

## People analytics reveals three things HR may be getting wrong

More sophisticated analyses of big data are helping companies identify, recruit, and reward the best personnel. The results can run counter to common wisdom.

*by Henri de Romrée, Bruce Fecheyr-Lippens, and Bill Schaninger*

**Bill James**, the factory watchman turned baseball historian and statistician, once observed, “There will always be people who are ahead of the curve, and people who are behind the curve. But knowledge moves the curve.”<sup>1</sup> Some companies are discovering that if they employ the latest in data analytics, they can find, deploy, and advance more people on the right side of the curve—even if the results at first appear counterintuitive.

Over the past decade, big data analytics has been revolutionizing the way many companies do business. Chief marketing officers track detailed shopping patterns and preferences to predict and inform consumer behavior. Chief financial officers use real-time, forward-looking, integrated analytics to better understand different business lines. And now, chief human-resources officers are starting to deploy predictive talent models that can more

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<sup>1</sup> Scott Gray, *The Mind of Bill James: How a Complete Outsider Changed Baseball*, New York, NY: Doubleday, 2006.

effectively—and more rapidly—identify, recruit, develop, and retain the right people. Mapping HR data helps organizations identify current pain points and prioritize future analytics investments (exhibit). Surprisingly, however, the data do not always point in the direction that more seasoned HR officers might expect. Here are three examples.

## **1. CHOOSING WHERE TO CAST THE RECRUITING NET**

A bank in Asia had a well-worn plan for hiring: recruit the best and the brightest from the highest-regarded universities. The process was one of many put to the test when the company, which employed more than 8,000 people across 30 branches, began a major organizational restructuring. As part of the effort, the bank turned to data analytics to identify high-potential employees, map new roles, and gain greater insight into key indicators of performance.

Thirty data points aligned with five categories—demographics, branch information, performance, professional history, and tenure—were collected for each employee, using existing sources. Analytics were then applied to identify commonalities among high (and low) performers. This information, in turn, helped create profiles for employees with a higher likelihood of succeeding in particular roles.

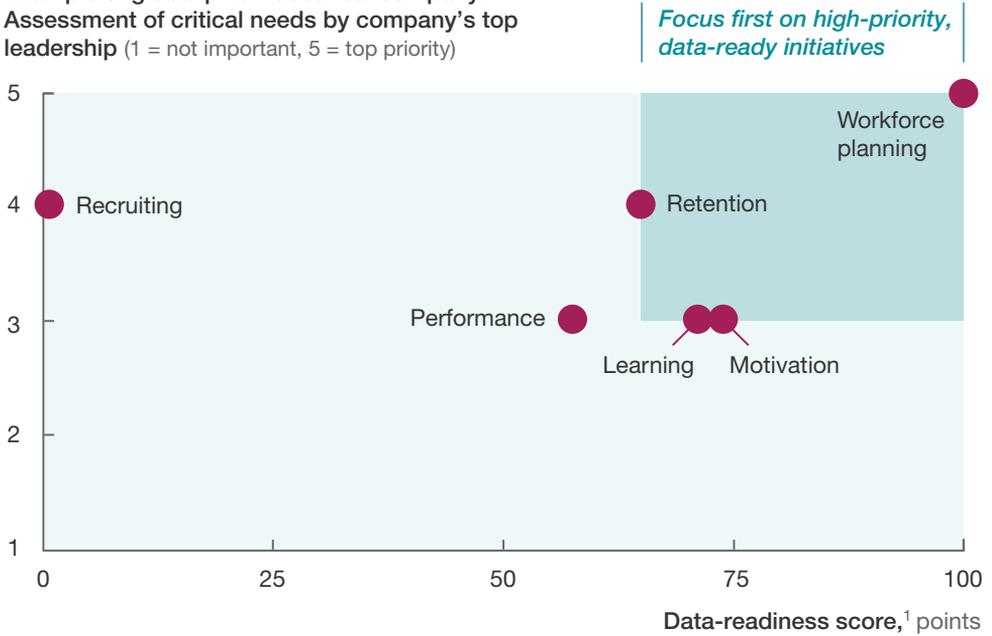
Further machine learning-based analysis revealed that branch and team structures were highly predictive of financial outcomes. It also highlighted how a few key roles had a particularly strong impact on the bank's overall success. As a result, executives built new organizational structures around key teams and talent groups. In many instances, previous assumptions about how to find the right internal people for new roles were upended.

