CAHRS Working Group Analytics

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Participating Organizations:

Accenture
Aon Hewitt
Archer Daniels Midland
Bristol-Myers Squibb
Caterpillar
Cigna
Cornell University
Deloitte
IBM
Nissan

Key Takeaways:

1. Organizations are using multiple strategies to build an analytical mindset within HR. This includes changes to how organizations hire, train, place, and develop HR talent. Organizations also recognize that some of the greatest insights can come from interdisciplinary teams who bring diverse perspectives to complex organizational problems.

2. New technologies are allowing organizations to assess employee engagement, skills, and motivation in novel ways. Social listening and passive data collection were mentioned as two examples of tools that provide dynamic and near real-time data on employee engagement and expertise as opposed to static, one-time evaluations.

3. Longstanding HR analytics challenges persist. Despite better technology and systems, issues around data governance, data access, and data accuracy continue to limit the widespread adoption and use of workforce analytics. Variation in global data standards, expansion of data sources and volumes, and the relative lack of understanding among data owners are just some of the key constraints.

4. Machine learning and artificial intelligence are coming soon to HR (or are already here). Participants shared examples of where they are using (or plan to use) machine learning and/or artificial intelligence tools to better manage the workforce. For instance, organizations could provide tailored career guidance to employees that draws from historical data about successful career trajectories of previous employees. Much like a retailer can figure out your next purchase, these tools may be able to guide employees toward their next best career move.

Key Themes on Benefits of HR Analytics

Over the course of our early discussion, participants shared a variety of issues that, if adequately addressed, would result in analytics having greater organizational impact. First, participants noted a continuing need for HR to move from providing information to providing insights—and to move from sharing what's interesting to sharing something truly impactful. Some shared the belief that HR holds back in driving through a rigorous, fact-based case when offering recommendations or solutions. Despite having even greater access to data and tools, there is still a capability gap that limits the
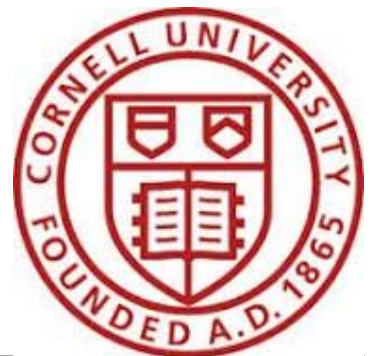
potential impact that analytics can have on talent investments and decisions that affect the business.

A second key theme revolved around HR analytics maturity—stated simply, what is the readiness of the organization to adopt and leverage workforce data for decision support? Does the organization have the right systems and tools? Does it have the right analytical talent? Do business leaders find the data credible? Is there sufficient pull from the business to justify investments in analytics? Are data governance systems in place so that conversations focus on decisions rather than issues of data accuracy and quality?

Third, participants shared a number of developments/applications that involve leveraging workforce data in new and interesting ways. For instance, many organizations have long sought to create "skills inventories" to identify who has what skills throughout the organization. However, implementation of skills assessment has often been complicated by reliance on self-report data and static measurement systems. To address these challenges, one company is passively mining internal data (e.g., blogs, work outputs) to "infer" employee skill levels and expertise. The approach yields near real-time skills assessment, which can feed into decisions around placement, development, and more. As another example, some companies have begun "social listening" campaigns, which involves analyzing internal company data (e.g., town hall conversations, blogs, emails) to understand the employee perspective. One company's senior leadership team made an immediate policy decision after discovering unanticipated negative feedback from employees. Overall, the key themes that surfaced early on related to data governance/structure and to applications of analytics to specific workforce challenges and opportunities.

How Companies Are Addressing the Key Challenges

During our discussion, participants provided greater detail on their challenges and opportunities and shared some strategies for how they are addressing each.

- **Creating an analytical mindset within HR**. Participants shared a variety of means by which they are infusing analytics throughout the HR function. One organization is growing HR analytics talent internally by placing new hires in an analytics role for a period before moving them into line HR. This gives individuals a deeper understanding of data/systems/tools as well as insight into the broader context in which the organization operates. Another organization leverages faculty from relevant university programs to upskill the HR function via hands-on analytics workshops. Yet another company creates interdisciplinary groups to tackle key organizational challenges. The teams are often made up of individuals from HR, Information Technology, business roles, and more, and draw upon their functional expertise to develop a more holistic view of the challenges and identify possible solutions. Still others are developing in-house training programs to deepen analytical skills and perspective, often focusing on how to build a narrative around data and how to deliver effective, data-based presentations.

