

Lessons from the big data frontier

What HR needs to know about building a more data-savvy organization

Data is fast becoming the currency for success in today's technology-driven world, thanks to an explosion in the availability of data generated from traditional and non-traditional sources, as well as advancements in the tools to collect, store, analyze and draw business insights from that data. The businesses that ultimately will be most successful will be those best able to apply those insights to the most critical business challenges: staking out a distinctive market strategy; improving customer service; developing more relevant products; and recognizing and responding to emerging competitive and market threats.

If "big data" is to live up to its promise, however, companies will have to build new capabilities and cultivate a culture that embraces the use of new analytic tools and sources of data at all levels of the organization:

- Senior management and functional leaders will be expected to encourage the use of data and analytic approaches in decision-making, and to define the opportunities where data can have the biggest impact on the business.
- Data experts — including data scientists and senior data leaders — will be critical for their use of sophisticated analytics tools to distill actionable information from data.
- Employees across the organization will need the skills to interpret and use data and analytics-generated insights in their work.

For human resources leaders charged with driving the talent agenda of the business, the emergence of big data and sophisticated analytics tools raises a variety of questions: What are some of the hard and soft skills the organization needs to develop to support big data initiatives? How can we position our business to attract the data-savvy talent we need? How do we overcome cultural resistance to new processes and ways of decision-making? What sort of training do we need to provide? Is data literacy an explicit prerequisite for hiring or promoting executives now, or should it be?

Improving data literacy in an organization is a journey, one along which a small number of digital and technology-based companies have traveled furthest to date. To help HR leaders whose organizations are confronting these questions today, we turned to human resources leaders from some of the most advanced users of data and analytics — including Akamai, Google, Groupon and Yahoo! — to see how they approach hiring and assessing data-savvy individuals and promoting a data-literate culture.

Improving data literacy

Data literacy is generally defined as a comfort with data and the tools for analyzing data as well as a willingness to rely on evidence and data analysis as the basis for decision-making. At the most advanced data organizations, data literacy is deeply engrained in the culture and is considered a standard capability.

“We don’t view data literacy as a discrete skill-set,” said Laszlo Bock, senior vice president of people operations for Google. “It’s analogous to asking whether you would hire someone who can’t write coherently. The presumption is that to be successful in this environment, there has to be a baseline level of analytic capability.”

In many companies, the most data-literate talent is likely to be found in the finance and marketing functions, which are using data to understand the performance of the business or marketing programs. As proficiency with data becomes an increasingly important capability for business performance, data fluency will need to spread beyond these traditionally data-rich functions.

“Data literacy is always important in credit and risk and finance. It’s important in marketing and consumer insights. But the hallmark of a truly data literate organization is when HR and facilities and other kinds of functions adopt data as the go-to deciding factor,” said Marcella Butler, who held HR and operational roles at Google. “That’s not to say there is not a role for intuition, but when you start to measure the effectiveness and the return on your HR investments the same way you would a capital investment or marketing campaign, then you really know the organization is living and breathing it. And you start to think differently. Instead of guessing what policy is best, you say, ‘Let me survey my employees and find out what they think. Let me do a test. Let me pilot.’”

Data literacy is always important in credit and risk and finance. It’s important in marketing and consumer insights. But the hallmark of a truly data literate organization is when HR and facilities and other kinds of functions adopt data as the go-to deciding factor.

Sandy Gould, senior vice president of talent acquisition for Yahoo!, argues that we are approaching a time when most organizations will expect their people to have some degree of proficiency in analyzing and using data. “We live in an age when information and data have become pervasive, global and integrated into the way we do everything. That means, suddenly, it’s a core capability, like using the phone, using a computer, reading,” he said.

How can organizations raise their data literacy? We offer six recommendations drawn from the experience of these advanced data organizations.

