analysts are needed because they understand the business process, drive collaboration and figure out where data can add value. It's not until a financial institution has a clear picture of the state of its analytical talent that it can

even get the right team in place to advance its ability to harness data, according to Accenture's Blanchard, who says taking an analytical approach to the workforce is the best way to go. "Taking an analytical-based approach to talent helps quantify and articulate what analytical talent you have, what you need, where are your gaps and what to do about it," she explains.

## **2. Place an emphasis on "soft" in addition to technical skills.**

"Those companies that are only paying attention to the technology and data warehousing strategies that surround big data are missing an opportunity," says Blanchard. "You've got to have the data housed right, it has to work efficiently, it has to be clean and people need to have access to it. But there's a whole set of softer skills that become quite important around making use of that data." Those "soft skills" include critical thinking and problem solving capabilities — or, "the ability to deal with the world through an analytical lens," says Russ Cobb, senior vice president of alliances and product marketing at SAS. These skills are important from both a technical and business point of view, he notes.

"From a business analytics perspective ... you have to have people who understand the core value drivers, the core business processes that drive a company in a given industry," Cobb asserts. "From a technical capability perspective, it's about more than just being able to boot up a computer and launch a data-mining tool. Employees have to actually understand how to design the process, how to construct the right questions, find the right data and apply the right modeling techniques." SAS's Prentice agrees, adding, "The data scientists, the hardcore technical people, can produce models and statistics all day long, but unless the people who are on the business side driving those results into their processes understand how to do it, you're not going to get the effectiveness."

## **3. Invest in ongoing staff development.**

A bank can instill and maintain in its workforce the types of skills and knowledge needed to leverage data by delivering ongoing training. In fact, research from the Accenture SAS Analytics Group indicates that at this point, companies are leaning toward training existing employees rather than hiring new ones, according to Cobb. Although hiring new employees can be very expensive, Cobb notes that saving money is not the only advantage to training current staff. "When you go through training of existing employees, you're getting them on board with the idea that you're going to create an analytically based or fact-based decision culture," he says. "We know through experience that in order to get value out of your analytical investments, you have to have executive support, and you have to have a culture that values fact-based decision making."

Cobb recommends that training occur at three levels: the executive level, the level of a functional manager for a business line, and the practitioner level. Executives need to know how to lead the charge on creating an analytical culture, he says, and practitioners should get hands-on training for products, modeling techniques and modeling capabilities. Training business line heads, he adds, could involve conceptual design and helping them understand how to set up an analytical competency center.

## **4. Be creative when looking outside the organization for new talent.**

Competition for analytical resources and talent is stiff across industries, notes SAS's Prentice. "This is one area where businesses really understand that investing in business analytics and people with these types of skills can glean them better performance, better productivity," she says. Accenture's Blanchard says finding the right talent will come down to creative sourcing strategies. "A lot of organizations believe that they're going to have to go to very different sources and take different measures to attract and retain analytical talent," she relates. Prentice agrees, adding that organizations are now looking beyond areas that have been traditionally mined for analytical resources, to industries such as engineering and math.

Partnering with resources from academia and the vendor community also is a way both to help develop and find new talent. SAS has partnered with North Carolina State University to develop a Masters of Science and Analytics program, for example. "There's going to continue to be a huge talent gap in the market," says Cobb. "There's an appetite and there will be a big demand out there for these kinds of masters in analytics programs." Financial institutions, he suggests, can forge similar partnerships with universities. **Banks also may turn to their vendor partners to find analytical talent, says Sid Probst, CTO at Newton, Mass.-based business intelligence vendor**

**Attivio. “We really want to engage and help steer together toward the client’s success. And that includes helping them with things like recruiting and defining what skill sets they need to bring in,” he explains. “We get access to a lot of very senior technology staff — and maybe their first place [to look for a job] wouldn’t be a bank. How we can facilitate getting those people to the banks is making them available as part of a solution.”** At the end of the day, says Accenture’s Blanchard, bank leaders have to put mind-set ahead of skill set and create an environment

in which information-based decision making is second nature. “With all of the data in the world, even if folks have the right data to make the decision, they need to also be in an organization where they’re incentivized appropriately, and where there’s appropriate accountability and governance in place to ensure that they make the decision that’s in the best interest of the company and its stakeholders,” she says. “That’s leadership, and that’s culture.”