Whereas the bank had always thought top talent came from top academic programs, for example, hard analysis revealed that the most effective employees came from a wider variety of institutions, including five specific universities and an additional three certification programs. An observable correlation was evident between certain employees who were regarded as “top performers” and those who had worked in previous roles, indicating that specific positions could serve as feeders for future highfliers. Both of these findings have since been applied in how the bank recruits, measures performance, and matches people to roles. The results: a 26 percent increase in branch productivity (as measured by the number of full-time employees needed to support revenue) and a rate of conversion of new recruits 80 percent higher than before the changes were put in place. During the same period, net income also rose by 14 percent.

Exhibit

## Mapping data quality to critical needs helps HR organizations to prioritize future analytics investments.

Example of global pharmaceutical company:  
Assessment of critical needs by company's top leadership (1 = not important, 5 = top priority)



<sup>1</sup>Determined by weighted scoring of the availability and quality of multiple data points.

Source: McKinsey People Analytics Readiness and Roadmap (PARR) diagnostic

## 2. CUTTING THROUGH THE HIRING NOISE AND BIAS

The democracy of numbers can also help organizations eliminate unconscious preferences and biases, which can surface even when those responsible have the best of intentions. For instance, a professional-services company had been nearly overwhelmed by the 250,000 job applications it received every year. By introducing more advanced automation, it sought to reduce the costs associated with the initial résumé-screening process, and to improve screening effectiveness. One complication was the aggressive goals the company had simultaneously set for hiring more women, prompting concern that a machine programmed to mine for education and work experience might undermine that effort.

The worries proved unwarranted. The algorithm adapted by HR took into account historical recruiting data, including past applicant résumés and, for those who were extended offers previously, their decisions on whether to accept. When linked to the company's hiring goals, the model successfully identified those candidates most likely to be hired and automatically passed

them on to the next stage of the recruiting process. Those least likely to be hired were automatically rejected. With a clearer field, expert recruiters were freer to focus on the remaining candidates to find the right fit. The savings associated with the automation of this step, which encompassed more than 55 percent of the résumés, delivered a 500 percent return on investment. What's more, the number of women who passed through automated screening—each one on merit—represented a 15 percent increase over the number who had passed through manual screening. The foundational assumption—that screening conducted by humans would increase gender diversity more effectively—was proved incorrect.

### 3. ADDRESSING ATTRITION BY IMPROVING MANAGEMENT

Too often, companies seek to win the talent war by throwing ever more money into the mix. One example was a major US insurer that had been facing high attrition rates; it first sought, with minimal success, to offer bonuses to managers and employees who opted to remain. Then the company got smarter. It gathered data to help create profiles of at-risk workers; the intelligence included a range of information such as demographic profile, professional and educational background, performance ratings, and, yes, levels of compensation. By applying sophisticated data analytics, a key finding rose to the fore: employees in smaller teams, with longer periods between promotions and with lower-performing managers, were more likely to leave.

Once these high-risk employees had been identified, more informed efforts were made to convince them to stay. Chiefly, these involved greater opportunities for learning development and more support from a stronger manager. Bonuses, on the other hand, proved to have little if any effect. As a result, funds that might have been allocated to ineffectual compensation increases were instead invested in learning development for employees and improved training for managers. Performance and retention both improved, with significant savings left over—showing yet again the value of digging into the data at hand. When well applied, people analytics is fairer, has greater impact, and is ultimately more time and cost-effective. It can move everyone up the knowledge curve—often times in counterintuitive ways. 

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