Special Issue: Using Human Capital Analytics to Make Excellent Business Decisions

*Special Issue Editors: Alexis Fink and Mark Vickers*

**PERSPECTIVES**

Why Business Simulations Work and How They Are Building More Agile Organizations

Dan Parisi

Counterpoints:

Tod Nielsen/Cindy Brinkley/Carol Morrison/Philip McCullough

**HUMAN CAPITAL ANALYTICS**

Raging Debates in HR Analytics

Laurie Bassi

Maximizing the Impact and Effectiveness of HR Analytics to Drive Business Outcomes

Scott Mondore/Shane Douthitt/Marisa Carson

Connecting People Investments and Business Outcomes at Lowe’s

Cedric T. Coco/Fiona Jamison/Heather Black

Using Targeted Analytics to Improve Talent Decisions

Alec Levenson

The Missing Link: Measuring and Managing Financial Performance of the Human Capital Investment

Frank DiBernardino

The Analytics of Critical Talent Management

Kathryn E. Shen
IF YOU DON’T GROW YOUR LEADERS, YOUR COMPETITORS WILL.

THE ART SCIENCE OF TALENT

Korn/Ferry understands that attracting top talent to your organization is only the first step to long-term success. In today’s competitive talent market, companies unable to develop their best and brightest risk losing them to competitors who can.

That's why Korn/Ferry Leadership and Talent Consulting offers a range of talent management solutions designed to help you maximize talent effectiveness. We help you assess, select, develop, coach, motivate and retain your organization’s top talent.

Whatever the talent need, organizations worldwide turn to Korn/Ferry Leadership and Talent Consulting to help them maintain a competitive advantage. Isn’t it time you spoke with Korn/Ferry?
articles

14 Raging Debates in HR Analytics
   Laurie Bassi

20 Maximizing the Impact and Effectiveness of HR Analytics to Drive Business Outcomes
   Scott Mondore/Shane Douthitt/Marisa Carson

28 Connecting People Investments and Business Outcomes at Lowe’s: Using Value Linkage Analytics to Link Employee Engagement to Business Performance
   Cedric T. Coco/Fiona Jamison/Heather Black

34 Using Targeted Analytics to Improve Talent Decisions
   Alec Levenson

44 The Missing Link: Measuring and Managing Financial Performance of the Human Capital Investment
   Frank DiBernardino

50 The Analytics of Critical Talent Management
   Kathryn F. Shen

departments

3 From the Executive Editor
   Joseph McCann

3 From the Special Issue Editors
   Alexis Fink and Mark Vickers

4 Perspectives: Point/Counterpoint
   Why Business Simulations Work and How They Are Building More Agile Organizations
   Dan Parisi
   Counterpoints:
   Tod Nielsen
   Cindy Brinkley
   Carol Morrison
   Philip McCullough

10 Linking Theory and Practice
   Steven H. Hanks

12 Thought Leaders
   Steven Steckler

58 Book Reviews
   Reviewed this issue:
   Analytics at Work, Smarter Decisions, Better Results
   By Thomas H. Davenport, Jeanne G. Harris, and Robert Morison
   How to Measure Anything: Finding the Value of “Intangibles” in Business
   By Douglas Hubbard
   Retooling HR
   By John Boudreau
   The New HR Analytics
   By Jac Fitz-Enz

Join us on Twitter
For industry news, HRPS events and membership updates and special offers, follow @HRPS on Twitter.
HR People & Strategy is a unique and dynamic association of human resource and business executives. We are committed to improving organizational performance by creating a global network of individuals to function as business partners in the application of strategic human resource management practices.

Now in its fourth decade of service, HRPS is a vital force in addressing and providing current perspectives on complex and challenging human resource and business issues. HRPS is a non-profit organization representing a mix of leading-edge thinkers and practitioners in business, industry, consulting and academia around the world.

HRPS continuously seeks to build recognition from business leaders and the HR community for the critical role of HR as a strategic business partner in achieving higher levels of organizational success. In support of this mission, HRPS:
- Serves as a global forum for presenting the latest thinking and information on the HR implications of key business issues and strategic HR practices.
- Offers a broad range of comprehensive publications and professional development programs with distinguished human resource scholars, practitioners and business leaders.
- Builds networks of diverse individuals to exchange leading-edge HR ideas, information and experiences.

HRPS has 15 affiliates in the United States and Canada and also has a unique, reciprocal relationship with the European Human Resource Forum (EHRF), the corporate HR network for multinational companies in Europe, and The Human Resources Institute of New Zealand (HRINZ). We also have professional contacts in South America, Taiwan, Australia and Asia Pacific.

HRPS also has engaged in collaborative partner relationships with several quality organizations to provide valuable services to HRPS members. The current HRPS Member Partners are:
- Center for Advanced HR Studies (CAHRS), Cornell University
- Center for Creative Leadership (CCL)
- Center for Effective Organizations (CEO), University of Southern California
- Institute for Corporate Productivity (i4cp)
- The Walker Group
Developing True Strategic HR Leaders

Wow! When the talented People & Strategy team and special editors get behind a project the results can be exceptional. This issue’s focus on HR Analytics is packed with ideas that should keep a conversation going for weeks around your offices and with other professionals. It is a challenging, but important, topic for HR as developing a deep analytical capacity requires time and investment, but the rewards are substantial. We invite you to dive head first into this issue.

In case you haven’t caught the pattern to the cycle of P&S issues, we are trying to do two special issues per year with the other two issues open to diverse ideas and directions. The next special issue which is 34.4 will be devoted to Organization Design and led by special editors Greg Kesler and Amy Kates. This topic deserves revisiting as new HR professionals enter the senior ranks without a deep exposure to this complex topic. The models and frameworks we thought were well-proven also continue to evolve.

Our next issue 34.3 is already taking shape with some major authors stepping forward with new takes on things, and we will also look at HR practices in a wider array of organizations. Noel Tichy will also offer his candid assessment of the state-of-the-art in our “Thought Leaders” interview.

With another really fun read produced by Anna on the use of simulations in organizations, Steve Hank’s tour around HR academic research topics, Steve Steckler’s provocative Thought Leaders interview with Peter Block, and Patsy and John’s tremendously informative book reviews, how could you ask for more from your HRPS affiliation?

Joe McCann

Fresh Approaches to HR Analytics

We live in what could be termed the Age of Analytics. Information itself is so cheap and abundant that we feel awash in digital data. What we need now is not more data but better ways to make sense of it. This puts a premium on business analysis and interpretation, especially in the area of human resources. After all, talent represents the last true competitive advantage for today’s organizations, yet HR is an area that has traditionally lagged behind other business functions in terms of analytics.

That’s why this special issue is so critical. It not only reports on the major trends in human capital analytics, it highlights some of the best analytical strategies for making businesses successful. The first article, by Dr. Laurie Bassi, summarizes both the past evolution of HR analytics and the current raging debates that will influence the future, and sets the stage for the rest of this issue.

Next, we have Dr. Scott Mondore’s comprehensive article on maximizing the impact of HR analytics. He begins by defining HR analytics both in terms of what it is and is not, and then he provides case studies to illustrate process and integrated analytics. Mondore is followed by an article that describes how organizations can make that all-important connection between employee engagement and business performance, with a focus on how this has been done with Lowe’s.

Then, Dr. Alec Levenson illustrates how to use targeted analytics to improve talent decisions. He begins by revealing the state of analytical competencies in HR today and then provides models and case studies showing that HR professionals do not always need to use advanced statistical analysis to achieve deep insights.

We conclude with a piece by Frank DiBernardino that helps us understand how to achieve what some consider the Holy Grail of analytics: how to link investments in human capital to the financial performance of organizations, and Kathryn Shen writes a future-looking article about workforce planning and forecasting, with an emphasis on predictive analytics. This is the appropriate way to anchor this series of terrific articles which—we believe—will help guide the future of human capital analytics throughout the rest of this decade.

Alexis Fink

Mark Vickers
How Peak Performers Develop Hindsight in Advance

Before taking action, real-world peak performers like pilots, military personnel and disaster response teams use simulations to develop the skills to respond to high-impact challenges. Management decisions, too, can have significant consequences for their direct reports, customers and company shareowners. And while “on the job training” initiatives are often treated as acceptable alternatives, most managers don’t want employees making high-risk decisions for the first time on their watch. So why don’t more organizations take advantage of simulations to give their own managers and leaders the same performance advantages other peak performers receive? The case for using simulations to practice and develop peak performance is well-established and clear. What we’re exploring here is why simulations and scenarios work so well. And how can we use this understanding to design solutions that develop, engage and manage our people optimally?
The Power of Practice
A May 2010 study conducted by Mercer found that HR managers cited leadership, succession, training and development as their top talent-management concerns. This explains, in part, why many HR departments and talent managers are embracing business simulations to help employees develop better leadership, business acumen and decision making skills. The simulations provide an opportunity to practice new methods, processes and technologies without risk, and immerse participants in the new behaviors required for business success.