Create a culture that embraces data. At companies that are the leaders in big data, analytics and scientific methods are engrained in business processes, the culture and the ways decisions are made. There is a willingness to challenge assumptions and trust data and facts, even when they conflict with past practice or intuition.

“We’re a very data-oriented culture, so for us data is the common language. You don’t go into a meeting at Akamai and say, ‘Gee, I’m sensing this,’ or ‘my intuition tells me this.’ It really needs to be backed up by an appropriate set of rigorous constructs that are backed

by data,” said James “Jim” Gemmell, the company's chief human resources officer. “But I will say there is a danger of groupthink if companies don't also incorporate that sensing, intuitive side into decision-making. You want balance. You achieve that by pulling in those perspectives early in the process of setting up the construct: Define the set of outcomes you're trying to go after and pull in those perspectives as well.”

Companies that are building their analytics capabilities will need to adopt new behaviors and approaches to solving business problems and become comfortable relying on data to drive decisions. The executive team must set the tone. Senior leaders should be passionate advocates for the use of data in decision-making, encourage experimentation and continuous learning as well as tolerance for the mistakes that may be made along the way.

I will say there is a danger of groupthink if companies don't also incorporate that sensing, intuitive side into decision-making. You want balance. You achieve that by pulling in those perspectives early in the process of setting up the construct: Define the set of outcomes you're trying to go after and pull in those perspectives as well.

Appoint an executive champion for change. Another consideration for companies that want to accelerate their adoption of analytics tools and data-driven decision-making is whether they have the right leadership for embedding data and analytics into the business. For many, it may be helpful to have an executive-level leader who can manage a data or analytics center of excellence or competency and can serve as an evangelist for the potential of big data. This executive can help set the big data strategy for the business, identify operational or cultural obstacles to change and be a champion for the change that is required, which includes making sure the organization has the infrastructure to organize, analyze and interpret valuable data.

Define the skills that are required at each level of the organization and incorporate data literacy into assessments. At Akamai Technologies, data literacy is a “baseline foundational expectation” for senior leadership, said Gemmell. Senior leaders do not necessarily have to be “data junkies,” he said, but, “By the time you move into a senior leadership level, there is an expectation that you're data literate — that you know how to access data and even do some analysis on your own.”

Yahoo! has developed “job guides” that define a set of disciplines that individuals need to master to be successful in each role. “Analytics is key on many of those job guides today and eventually will be key on all,” Gould said. “When we measure performance, we look at who uses analytics as a differentiator, who uses it really well and who doesn't, both as individuals and teams.”

Advanced data businesses also devote resources to training employees to improve their use of analytic tools and database systems, and incorporate analytics into leadership development programs. “We drive analytics development and rigor as part of our accelerated development programs for emerging talent and high performers as well as our next generation of leaders,” Gould said.

By the time you move into a senior leadership level, there is an expectation that you're data literate — that you know how to access data and even do some analysis on your own.

Screen for data literacy when hiring. Organizations that want to improve their overall data literacy and numeracy must start by consciously hiring executive talent with these competencies, and this may require organizations to adapt their interviewing process to look specifically for these skills. Human resources leaders say they assess for data literacy and an analytic mindset through rich interviews that examine the degree to which individuals' successes have been driven by or aided by analytic techniques. They listen

closely for evidence that candidates have incorporated data and analytics into their work, and then follow up with detailed referencing to determine whether data was a differentiator for them.

“You really have to crawl through the details,” said Brian “Skip” Schipper, former senior vice president of human resources for Groupon and now head of HR for Twitter. “You want candidates to walk through how they approached solving a large-scale problem. What steps did they take? What role did they play? What did they personally do? How did they get the insights they got about the problem-set that they were dealing with? How did the issue first manifest itself in the organization? If you don’t deconstruct the work, you’ll never know if somebody is analytically minded and data-driven in their orientation.”