- **Strengthening data governance systems**. Numerous issues surfaced around the broad theme of "managing the data." Among others, this included questions about data definitions, data ownership, and data privacy. Participants shared the need to view data governance at an enterprise—and not just HR—level. Aligning other functions (IT, Operations) with HR yields greater consistency in data usage. One CAHRS member shared a frustration that the data owners themselves are not skilled enough to understand the meaning and measurement of certain key metrics. Regarding the systems themselves, another participant believes that we will always be pulling and matching data from disparate systems — and that the goal is not to find one overarching systems solution, but to be savvy about understanding various data sources and their value and limitations.

- **Using new technologies to sharpen workforce insights**. Many of the challenges identified by the participants are longstanding concerns for HR—e.g., workforce planning, engagement, retention, skills assessment—but companies are finding new ways and new data sources for tackling these issues. As mentioned above, one company has found success in passively scanning internal employee data to inventory skills and expertise. As a

simple example, locating someone with SAS expertise could be done by searching for those who regularly open SAS enterprise software, attach SAS code files to email, or who blog about SAS in various forums. A key differentiator from past approaches (e.g., self-report by employees stating that they have expertise in particular areas) is that a company can conduct these assessments in real-time as business and talent needs evolve. The approach also does not require survey development and administration and avoids the problem of low response rates. The organization has taken steps to validate the evaluations by allowing employees to review and provide feedback on the algorithm-generated skills assessment. On the whole, the organization reports that the expertise evaluations have good levels of predictive accuracy. Another example involves new ways to assess employee engagement. The classic approach of an annual opinion survey is being supplemented with technologies that allows organizations to conduct social listening—i.e., monitoring digital information to understand what people say (or how they feel) about a brand or organization—in ways that are more real-time. These tools are being applied to internal company data to get an immediate pulse on employee reactions to announcements, changes, or other decisions.

What's Ahead For HR Analytics?

As the discussion concluded, participants shared their insights regarding future developments in HR analytics. These included:

1. **Greater use of machine learning and artificial intelligence**. Much like other functions have benefited from the use of machine learning and artificial intelligence (e.g., think marketing at CAHRS partner company Amazon), participants believe that these tools will be (if not already are) coming to HR. One participant suggested that his organization is looking into ways to communicate job opportunities to employees in much the same way that online retailers recommend products that "you might also be interested in." The technology could leverage historical/comparative data for successful employees to recommend the next set of opportunities for someone who is likely ready to move. In general, participants felt that artificial intelligence could be used to provide employees with information that helps them develop, improve, and advance at faster rates.

2. **Continued interest in HR upskilling around data use and storytelling.** Many participants believed that analytics was "here to stay" and believed that their organizations should continue to invest in developing analytical skills within their HR organization—not so much in terms of making them "data scientists," but to increase skills to a level that is on par with other business functions. As noted above, some organizations are addressing this gap by hiring differently (requiring analytical skills of new hires), retraining (whether provided internally or externally), or through stretch assignments (creating teams with a mix of HR and business analytics focus areas). The goal in all cases was to enhance HR's ability to tell persuasive, data-based stories and to identify actionable recommendations that stem from the data.

3. **Looming data privacy and ethical concerns.** Many participants noted the ongoing challenges of managing data in global organizations. Some expressed frustration with a sense that their organizations were overly risk averse when it comes to data sharing and use. Others believed that technology is moving so quickly that organizations haven't had time to fully consider the appropriateness and relevance of their data collection and use practices. Going forward, issues of data privacy, sharing, and use may require even closer scrutiny as the volume and sources of people data multiply. For instance, one participant noted that her company collects approximately 17 million different fields of information across its business and workforce.

4. **Movement towards a broader, interdisciplinary analytics practice**. HR analytics seems not only to fall within the purview of HR, but is increasingly viewed as an organizational imperative to include other, non-HR perspectives and approaches. This was evident in the makeup of the participant group itself, as a number of attendees

represented backgrounds or functions outside of HR. Part of this reflects the historical development of HR analytics—many of the tools and techniques were developed and tested first elsewhere (e.g., marketing, operations)—but another part signals the need for a broader, business- and enterprise-focused perspective. Many participants viewed this as a positive development, as it breaks down silos and leads to richer outcomes and insights.

5. **Push to master the basics and avoid chasing "shiny new objects."** Many participants noted the hype surrounding analytics. Given increased media attention and the rapid growth of vendors, data sources, and tools, organizations run the risk of overlooking the basics while pursuing the latest promise or fad. Participants felt that HR departments risk losing credibility if they are constantly on the hunt for the latest solution. Instead, participants recommended continuing efforts to focus on the basics of analytics: asking good/testable questions, identifying reliable data sources, making proper interpretations of results, and communicating findings and recommendations persuasively. Participants believe that this will help HR move from an "information provider" to an "insight provider."

This Summary Report was prepared by John Hausknecht for use by participants of the Analytics Working Group.

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