Business simulations help:
• Impact audiences in a more engaging, dynamic and effective way than traditional methods like reading or lecturing.
• Build alignment commitment, and execution capability around corporate strategies, business models and initiatives.
• Provide a realistic approximation of the business environment and create interactions that allow participants to experience their role in delivering results.
• Allow for the practice of key behaviors and skills that impact business results.

Within minutes of being placed in a simulation, participants are immersed in an experiential learning environment that helps them derive immediate, applicable meaning and transfer the insight and knowledge they gain to on-the-job performance situations. The result is an effective, aligned organization that is able to quickly execute on plans, grow revenue and share price, and adapt to change in an on-demand market.

The learning that takes place during a simulation helps participants increase competencies rather than simply build skills. Once employees finish a simulation, teams can compare results against one another. Results that may have looked good by themselves can begin to pale when put in a market context. Armed with this feedback, participants are able to see how their decisions play out, look at other teams’ results, and see the effect a different choice might create.

As “Fortune” magazine columnist and MIT Media Lab fellow Michael Schrage has noted, successful adults typically need to “persuade themselves” through their own experience. Simulations do just that.

Not Just Training
The idea of simulations is a familiar one for digital natives, and even video-game playing is gaining credibility as a social good; author Jane McGonigal goes so far as to say, in the “Harvard Business Review,” that, “The enterprise counterpart of what is now niche entertainment (alternate reality games) could become the new operating system for real-world business.” While this author does not seek to prove her thesis, we submit that acceptance of business simulations will only increase. As more and more Millennials—employees who have grown up online, using real-time simulation games such as Second Life and Farmville—enter the workforce, forward-thinking HR professionals will see that business simulations have a broad range of applications:

• Rapid familiarization of new hires with a company’s products and customers—the future of work will see far more mobile workforces; agile organizations will need to accelerate the time-to-competency of their teams.
• Deep alignment building—today’s most successful companies create a strong culture for their employees. In the future, companies will impart this culture throughout their entire ecosystem, to everyone who performs work on their behalf.
• Development of execution skills and capabilities—business acumen decision making, leadership, and an understanding of how your function affects the top and bottom lines will be a critical part of every successful employee’s know-how.

HR professionals and company executives are making simulations the primary driver of business insight and behavior change across business processes or corporate initiatives. The simulations allow users to immediately transfer the insight and knowledge they gain through the feedback sticks.

Dan Parisi, executive vice president, BTS, is a BTS global partner and managing director of BTS San Francisco. Throughout his 16-year career at BTS, Parisi has pioneered the application of customized business simulations for leading Fortune 500 clients such as Cisco, HP, NetApp, Texas Instruments, Toyota, Wal-Mart and others. He has personally facilitated the development of more than 7,500 executives and managers using computer-based business simulations and other experiential learning techniques. Parisi received his MBA in finance from NYU and currently lives in San Francisco.
High Stake Simulations Require High Customization

Tod Nielsen, co-president, application platform, VMware

Dan Parisi presents a strong argument for the use of simulations today and increasingly for use in the future. As he states, the concept of “practice” in context gives participants a powerful way to transfer new insight, skills and thinking immediately to their day-to-day actions, applying them to their performance.

If I can provide one caution, though, it is the importance of deep customization for simulations used for the purposes of alignment and whenever simulations are being leveraged at the senior management level. This requires careful research and corroboration by the designers and top management on such elements as the company culture, environment, competitors and goals of the simulation. Without this credibility, the endeavor is at risk: Participants may discount the experience and a wedge is driven between their learning and their ability to apply the skills on the job.

Top leaders in particular cannot help but be skeptical when told a simulation will be a key event to change a culture or align an organization. Many have already had experience with business simulations; Ninety-eight percent of U.S. business schools have students participate in off-the-shelf simulations to teach everything from Business Policy to Marketing to Operations. Yet few business graduates count those simulations as significant behavior-changing events.7

A truly customized simulation blasts away irrelevant elements and focuses on core issues, immersing participants in culture, strategy and externalities that affect the business. This takes an enormous amount of expertise and deliberation—for every hour of simulation, there are dozens of hours of preparation—but, in the end, participants have measurable changes in behavior and even new business ideas. These results leapfrog the outcomes from off-the-shelf, lightly customized versions for the same population.

The customized simulations should model your organization’s business challenges and anticipate its future evolution. This allows top leaders to not just see the new strategy but to practice making it a reality.

Tod Nielsen is co-president, application platform with VMware. Nielsen joined VMware in January 2009. Prior to VMware, he served as president and chief executive officer of Borland Software since November 2005. Prior to Borland, he held several key executive management positions at leading software companies including Microsoft, BEA and Oracle. Nielsen brings more than 20 years of leadership experience in enterprise software and application development to VMware.

Organizational Inflection Points: The Strategic Application of Simulations at AT&T to Power Organizational Change

Cindy Brinkley, senior vice president of talent development and chief diversity officer, AT&T

Like many organizations, AT&T has undergone a significant transformation over the past decade. Through a series of mergers and acquisitions, the company evolved into the largest global provider of communication services, and an employer of more than 266,000 people around the world.

Over this period, the transitions and assimilations in leadership, culture, technology and business models have been complex. While a wide array of learning methodologies have been employed in the face of this change, at critical junctures AT&T turned to highly customized business simulations to ensure alignment around changes to organizational structure and business strategy.

Use of simulations during times of merger integration activity was found to be particularly effective, especially when cascaded top down to ensure that business strategy was being quickly understood and executed. In two instances over the past decade, AT&T and its legacy companies have realized significant measurable results through simulation.

In the case of the Cingular/AT&T Wireless merger, more than 6,000 senior leaders participated in simulations within weeks after the deal closed. This was critical, given the integration of two different cultures that had competed with one another. Getting leaders to unify behind the new company “as one” was accelerated, and simulation was key.

In addition and more recently, as AT&T set its course on “One AT&T,” following the BellSouth merger and a change in leadership,
Chairman & CEO Randall Stephenson approved the use of a simulation-anchored learning event to once again drive a new vision. In this case, the simulation enabled thousands of leaders across the company to better understand what this new vision meant for them, their organizations and the future of the company.

Enabling these leaders to actually make simulated management decisions across the broader, more complex landscape of the new company, and doing it with cultural considerations top of mind has been instrumental in driving change quickly through this complex organization.

Simulations play a critical role in leading change at AT&T—and like other elements of a blended learning platform, they have a proper time, place and purpose.

As senior vice president-talent development and chief diversity officer at AT&T, Cindy Brinkley is responsible for identifying and developing future leaders, companywide training, employee engagement and diversity management. Brinkley joined the company in 1986, and has held several positions throughout her 24 years with AT&T—primarily in state and federal government relations. Brinkley was named president, SBC-Arkansas, in 1999, and in 2002 was recognized as the state’s Business Leader of the Year. A native of Milan, Missouri, Brinkley holds a bachelor’s degree in journalism from the University of Missouri-Columbia, and a bachelor’s of science degree in political science from Truman State University.

Simulations play a critical role in leading change at AT&T ... they have a proper time, place and purpose.

The Society for Industrial and Organizational Psychology advocates careful construction of simulations, including use of “thorough and accurate job information,” design that ensures all participants have equal opportunities and are rated on the same bases, and incorporation of standardized rating scales.

Simulations: Valuable, but Not Universal

Carol Morrison, senior research analyst, I4CP

Simulations offer a realistic, innovative and engaging option for workplace learning. But calling them “the primary driver of business insight and behavior change” may be optimistic, because their use remains somewhat limited. The Institute for Corporate Productivity (I4CP)—the fastest growing and largest corporate network and research organization focused on high-performance workplaces—and ASTD have partnered in multiple studies on the latest trends in organizational learning. When business and training leaders from organizations across a variety of industries and company sizes were surveyed about learning design, more than a third confirmed their use of online simulations. Offline versions—simulations that take place in a live environment—show more extensive adoption. Nearly half of study participants say they use offline simulations in their learning effort.8 Far fewer—from two to five percent—are using virtual worlds and augmented realities for work-related learning.9

Simulations can be time-intensive to create, which may explain why they aren’t more widely used. One estimate puts development time at 750 hours per single hour of an actual learning program.10 Time-intensive usually means more-expensive-to-develop, thus cost could play a role in limiting use, too. Further, validity and effectiveness of simulations hinge on proper design. The Society for Industrial and Organizational Psychology advocates careful construction of simulations, including use of “thorough and accurate job information,” design that ensures all participants have equal opportunities and are rated on the same bases, and incorporation of standardized rating scales.11

Although they require significant thought and effort on the back end, simulations appear to be well worth it. Because I4CP looks for the traits and strategies that set high-performing organizations apart, its research examines market performance (based on revenue growth, market share, profitability and customer satisfaction).

8 ASTD & Institute for Corporate Productivity. (2010). Instructional systems design today and in the future. Published by ASTD.
In the United States, each nuclear plant has a control room simulator that replicates plant responses to operational conditions. ... Manipulation of every control and/or piece of equipment responds with full fidelity to what a reactor operator would experience in the actual control room.