Candidate interviews also should assess individuals’ fit with the culture and ability to contribute to the organization’s understanding of these techniques. If the goal is to imbue analytic capability throughout the business, new hires must be able to share their expertise and model analytic thinking for others.

Know how to hire and retain specialized talent. The demand for data scientists and senior data leaders, such as a chief data officer, head of analytics or head of marketing analytics, far outpaces the supply today. This specialized talent wants to work at organizations where data is valued, even by the CEO, and where they will have a seat at the table with the leadership team. They want to work where they will be able to be innovative, disruptive and creative.

“They want you to listen to their outputs,” said Butler. “These are people who want to be heard. This is not a group of people who you’re going to retain by giving them a nicer office and a bigger title. They want us to use what they do because we believe in it.”

While many data scientists are drawn to environments where analytics is practiced at a very sophisticated level, others want to make their mark by helping a less advanced business build a big data capability. Companies that want to attract and retain these experts should demonstrate their commitment to the effort. “They should declare in their strategy that analytics is a super power they want to acquire, and they should back that up with something they are going to do or deliver. And there should be a commitment about the level of resources and investment,” said Gould.

To improve the quality of their assessment of these candidates, Bock recommends that organizations tap the individuals in the organization who are the most data savvy and train them to interview. “Identify people who are the exemplars of those skill-sets today — whoever is the best analyst or computer scientist, whoever represents a distinctive level of ability in those sets of attributes — and allow them to take some time out of their day jobs to interview. I would argue that’s an incredibly valuable investment, because if you’re improving the quality of the people you’re hiring, you can change the trajectory of your company.”

A great way for an organization to put data to work and to have a direct impact on employees is a well-designed employee survey, where you are able to measure success and measure changes year over year.

When establishing a dedicated analytics function, organizations may need to focus their recruiting efforts in locations where the talent pool exists, in Silicon Valley or Seattle, for example. This may mean that the team is physically separate from the rest of the organization. While some may not consider this approach to be ideal, it can better position the company to attract this specialized talent.

Model big data techniques. The HR function can and should be a leader in improving data literacy in the organization, both through talent management initiatives and by becoming a role model in the use of data. The function already has access to a wealth of employee data — resumes, promotion histories, performance histories — that can be drawn on to tease out answers to important questions for the business: Are some managers more effective than others? Are some people progressing more quickly than others? Are high performers working on the biggest business challenges? How does retention compare by manager or by function?

In addition, HR leaders can apply test-and-learn approaches to talent initiatives and generate additional data through tools such as an employee survey.

“A great way for an organization to put data to work and to have a direct impact on employees is a well-designed employee survey, where you are able to measure success and measure changes year over year,” said Butler. “When you develop a survey that incorporates management priorities and then go back and measure it the next year, it’s a very powerful way to generate credibility and to show that HR added value and is aligned with the organization.”

HR leaders also should be willing to use data to challenge assumptions about talent and talent management. “Too often in organizations, people will not challenge assumptions that are made based on anecdotal information. They simply accept it. I’ve seen HR people start with a leader’s assertion that something is true or not true, and then start to do work against that assumption, versus first testing whether that assumption is true and understanding it at a greater level of granularity,” said Schipper.

The data that organizations relied on in the past tended to be found in formal reports generated from structured data sets, such as sales transactions and expenses. The emergence of new sources of data and the tools to collect and analyze that data allow for much more fluid and creative approaches to using data. Machine learning, data visualization, predictive analytics and other new approaches to distilling actionable insights from data have the potential to drive enormous benefits for businesses able to leverage them. Human resources leaders can play a critical role in improving their organizations’ ability to take advantage of these tools by embracing analytics techniques in the practice of HR and evolving talent management programs to instill data literacy as an institutional capability.

Authors

Marie Ford (Philadelphia), Fran Helms (Orange County) and Fleur Segal (Boston)

Social Media @ Spencer Stuart

Stay up to date on the trends and topics that are relevant to your business and career.



@SpencerStuView