Analysis confirms that use of simulations correlates to market performance. Interestingly, online simulations have a higher correlation than do live, offline versions12.

So in the end, the news about simulations is good. When simulations are in use, the organization employing them is likely to be a high performer. And the fact that they aren’t yet used universally for workplace learning can offer companies valuable opportunities for leveraging simulations to achieve competitive learning advantages.

Simulation Enriches a Strong Nuclear Safety Culture

Philip McCullough, EdD, retired vice president, industry training and accreditation, Institute of Nuclear Power Operations

This statement is made many times by nuclear plant operators validating the importance of simulation: “Everything worked in the plant in real time just like it did on the simulator.” The nuclear power industry, like other high-risk industries, depends heavily on simulation for learning. Nuclear workers need to experience it on the simulator before they experience it on the real plant. This promotes a culture that makes nuclear safety the overriding priority and fosters a continuous learning environment.

Safety analysis and operational experience consistently indicate that human error can be the greatest contributor to the risk of a severe accident in a nuclear power plant. The use of full-scope simulators in the training and qualification of operators is an essential element to reduce human error. The reactor operators spend a large fraction of their time training and retraining on the simulator performing numerous exercises. This simulation instills more than just technical competence. Reactor operators improve their skills in areas such as leadership, communication, command and control, decision making and teamwork.

In the United States, each nuclear plant has a control room simulator that replicates plant responses to operational conditions. Manipulation of every control and/or piece of equipment responds with full fidelity to what a reactor operator would experience in the actual control room. Training is done on everything from routine plant monitoring to the most challenging accident mitigation scenarios.

There is much to be learned in accident management from what occurred at the Fukushima Daiichi nuclear power plants following the earthquake and tsunami in Japan in March 2011. Many of those lessons learned will be incorporated into training and simulation. These insights will strengthen nuclear safety culture around the world.

Simulation for learning clearly extends beyond the control room and is being developed for managers, supervisors and workers throughout the nuclear plant. With many experienced workers hitting retirement age the nuclear power industry is addressing issues associated with an aging workforce. While this is happening the replacement workforce is coming from an influx of Generation Y workers. The effective use of simulation will enhance the knowledge transfer to the next generation of workers keeping the focus on nuclear safety.

Philip McCullough is president of McCullough Consulting, LLC. His areas of expertise include safety culture, operational excellence, strategy, learning and governance. McCullough retired as vice president of Industry Training and Accreditation for the Institute of Nuclear Power Operations (INPO) in February 2011 after nearly 30 years in the nuclear power industry. He also served as the executive director of the National Academy for Nuclear Training. He helped advance the training and development of nuclear workers, managers and executives around the world.
Every leader has a dark side that emerges under pressure. From the occasional outburst to headline-worthy despotism, when the dark side takes over, it can derail even the brightest career.

The Hogan Development Survey is the only business-related personality assessment that identifies performance risks ahead of time to prevent career derailment. Don’t let the dark side get the best of your leadership potential.
Recent Academic Research on People and Strategy

By Steven H. Hanks, Ph.D.¹

In this issue of People and Strategy, we review three recently published academic articles with significant relevance to the HR community. We begin with a comprehensive literature review regarding HR management and performance, followed by two empirical studies addressing goal theory and diversity climate respectively.

Exploring the Link Between HR and Firm Performance: Status Report on Research in the Field

Understanding the linkage between HR practice and firm performance is central in the development of the profession. This strategic question is the focus of a recent literature review published by David Guest in Human Resource Management Journal.

Professor Guest brings a unique perspective to his review of key studies of the HR-performance relationship over the past 20-plus years. He starts out by tracing development in the field through a series of broad overlapping stages, including:

- **The Beginnings.** Research emerging in the 1980s, ranging from anecdotal works such as Peters and Waterman’s In Search of Excellence, to books and articles authors such as Fombrun et al., Miles and Snow, Walton, Beer et al., Schuler and Jackson, Guest, Story and others, representing early attempts to empirically link human resource management to business strategy.

- **Empiricism.** Mark Huselid played a leading role in this stage with his landmark 1995 article in the Academy of Management Journal, documenting the linkage between HR practices and firm performance in specific industries including steel mills, the automotive industry and banking.

- **Backlash and Reflection.** In the mid- to late ‘90s, a number of studies were published, calling for better measures of performance and a stronger theoretical foundation in advancing the field. Seminal works in this stage were studies by Dyer and Reeves, and Becker and Gerhart. While empirical evidence documented the association between HR practice and performance metrics, the authors criticized the absence of a sound theoretical foundation accounting for these findings.

- **Conceptual Refinement.** In response to aforementioned criticisms, studies in this phase focused on the theoretical base underlying proposed empirical linkages. Authors proposed theoretical underpinnings based on (1) Vroom’s Expectancy Theory, (2) the resource-based view of the firm, and (3) the institutional perspective, the latter highlighting the key role of government regulation in defining HR practice in places such as the European Union.

- **Bringing the Worker to Centerstage.** This stage includes studies in the early 2000s focusing on the “key role of workers and the importance of worker’s perceptions and behavior in understanding the relationship between HRM and performance.” Key here was research by Wright and Boswell, as well as others, calling for greater focus on the manner in which workers respond to human resource management practices.

- **Growing Sophistication.** The final and current stage as defined by Guest involves growing complexity and sophistication in both theory and research methods. Reflected here is work by Bowen and Ostroff and others seeking to address HRM and performance from a multi-level perspective, examining the relationship between HR and firm performance at both the individual and organizational levels. While much of the earlier empirical study of the HR-performance relationship has centered on the presence of HR practices, there is increasing recognition that far greater attention needs to be paid to the manner and effectiveness with which HR practices are implemented, which generally lies in the control of line management rather than HR. Related to these concerns are questions about the critical role of leadership and the manner in which employees perceive and interpret HR policy as implemented in the organization. Ultimately, there is increasing recognition of the complexity associated with firm performance. Firm performance is impacted by many factors, including external factors such as market and environmental conditions, etc.

Guest concludes with a discussion of some distinctive challenges for future research. He notes that many in the field are calling for a major (comprehensive, expensive) study involving a large sample of firms and capturing extensive longitudinal data related to HR practice, implementation, leadership, firm strategy, environmental contingencies, etc. In an attempt to build and test more robust models related to the HR-performance relationship. Others argue that searching for the one universal model may be less beneficial than more focused theory development and studies designed to better understand contingency or configurational models of the HR-performance linkage. The great contribution of a review such as this is that its array of references provides a great launching point for those wishing to explore the field.


Mobilizing the Subconscious: A New Perspective on Goals and Performance

The relationship between goal setting and individual performance is one of the foundational building blocks of management...
practice. A recently published study by Amanda Shantz and Gary Latham in Human Resource Management, adds a new dimension to our understanding of goals and performance. Moving beyond the notion of conscious goal setting, the authors introduce the concept of primed goals, which they describe as follows:

Primming is defined as the temporary nonconscious activation of a behavior. During the time that the primed goal remains active in the subconscious, it exerts a passive effect on an individual’s behavior even though that person is unaware that the goal exists.

“In short,” the authors note, “a primed goal affects behavior in the absence of conscious attention or awareness of pursuing a goal.”

Two field studies are reported in the article. The studies were conducted in two university call centers. The subjects were employees hired to call alumni with the goal of obtaining donations for the university. Both the experimental and control groups were provided the same written instructions. The difference was that instructions for the experimental group were printed over a color background photo of a woman who was winning a race, hence priming the goal of achievement. Instructions for the control group were printed on plain white paper. Findings revealed that the experimental group (those primed with the picture of the woman winning a race) raised significantly more money over the course of their shift than those in the control group. The authors then conducted a meta-analysis of one previous study and the two present studies, where the findings were confirmed.

Based on their findings, Shantz and Latham drew the following conclusions. First, “The present findings suggest that the subconscious can be harnessed to an employee’s and employer’s advantage.” Second, they noted that:

...these findings suggest the need to change the way we view behavior in the workplace. Most human resource researchers and managers adhere to the view that behavior can be explained based on conscious processes.

Their third conclusion was that “environmental cues in the workplace, such as photographs relevant to appraising, coaching and training employees, allow employees to apply what has been learned during training to their job.” The authors continue, “They can work diligently in absence of direct supervision (i.e., self-management), which may significantly increase their performance.”


Diversity Climate and Retention: Looking Beyond Female and Minority Employees

David Kaplan, Jack Wiley and Carl Maertz, Jr., in a recent article published in Human Resource Management, reported, “The efficacy of diversity management depends on demonstrating the value-added organizational benefits of diversity-related initiatives and of a more diverse workforce.” They continued, “Researchers and practitioners need to focus, therefore, on specific tangible benefits of diversity initiatives and on understanding how they are realized.”

The focus of this study is the relationship between diversity climate and turnover intention, as mediated by a construct called calculative attachment. Other constructs of interest include pay satisfaction and supervisory effectiveness. Diversity climate is defined in the study as “employee perceptions regarding the extent to which individual diversity is valued, integrated into organizational life and supported through fair employment practices.” Said the authors, “We propose that by fostering a positive diversity climate an organization can increase the likelihood that an employee will determine that management is committed to non discrimination and will trust that decisions concerning his or her career will be made fairly.” Thus, the employee would be more likely to stay with the organization.

As proposed by the authors, calculative attachment plays a mediating role in the relationships between employee perceptions of the organization’s diversity climate, pay satisfaction, supervisory effectiveness and turnover intention. Calculative attachment has been defined by Maertz and Griffin (2004) as “a rational calculation of the probability of attaining important values and goals in the future through continued membership.” Thus, calculative attachment is expected to be high where employees perceive positive future job and career opportunities with the firm. Key findings of the study are highlighted below.

First, firms exhibiting a positive diversity climate were expected to experience lower turnover. Second, among other things, the authors hypothesized that these findings would be similar for white males as well as female and minority employees. Their underlying rationale was as follows:

Although researchers have suggested that the benefits of diversity initiatives may be limited to women and minorities, we question this conclusion. Instead, we propose that all employees may benefit from positive diversity climates in the form of stronger calculative attachment to the organization. One reason White men may feel that they also benefit from a positive diversity climate involves the signaling effect of general fairness in policies and decisions going forward.

Analysis of the data revealed support for this hypothesis. The authors stated, “The results support the conclusion that all employees can benefit from positive diversity climates regardless of sex or race.” They further commented, “This finding thus refutes both the theoretical and practical concerns that diversity initiatives represent a zero-sum game in which support for a diversity climate comes at the expense of majority members.”

The authors performed several additional tests, but the bottom line for these indicate that diversity initiatives do not operate in isolation; other elements of an organization’s decision-making structure and culture may influence the efficacy of diversity initiatives. Without positive and consistent signals from management across policies and practices, the key message from diversity initiatives of procedural justice and fair treatment can be undermined, thereby undermining the diversity climate’s potential to generate calculative attachment. The authors conclude: “Further, the interaction between diversity climate perceptions and pay satisfaction demonstrates that when an organization sends consistent signals with other human resource decisions (i.e. compensation), perceptions of the diversity climate have their greatest impact on an employee’s calculative attachment.”

Influential Strategist: Peter Block

By Steven Steckler

Peter Block has consulted to many of the world’s largest and most complex corporations, government agencies and public service institutions for more than 35 years. He has been one of the most influential and effective strategists and practitioners in the field of organization change. Block is the author of a number of best-selling books. His most widely known book: Flawless Consulting: A Guide to Getting Your Expertise Used, now in its third edition, has been and still is a primer for effective consulting relationships. The book received the first place 2004 Members’ Choice Award by the Organization Development Network and was recognized as the most influential book for OD practitioners over the past 40 years. Block’s latest book, co-authored with John McKnight and published in 2010, is titled, The Abundant Community: Awakening the Power of Families and Neighborhoods and followed Block’s book, Community: The Structure of Belonging. He also wrote The Answer to How Is Yes: Acting on What Matters (Berrett-Koehler, 2002) that won the 2002 Independent Book Publisher Book Award for Business Breakthrough Book of the Year. He has received various national awards for outstanding contributions in training and development.

To start, can you assess the actual impact that HR has had over the last 30 years. What is your honest assessment of the actual impact that we have had as a group of internal practitioners, consultants, academics and authors on both individual employees, their lives at work, how they are managed and on organizations?

First, I believe we have brought the vocabulary of team building and the importance of relationships into the forefront. I can remember in the 1960s when I first began, the idea of team building, the idea that relationships matter, that high performing teams were radical ideas. This resulted in a significant shift and people started to accept the fact that business results and overall performance are affected by human factors. I think that was the important shift in thinking that was introduced by HR. However, now institutions think people are perceived as less important than they have ever been during my career. Companies value their people less. Not in terms of their humanness, but in terms of what the business really needs to succeed. I just think that there has been a huge shift toward automating and outsourcing that has had an enormous impact. As soon as a company is willing to outsource, that company is saying that loyalty, commitment, company knowledge, company history and tradition has no value to us anymore.

What specifically have you learned from successes and disappointments?

I think that people are more afraid now about losing their jobs and feel more vulnerable than employees have ever felt based on what I have seen. It is not caused by the recent recession. It is beyond the recession. Regarding the humanness of our institutions, this is where I don’t see much progress. I am not blaming HR. People are afraid of their bosses, and they are isolated in their work.

We went through a period in the ‘80s that I think was different. In early 1983 and 1984 with the recession then and the competition with Japan, I think companies for about 10 years decided that employees were their future. You saw enormous growth in employee involvement. The quality improvement movement was very humanistic in its tone. Most of that has disappeared.

Should HR re-engage this discussion about performance and loyalty and a meaningful employee value proposition. Or is it too late?

As far as companies, I think that the big question for companies is one of purpose. Once you say that our purpose is for stockholders or our number one purpose is for shareholder return, then, the conversation about human resources is a secondary one. I have one client, finally, where I am in a conversation of what is the purpose of a business. And I find that thrilling. It is with M&M Mars, and I have worked with them for six years. They are privately held. They say that freedom, mutuality of interest and engagement are their core principles. And now because their founders are aging, they are asking, “So how do we sustain the fact that this business has never been run for the money even though it is making several billion dollars a year in profits?” They are saying, “Well maybe what made us great was the deep belief that everything we do was out of a mutuality of interest and if we do not consider the interests of those around us, we don’t have a future.” I find that a positive sign post.

Do you think that we have a role in framing that purpose and introducing that conversation? Could that be a role for HR?

I would love it. I would love HR to join forces with corporate communications and the corporate social responsibility conversation. If we don’t get off this notion that absentee shareholders are our primary customers and our primary interests, institutions will lose their license to operate.

For years, HR has tried to establish its credibility by talking about shareholders, the bottom line and Wall Street. Is that the wrong way?

It’s not powerful. As soon as we decide that we should sound like management, they don’t need us any longer. Why would you go up to somebody whose whole being is one of pragmatism, consistency, control and predictability and say, “Can I help you become more consistent, more in control and more predictable.” That is not a unique offering. I think companies need some people who have a lot of focus and energy and care for sustaining the humanity of the system. The great question of purpose, of meaning and contribution, people still have that. And I think that HR has something to offer in that.

So we should at least be thinking about purpose. The HR field doesn’t seem to raise that discussion to the level of prominence that it should be at.

Exactly, that is the point. HR has a role to play in the discussion of purpose. We have “human” in our name. We should take that seriously. We have to provide an alternative voice to the one that argues for control and consistency. Our function is to stand for the restoration of humanity in the systems world. Also to take a stance for local control, local culture. I hear from clients, “We operate in $4
countries and how do we take our values and spread them across those 54 countries; how do we bring to these cultures what has made us great in the United States?” The question should be, “What do we have to learn from the local units and local cultures in which we operate?” We should ask, “What have they figured out that we don’t understand?”

What are the key challenges in front of us now as a profession and what should we be doing about them?

I think the broader we become in our perspective, the more powerful we become. I would say that the task of human resources is to look for those ways to help people restore their own humanity.

What are you personally/professionally working on now that is important to you; what is providing meaning to your work?

I am on a pilgrimage to discover how people in a wide variety of disciplines are dealing with the same core questions that I have always had. My project is to explore more dimensions of the restoration of humanity efforts. I am super interested in rethinking the economics of abundance. I am talking to economists now. I am very interested in art. I was just part of a two-day discussion with 15 people about how do we make art, music, theatre, drawing, poetry central to the process of transformation. My focus is also on neighborhoods and their capacity to raise a child, provide a job and care for the vulnerable. All this means working to change the narrative of who we are, to write a new narrative for our institutions and communities. The narrative that we have now is one of deficiencies, that we are a problem, that what we have is not enough. That what we need is more programs, leadership and money. This current narrative is the problem. All transformation is about the story that we tell. And so my work for the last six years in Cincinnati has been to try to shift the narrative of who we are as a community toward one of that what we have is enough, here are our gifts, here is our capacities, rather than the current dominant narrative that is we are a problem to be solved.

So yet another transformation? The most important one, perhaps?

Who is to say? Just because I am interested, does not mean it is important. The narrative work, though, is promising. You ask, “What’s the role of HR?” The role is to change the narrative within our institutions and communities. To move us to an alternative narrative that has us living in a place that is one of possibility, and relatedness, and of appreciating our gifts. To back away from the problem narrative that we have been living. I would love to see HR do that. I would show up for that conversation.

Great leaders create great results.

It’s a fact, nothing impacts an organization’s success as much as leadership. We’ve been partnering with clients to develop great leaders for 30 years and that insight is now available in our new resource guide.

Let us help you inspire great leadership and build your firm’s talent acumen.

MDA Leadership Consulting – The Talent Acumen Experts™:

- Talent Assessment
- Leadership Development
- Organizational Performance
- CEO & Board Services

www.mdaleadership.com
Raging Debates in HR Analytics

By Laurie Bassi, McBassi & Company
HR analytics holds the promise of both elevating the status of the HR profession and serving as a source of competitive advantage for organizations that put it to good use. Our realization of this promise hinges on our individual and collective ability to master the art and the science of HR analytics. That, in turn, will happen much more quickly if we can achieve clarity—even consensus—on a number of issues where neither clarity nor consensus currently exists.

My hope is that explicitly naming, categorizing and examining some of the most important (but often unnamed) debates will help speed the process of achieving consensus.

In this article, Section 1 briefly reviews the evolution of HR analytics. Section 2 positions and comments on what I see as the major debates within HR analytics, which I categorize as: what, why, who and when. Section 3 speculates on the value that HR analytics can produce in the future.

The Evolution of HR Analytics

According to a 2004 Workforce Management (formerly Personnel Journal) article, “In 1978—in this publication—Jac Fitz-enz proposed a radical, anti-establishment idea. Human resources activities and their impact on the bottom line could—and should—be measured. The reaction was apathy, disagreement and disbelief” (Caudron, 2004).

For the past three decades Fitz-enz has, along with a growing band of kindred spirits, campaigned tirelessly to improve the state of HR measurement and to help both HR professionals and senior executives understand its importance.

These efforts started out at the nuts and bolts level—creating definitions for basic HR metrics such as compensation, staffing, hiring and retention. This work laid the foundation for gathering comparable data across organizations, which in turn, enabled the benchmarking of HR metrics. Over the years, a number of scholars and practitioners expanded the benchmarking of HR metrics to include investments in training and developing employees, as well as in a broad array of other HR policies and practices.

Refining and improving the benchmarking of HR metrics remained a primary area of focus throughout much of the 1980s and 1990s. This benchmarking focus, while helpful in informing HR professionals about how their organization’s HR metrics stacked up to comparable or best-in-class organizations, provided little by way of actionable business intelligence on how to gain competitive advantage through people. It also contributed to an often unhealthy belief by HR professionals in simple one-size-fits-all solutions: something to the effect of, “If we can just look more like our competitors on some standard HR metrics, then we have done our jobs.”

During the past decade, this has begun to change. Advances in the software used to automate transactional aspects of the management and development of people have expanded the landscape of possibilities. Not only have data on HR metrics become more readily available, they have become available in forms that make it increasingly possible to link disparate data sources together. So as the worlds of HR metrics and software have converged, new horizons for creating business intelligence on the people side of the business are arising. Many HR professionals, however, wonder why they should go to the trouble of going down this path because they are already way too busy handling what is already on their plate—an issue that is discussed in the following paragraphs.

Questions that had previously required tedious, manual calculations to answer, can now be answered more easily and with relative precision. Examples include identifying the profile of candidates most likely to accept a job offer, the probability that any given employee will leave, and the attributes of high-performing employees. But even as some linkage analysis has become easier, other types of analysis—especially that which identifies the human drivers of business results—has remained challenging.

This is partly due to fundamental methodological issues; it’s easier to identify linkages with larger sample sizes of individual employees than with smaller sample sizes of groups responsible for organizational outcomes. And it’s partly due to some of the myths and limiting mindsets that have impeded progress.

In sum, while it has become much easier to answer questions about the drivers of individual-level outcomes, less progress has been made on answering important questions about the drivers of organization-level outcomes. Too often, vendors fill this void by using clever marketing and shoddy science that confuse the drivers of individual performance with the drivers of organizational performance.

Major Debates in HR Analytics

Not surprisingly, the evolution of HR Analytics has shaped the debates that swirl around it. These debates—some of which are explicit and open, others of which are muted but real—can be classified into the categories of who, what, where, when, why and how.

The “What” Debate

A good starting point is the debate asking, “What is HR analytics, and what can and should it be used for?”

The term “HR analytics” means different things to different people. To some, the term only means a process for systematically reporting on an array of HR metrics—time to hire, turnover, compensation, employee engagement. Often the reporting includes a benchmarking component (e.g., how our compensation compares to the broader market, or how we compare to organizations on...
a one-size-fits-all measure of employee engagement). While this is definitely a component of HR analytics, in and of itself, it does not constitute HR analytics.

At the other end of the spectrum are those who regard HR analytics in a much more rarified sense. To these people, the only activities and/or processes that constitute HR analytics are those that involve “high-end” predictive modeling (e.g., “what-if” scenarios that forecast the consequences of changing policies or conditions). This perspective, too, is limited.

My view is that this particular aspect of the “what” debate can be resolved by thinking in terms of “both/and” rather than “either/or.” In a recent work, my co-authors and I defined HR analytics to be “the application of a methodology and integrated process for improving the quality of people-related decisions for the purpose of improving individual and/or organizational performance” (Bassi, et al., 2010).

Davenport, Harris and Shapiro help to provide clarity in this area by laying out the range of applications that constitute “talent analytics,” their phrase for HR analytics, from simplest “human-capital facts” to most sophisticated analytics that help optimize the “talent supply chain” (Davenport, et al., 2010).

Perhaps most fundamentally, “what” HR analytics is about is taking an evidence-based approach to management. According to Pfeffer and Sutton, “Evidence-based management is based on the belief that facing the hard facts about what works and what doesn’t, understanding the dangerous half-truths that constitute so much conventional wisdom about management, and rejecting the total nonsense that too often passes for sound advice will help organizations perform better” (Pfeffer and Sutton, 2006).

Getting to this point will require moving beyond existing myths. Perhaps one of the biggest myths in this regard has to do with employee engagement. It is a construct that the psychology profession that heavily dominates HR was created to explain what motivates individuals. But too often one-size-fits-all measures of employee engagement have somehow become equated with organizational performance in the minds of many HR professionals, as well as their senior executives, despite the fact that it’s now possible to link people factors directly to business outcomes themselves. The focus on employee engagement requires serious examination if HR professionals are to become able and respected practitioners of HR analytics (Bassi and McMurrer, 2010).

In sum, HR analytics is an evidence-based approach for making better decisions on the people side of the business; it consists of an array of tools and technologies, ranging from simple reporting of HR metrics all the way up to predictive modeling.

The “Why” Debate

Another basic debate swirls around, “Why should we do HR analytics?”

Some well-known and highly regarded HR practitioners argue that they have no need for HR analytics because their senior executives don’t require or expect it of them. This is not an excuse for complacency. This misguided point of view is the result of a fundamentally incorrect understanding of the purpose of HR analytics. It results from a confusion of HR professionals’ ongoing quest to prove HR’s worth, with their obligation to use the tools of their profession to help improve individual and organizational performance.

Using HR analytics as a means of proving the value of the HR function is misguided: It is a misuse of analytics that fails to create any lasting value for an organization. “From a practical perspective, it immediately calls into question the credibility of any findings, insights, and recommendations that emerge. In short, if executives believe the HR function is embarking on an analytics project to justify itself, its budgets, or its programs, the outcomes from the project will be viewed with suspicion even if the analysis is done well. More substantively, such a perspective fails to capitalize on the tremendous value that can be created for an organization as a whole from the effective application of HR analytics” (Bassi, et al., 2010).

The purpose of HR analytics is to improve individual and organizational performance. So it needs to be done, even if the CEO doesn’t require it. Moreover, how could you expect the CEO to require something that he or she probably doesn’t know exists? Added side benefits of HR analytics are that it can help
identify where *not* to be spending time, effort and budget, thereby reducing HR workloads and it can enhance the credibility of HR.

So what about the role of ROI analysis as a component of HR analytics? Many practitioners view ROI as the Holy Grail of HR measurement. These people are often focused on using analytics as a method of proving their worth. Boudreau and Ramstad summarize the problem clearly: “Understanding the returns and investments in HR programs and practices is useful, but the quest for ROI will not provide the entire solution to the need for a decision science … Most ROI calculations fail to change decisions about the vital human capital and organization resources. They are used primarily to demonstrate the value of HR investments after the fact. ROI creates the wrong focus” (Boudreau and Ramstad, 2007). In sum, the reason for doing HR analytics is to improve individual and organizational performance—not to prove the worth of HR.

The “Who” Debate

Another important element of the debate is, “Who should or can do HR analytics?”

The debate over ROI is closely related to the “who” debate. Who will be responsible for measuring the financial impact of human capital—the HR function or the office of the CFO that has the best handle on available measures of business results? And who will drive the future of HR analytics—the HR function or IT that typically owns the analytic software and tools necessary for HR analytics?

Well, it depends. It depends on the ability and drive of HR functions to rise to the occasion by developing the skill sets and organizational capability required to credibly lead HR analytics. This does not require that HR develop full-fledged IT or finance capabilities. But it does require that HR functions develop sufficient analytic wherewithal—both from a finance and IT perspective—to be able to partner knowledgeably with and lead HR analytics efforts on both of these fronts.

In the absence of the necessary IT and financial acumen skill sets and organizational capability, HR functions will inevitably cede responsibility for analytics to both the IT and finance functions. This would be a negative development for those HR functions (or professionals) that aspire to have a strategic impact on their organizations. And arguably, it would also be a negative development for employees and firms, as the people side of the business has historically not been a strength of either IT or finance. That’s why it’s important for HR to develop these skills and capabilities.

In sum, HR—not IT or finance—needs to take the lead on HR analytics. But doing so will require that HR develop new capabilities and capacities.

The “Where and When Debate”

Finally, some debates ask the question, “When should we use HR analytics?”

For example, some people worry about whether it is possible to create good global analytics in a world of various cultures, regulations and standards. Others have begun to raise early concerns about potential abuses of HR analytics as it becomes more powerful and widespread.

The first of these—whether it is possible to create good global analytics—is, I believe, an artifact of old thinking. Although it would be perfect if there were truly one-size-fits-all solutions, rarely do they exist in the real world. HR analytics provides the tools to break through the need for a single global solution; it provides the wherewithal to identify with precision and rigor both that which is common across various environments (be they geographic, regulatory, etc.) and that which is unique to a specific environment.

In other words, using the absence of a perfect, universal answer as a rationale for not doing HR analytics is tantamount to confessing ignorance about the very capability that HR analytics creates. It’s about finding good, customized (not mythical one-size-fits-all) understanding, insights and answers.

Discussion about potential abuses of HR analytics is only now beginning to emerge. Rapid advances in software capability, together with an increasing capacity to pull together disparate pieces of information, are beginning to create ethical questions about what is and is not appropriate in applying HR analytics.

For example, under what conditions, if any, is it appropriate to use legally obtained records about an employee’s prescription drug usage in making decisions about that employee? What if doing so can help identify employees or job applicants who have an unusually high probability of becoming violent in the workplace? By the way, I’m not making this up; I actually had this conversation with a leading software company working in this space. Are there circumstances under which it is right to use that information? How can the organizational benefits of this type of analytics be weighed...
against the individual costs that arise from errors in prediction? Probably the best way to avoid unexpected ethical quandaries is to tackle the issue head-on by establishing clearly written and widely circulated principles for when HR analytics will and will not be used.

In sum, many applications exist for when HR analytics can help us get to better (but not “perfect”) solutions. A useful mantra to keep in mind is, “Let not the perfect become the enemy of the good.” Having said that, it is important to be aware that as the power of HR analytics advances, so too, will the ethical dilemmas that it poses.

The Future of HR Analytics

HR analytics is an evidence-based approach for improving individual and organizational performance by making better decisions on the people side of the business. Although it is not its purpose to prove the worth of HR, analytics can certainly enhance the credibility of the function and the profession by improving the effectiveness of HR policies and practices and contributing to the competitive advantage of organizations that develop it as a core competency. An added side-benefit is that HR analytics can help expose where effort, resource and budgets are not producing their intended impacts, and in so doing reduce the workload while improving the effectiveness of HR.

As such, HR functions and professionals develop new skills and capabilities so that they can effectively partner with and lead IT and finance on HR analytics initiatives or risk ceding this increasingly important and strategic responsibility to them.

Along the way, HR professionals will need to address ethical dilemmas. This is proactive by clearly delineating the principles for deciding when HR analytics will and will not be used.

Without a doubt, mastering the art and science of HR analytics takes effort. But it can result in an elevation of the status of the profession and its practitioners by helping them to guide their organizations in finding the sweet spot—the intersection between more profitable and more enlightened management and development of people. Mastering this effort would represent a win-win for employers and employees, and ultimately the society in which we live and work.

Achieving this win-win will require that we move beyond the confused debates and dangerous half-truths that currently muddy the HR analytics waters.

Let us resolve to do so. ☐ ☐

I am grateful to Dan McMurrer, Jennifer Muss, Jonathan Siddhu and Mark Vickers for their thoughtful input and suggestions.

References


Laurie Bassi is the CEO of McBassi & Company, a leader in the emerging decision-science of human capital management. Since she founded McBassi in 2001, she has been working with clients to help them unleash human capability within their organizations. She is also chair of the board at Bassi Investments, Inc.—an investment firm that invests in firms with superior human capital management capabilities. Bassi is a prolific author, with more than 80 published papers and books. Her current books are Good Company: Business Success in the Worthiness Era (Berrett-Koehler, 2011) and HR Analytics: A Summary of the State of Knowledge (Reed Business, 2010). She holds a Ph.D. in economics from Princeton University and a M.S. in Industrial Relations from Cornell University.
50 contemporary leadership courses
5 ways to deliver
100% of your leadership pipeline

It all adds up to bringing you proven development that builds skills, changes behavior and boosts confidence.

- **New courses** such as Networking for Enhanced Collaboration, Influencing for Organizational Impact, and Making Change Happen, covering virtually every critical leadership competency.
- **Design that meets the unique needs** of every level from individual contributors and frontline leaders to mid- and senior-level leaders.
- **A range of delivery options**: classroom (your facilitators or ours), virtual classroom, and Web-based.
- **Unparalleled experience** in global implementation, covering 26 countries.

**Contact us today for our white paper, Optimizing Your Leadership Pipeline:**
1-800-933-4463 or www.ddiworld.com/developthebest.
Maximizing the Impact and Effectiveness of HR Analytics to Drive Business Outcomes

By Scott Mondore, Shane Douthitt and Marisa Carson, Strategic Management Decisions
The topic of HR analytics has been given a lot of press lately—and rightfully so. It affords HR leaders an opportunity to show the direct impact of their processes and initiatives on business outcomes. Unfortunately, as with many concepts that were once new to HR (e.g. engagement, quality circles, etc.), the definitions and process details associated with doing analytics the right way have not been well-articulated.

We will help remedy this by taking you through a step-by-step process of conducting HR analytics for maximum impact and effectiveness, while making sure that we give you the details, via case studies, to get it done right. We will clearly articulate a step-by-step process for making these connections so that HR can clearly articulate a business-case and show the business impact of its investments—like other departments/functions within organizations.

Specifically, we will focus on process analytics that focus on conducting cause-effect analytics on individual HR processes, and integrated analytics that focus on pulling multiple HR processes together to tackle strategic issues such as succession planning.

We define HR analytics as demonstrating the direct impact of people data on important business outcomes, but landing on a proper definition of HR analytics is less important than using the process to affect the overall role of HR in an organization. The reality is that organizations already spend significant dollars on employees. The problem isn’t that senior executives are not willing to invest in people. The problem is that those investments: 1) lack data to justify their worth, 2) use the wrong data, or 3) produce unquantifiable returns.

The HR function can implement a practical approach to help executives make the right investments based on effective analysis and practical initiatives. Yes, there is the need for advanced statistical knowledge, but for the most part, the process is fairly straightforward. Today, the types of analytics required to discover the drivers of tangible business outcomes are frequently used in different settings. For example, banks use predictive models to assess consumer and commercial credit risk. Market researchers utilize customer demographics to predict buying behaviors. These approaches make an educated, predictive assessment based on facts and data.

Chief financial officers (CFOs) do the same thing when they produce financial forecasts or conduct a cost/benefit analysis. The goal is to understand the past and present to predict the future, basing these assessments on facts and data. Therefore, the idea, for example, that employees’ attitudes can be scientifically and rationally related to tangible business outcomes is not ridiculous. In fact, based on our experience with organizations of all sizes, it is quite feasible—and in this age of intense competition, failing to discover the cause-effect drivers hidden in your employee-related data could be quite dangerous to your business’s long-term viability.

The Benefits of Analytics

Let’s consider the benefits of HR departments making an investment in stronger analytics.

1. They can redirect the money they spend today on the wrong employee initiatives to more beneficial employee initiatives. Specifically, those initiatives that impact critical business metrics and outcomes instead of the latest un-quantified HR fads that promise to make employees happier, more engaged, and satisfied.
2. The investments that they decide to make that focus on employees will result in tangible outcomes that benefit shareholders, customers, and employees themselves.
3. The returns on such investments, via their impact on the top and/or bottom lines, can be quantified.
4. HR departments can be held accountable for impacting the bottom-line the same way business or product leaders are held accountable.
5. HR executives will be included in the conversation, because they can now quantify their numerous impacts on business outcomes.

What HR Analytics Is Not

It is also important to try to put a halt to some of the misconceptions about analytics before HR leaders go down those paths. HR analytics is not the following:

Efficiency Metrics/Scorecards

For some, HR analytics have come down to tracking more efficiency metrics around HR activities. There is nothing wrong with measuring time-to-hire as an HR efficiency metric, but it likely does not excite your CEO—unless you have shown the direct connection between time-to-hire and the quality of people that are hired. Yet many just track it anyway and call it analytics. Tracking efficiency metrics on a big HR scorecard is important, but call it what it is—a scorecard. More metrics and a scorecard do not show business value and do not mean much outside of HR. More data collection does not equal analytics, it just means more collection.

Alignment

HR leaders often say that they are aligned to the business. They should be. In fact, it would be strange if what HR was doing was completely disconnected from the line-of-business (LOB) that it was supporting. If the sales function is hiring, then HR should be helping the sales function hire people. That’s alignment. No analyses are needed, nor does it show a cause-effect relationship with increased sales to say that you are aligned.

Gap Analysis

Showing gaps between survey scores between two different departments is a way of analyzing data. Demonstrating improvements from year to year is also an interesting perspective. However, if we aren’t showing the business impact of that gap, then all we are doing is ranking departments on scores—i.e., looking at data.
Correlations

Correlating people data and business data is definitely a step in the right direction. It shows the organization that we are pulling information together and making important connections. The downside is that correlations do not help us make important decisions about what to invest in from an HR perspective—because correlations may only represent coincidences in the relationship between people data and outcome data. The classic example is the correlation between shark attacks and ice cream sales. Shark attacks do not cause people to buy ice cream, nor does eating ice cream make you any more a target to be attacked by a shark. It is not a wise investment for Baskin Robbins to spend millions of dollars to chum the waters at beaches that are close to their stores. They are correlated because they both increase during the summer time. Plus, bringing a correlation analysis to a senior team with a moderate level of statistical expertise will result in quickly debunking an analysis.

Benchmarking

A key factor that many executives examine, particularly with employee opinion surveys, is the ability to benchmark how their organizations are doing versus the outside world. It’s an important metric and valuable in benchmarking; what is not apparent is the connection to business outcomes of being well-ahead or well-behind on benchmarks and the actual return-on-investment (ROI) on spending money to improve on a certain benchmark. Again, it is a way of looking at data, but benchmarking is not analyzing data or showing its business value.

How HR Analytics Should Be Executed

The key reason to conduct effective HR analytics is to conclusively show your business impact within the organization. Again, terms like “business partner” and “seat-at-the-table” have been overused in the HR world and HR literature. But showing the actual cause-effect relationship among what you do and business outcomes and building a strategy based on that information, will allow you to make those terms a reality. An HR leader that uses analytics properly to show business value will:

• Calculate return-on-investment for (nearly) everything that they do.

• Give evidence-based advice on how to drive the business from a people-perspective.

• Be pursued by line-of-business leaders to help them reach business targets.

• Take accountability for a portion of the organization’s financial health.

• Show results and not just HR activity completion (e.g. survey response rates).

• Create an HR strategy that has direct impact on the bottom-line.

Cause-Effect Analysis

Rather than get mired too deep in the statistical aspects of cause-effect analysis, we will focus on the benefits of this approach. Structural equations modeling (SEM) is a statistical analysis approach that econometricians and market researchers have used for decades and more recently by industrial/organizational psychologists. This approach allows you the opportunity to:

1. consider multiple independent & dependent measures concurrently;
2. imply cause-effect relationships;
3. calculate a more robust ROI; and
4. correct for measurement errors.

The first point is important because we know that each individual piece of employee-related data does not exist in a vacuum and organizations measure numerous outcomes. The second point is critical because, as mentioned earlier, correlations do not tell you which came first, for example, did financial improvements happen after we had employee satisfaction? By following the guidelines of SEM, we can uncover cause-effect relationships. By demonstrating cause-effect relationships, the third point becomes much more defendable to other senior leaders, because ROI will be shot down if based on correlations (we’ve seen it happen). Finally, point four is technical, but important. People-data collection brings with it a portion of measurement error that is typically shown through a reliability assessment. Unfortunately, correlation analysis assumes that everything was measured without error, which begins the process with a significant flaw.

Regression Analysis

Regression analysis does afford HR leaders an opportunity to look at multiple pieces of data simultaneously and help prioritize the impact of people data on business outcomes. Regression is used to show the connection from attitudes to attitudes on an employee opinion survey, e.g. connecting survey items to turnover intentions. Regression does not show a cause-effect relationship; however, it is a step in the right direction to help you prioritize impact.

A key message that we constantly communicate to HR leaders is: Don’t let the statistics be a barrier; you can hire a firm, a graduate student or professor to help you do the analysis, or use an internal resource within the organization with these skills.

Key Approaches to Analytics

Now that you know more about analytics, let’s take a look at two key strategies that show HR’s value.

As mentioned above, many HR processes have become ubiquitous in nearly all organizations (e.g. employee opinion surveys and 360s). The opportunity is now to assess and demonstrate the actual business value of these processes. To that end, two strategies to analytics should be taken to maximize their effectiveness and influence in organization.

First, HR Process Analytics helps connect an individual process, such as those listed in Sidebar 1, to important business outcomes.

Examples of Process Analytics

• On-boarding
• Selection
• Performance Management
• Employee Opinion Surveys
• Competencies
• Leadership Development
• 360 Assessments
• Work-life Balance Initiatives

Examples of Integrated Analytics

• Succession Planning
• HR Strategy Development
• CEO People Dashboard
Each process can be analyzed separately to show the return-on-investment and drive action and a sense of urgency for the results across the organization. Second, HR Integrated Analytics combines the key business drivers from the Process Analytics approach into an integrated business-focused strategic plan. Succession is an important area that consists of several processes, but can be focused upon by an integrated analytics approach. We will illustrate both types of analytics with the following case studies.

A Comprehensive, Practical Road Map to Conducting HR Analytics

We have refined a practical roadmap over many years that boils down to a straightforward six-step process shown in Exhibit 1 that drives HR strategy by connecting what is done in HR directly to business outcomes. HR analytics moves beyond conducting analysis and creates an environment of executive buy-in, cross-functional interaction, targeted initiative-building and a discipline of measurement and re-focusing.

Step 1: Determine Critical Outcomes

An organization must first determine the top two to three most critical outcomes on which to focus. For example, outcomes such as productivity, turnover and customer satisfaction are commonly desired outcomes—but those are not the end of the list. Financial indicators, costs and safety-related data are all outcomes that can be connected to employees. Key stakeholder interviews of the board, CEO, CFO or other business leaders are very helpful in the process—this is also a great chance to generate buy-in.

Step 2: Create Cross-Functional Data Team

Next, you will need to identify the various owners of the outcome data. These data owners become the key members of a cross-functional data team (CFDT) that needs to be organized. This team should consist of measurement experts, key line-of-business leaders or metric owners, and HR leadership. The measurement experts are needed to determine data requirements, to scientifically link the necessary datasets, and to conduct the requisite statistical analyses. It is important to have influential company leaders and decision makers participate in this process—to generate a sense of urgency. Warning: There can be instances of turf-battles over data and suspicion about turning over business data to another function—for this reason, additional senior leader participation is critical.

Step 3: Assess Measures of Critical Outcomes

The next step is to determine how data are currently captured in the organization. This step gets into the details of the actual analysis process, but several measurement characteristics of each outcome measure must be assessed.

- Frequency of measurement (e.g., monthly, quarterly, annually).
- Level of measurement (e.g., by line of business, by work unit, by manager, at the store level, at the department/function level).
- Organizational owners of each of the outcome measures (e.g., the department or leader of the particular measurement).

Understanding each of these measurement characteristics is important before any linkages to employee data can be made. The goal is to have apples-to-apples comparisons of the data—which means that if you want to look at productivity numbers, you need to have productivity data that is measured at the same interval (e.g., monthly) and at the same level for each manager.

Step 4: Conduct Objective Analysis of Key Data

This part of the process will require advanced statistical knowledge to link the data. If internal resources don’t exist in your organization, then hiring a consultant, graduate student, professor or full-time statistician for this role...
is necessary. Using structural equations modeling affords us the ability to determine, for example, whether employee attitudes about work-life balance are a cause-and-effect driver of increased customer satisfaction. This implied cause-effect relationship is important for understanding how these different measures relate to each other as well as for calculating an expected return-on-investment for the initiatives.

The statistical component of this step accomplishes three things:

1. Understanding the relationship between employee initiatives, skills, behaviors, attitudes and meaningful business outcomes.
2. Prioritizing types of interventions (i.e., determine where to spend time, money).
3. Calculating expected ROI to determine levels of investments and returns.

This work is designed to allow you to determine your HR priorities and how much to invest in them. The final result generated from the data analysis step is a list of priorities that have data and analysis behind them to ensure an impact on the business. It will also show which initiatives are not having their desired impact and could be candidates for cost-cutting.

### Step 5: Build the Program and Execute

Create interventions that will have the desired effect. At this action-planning stage you can focus activities at the systemic, organization-wide, line of business or work-unit level. The big opportunity is that the investments focus on those employee processes/skills/attitudes/demographics, that have been shown to have a direct impact on the organization’s desired business outcomes—and not just an assumed impact or a feeling that it is the right thing to do. An expected return will now be used to guide the HR strategy, and initiatives must be customized and placed in the context of each unique organization.

### Step 6: Measure and Adjust/Re-prioritize

In the last step, re-measure to assess progress and calculate actual return-on-investment. Business leaders understand the importance of goal setting and measurement. They also understand the importance of creating a culture of measurement and accountability. Like other organizational decisions, leaders should make slight adjustments to initiatives along the way based on regular measurement results. However, it is not advisable to make frequent, wholesale changes to the strategic focus of the interventions. Pick two to three priorities and build action plans around those priorities. Measure progress against those plans two to three more times, and then re-calculate the dataset linkages and re-prioritize.

### HR Process Analytics Case Study: Employee Opinion Surveys

Employee engagement/satisfaction/commitment is not a business outcome, but it can be a driver of business outcomes. HR analytics will allow you to link the survey data that you collect to important business results and then focus your initiatives on those key areas that drive results. The key questions to ask at each step in the Business Partner RoadMap™ (see page 23) are as follows:

1. On what outcomes/metrics are the senior leaders in this organization most focused?
2. Who owns the specific data/metrics that senior leaders are focused? How do I connect with those individuals to obtain the data?
3. Are the important business data/metrics collected at the appropriate level for me to make apples-to-apples comparisons (i.e. department level/district level)?
4. Do I have the statistical capabilities in-house or do I need to look at a university or consulting firm to help me analyze the data?
5. Based on the linkage analysis, what is the highest priority/ROI project that I should execute first?
6. How do I assess the change that has occurred and make adjustments to maximize effectiveness?

We had the opportunity to help Baptist Health Care analyze their employee survey data to make it business-focused. Due to the healthcare reform law, a patient survey known as HCAHPS (Hospital Consumer Assessment of Health Providers and Systems survey) has become a critical business outcome with important financial implications for the organization. The organization typically viewed their employee survey as a way to gauge their level of engagement, which is common in many organizations. However, they needed new tools to improve HCAHPS...
scores and viewed their people as an opportunity. We took their survey data at the manager level and directly linked it to HCAHPS scores at the manager level, using structural equations modeling. On a tactical level for the analysis, we lined up the survey results for each manager and then aligned their year-to-date HCAHPS scores. We then used the AMOS program in SPSS statistical software to analyze the data using structural equations modeling. What we discovered from these senior level analytics is in Exhibit 2.

Exhibit 2 shows that Quality and Safety are the two survey categories that significantly drive HCAHPS at Baptist. More specifically, for Safety, employees at Baptist felt safe at work, literally in the building and walking to their car. The beta-value (impact measure) of 0.12 was statistically significant, meaning that feeling safer at work was a direct cause of employees treating patients more effectively. This result made sense as it is difficult to focus on making patients feel cared for if you are looking over your shoulder or feel uncomfortable in your surroundings.

Furthermore, the hospital had recently experienced a significant safety incident in the emergency department. As a result of the linkage analysis, Baptist raised the sense of urgency around safety even higher. Survey results that were not high on the to-do list now had the full support of the entire senior team, including the CFO, because of the demonstrated impact on financial outcomes. Having the facts and data to support the improvement of a critical business outcome (HCAHPS), and the ability to show the level of impact and specifically on what needs work creates impact opportunities for HR.

Bringing Analytics Results to Front-line Leaders

Making HR analytics available and actionable to front-line leaders will expand your impact in the organization. An important approach/tool that makes employee opinion survey data more business-focused is the use of analytics-driven HeatMaps. We created Strategic Survey HeatMaps™ (Exhibit 3) to provide each leader with an easy-to-understand chart that summarizes their local survey data into four areas that prioritize action—based on cause-effect business impact. Front-line leaders simply do not have the time to pore over numerous survey items with average scores, percentile favorable scores, and benchmark scores prior to making any informed decisions on strengths, weaknesses and what needs their work to see an improvement or a business impact.

The HeatMaps allow you to provide all leaders, at all levels a quick way to incorporate analytics to prioritize exactly what needs their attention to impact results.

The Mechanics of the Strategic Survey HeatMap™

In this example, the outcome were the HCAHPS results. Using structural equations modeling, we lined up each manager’s employee opinion survey data with their year-to-date HCAHPS data. The vertical axis on the heatmap is the percent favorable score that was achieved on each of the categories from the survey. The horizontal axis shows the level of impact that each of the survey categories had on the business outcome (HCAHPS). The vertical bolded line near the middle of the heatmap reveals the cutoff where the impact was significant or not significant. Every survey category to the right of the vertical bold line had a significant impact. Every survey category to the left of the vertical bold line did not have a significant impact.

The horizontal bold line represents the average “overall percent favorable goal” for the entire organization. We determined this average by holding a meeting with senior leaders to gain their input. Any survey categories that are above the horizontal bold line are considered strengths. Any survey categories that are below the horizontal line are considered a developmental area.
The four quadrants of the HeatMap help leaders to determine how to combine the level of impact and the level of strength of each survey category and turn those results into a business-focused action plan.

**Maintain**
The top-left quadrant of the HeatMap is called Maintain—this represents the areas in which the leader is doing a great job, but these survey categories are not highly impactful on the HCAHPS outcome.

**Focus**
The bottom-right quadrant is labeled Focus. This quadrant is the most important because any survey category that falls into this area is 1) scoring below the organizational average as measured by percent favorable, and 2) a significant driver of HCAHPS. Simply put, these two survey categories (Career Development and Management Communication) are important, and this particular leader is not very good at either of them. It makes sense that this particular leader should put these two categories on his or her action plan. The HeatMap is designed to help the leader get very detailed quickly by providing the specific items that make up each of these survey categories. Then, he or she can see specifically where to spend the most time. If you think back to any past employee surveys that you have conducted, you will remember that it would be difficult to reach such quick conclusions on where to spend your time to have a business impact. Most standard reports only list performance on each survey item. Front-line leaders love the four-quadrant approach, because it significantly reduces their data analysis time and allows them to get down to creating plans quickly. When they realize that these are not just low scores, but are also elements critical to a performance metric that directly impacts their bonus, they buy-in on a personal level and a business level.

**Promote**
The upper-right quadrant of the HeatMap is labeled Promote, because these are the survey categories on which the leader is scoring well; and they are important drivers of business outcomes. For these survey categories, the leader would want to get the word out to his or her people and brag about the outcomes the leader would like to see. For these survey categories, the leader would want to get the word out to his or her people and brag about the outcomes the leader has achieved as a result of his or her actions.

**Monitor**
The bottom-left quadrant of the HeatMap is called Monitor, because the survey categories that land here represent areas of weakness for this leader; but they are not highly significant to driving the HCAHPS business outcome.

**HR Integrated Analytics Case Study: Succession/Talent Planning**

Employee surveys and 360s are two of many opportunities to apply process analytics to important HR initiatives. Integrated analytics bring multiple processes under one umbrella and can have even larger strategic impact in your organization—as evidenced in the following paragraphs.

Succession/talent planning is critical to building that long-sought-after pipeline of leadership for the organization. Unfortunately, this process has been plagued by favorites being selected as high potentials and ratings of performance/potential that are not based on any type of rigorous measurement. Many components of succession planning can and should be made more rigorous and scientific to reap the greatest benefit for the organization. These include:

- Discovering what aspects of employee performance drive business outcomes.
- Assessing the health of the talent pool.
- Creating leadership programs based on true talent pool development needs and individual development needs that are driving business outcomes.

**Using Analytics to Drive Succession/Talent Planning**

Building on the Baptist Health Care case study, we will again focus on HCAHPS as the critical business outcome. An analytics-based approach to succession planning infuses the appropriate amount of scientific rigor into the process while still allowing the program to be customized to best meet the needs of individual organizations. Like the other previous examples, we used the six-step roadmap as a guide for the process.

Our specific approach to analytics-based succession planning is depicted in Exhibit 4.

The analysis of key business drivers serves as the foundation for a talent/succession scorecard. Integrating the business drivers from key HR process analytics and applying them to individuals across the organization will neutralize the biases that come into play when creating succession/talent plans.

A sample of our Talent/Succession Scorecard™ is provided in Exhibit 5. This scorecard...
allows you to focus exclusively on factors that drive the business because it only displays those key areas of performance and behaviors that were proven to have a cause-effect impact on business outcomes. This approach helps to calibrate “9-box” ratings and reduce the amount of bias inherent to less rigorous succession planning approaches.

If you read the scorecard from left to right for each leader, you can see very quickly the specific areas in which they need individual development help. Additionally, if you read top-to-bottom for each area that was assessed, you can quickly identify key development needs across the entire talent pool. For example, the most glaring issue raised by the scorecard in Exhibit 5 is employee attitudes. The scorecard gives you the opportunity to identify both individual and organizational development needs. Another key outcome from this scorecard is the ability to calculate an overall Talent Pool Health Score that can be used to track progress in developing the key talent in your organization. The Talent Pool Health Score represents a summation of all of the talent health scores for each individual being assessed.

By incorporating information from all leaders in an organization beyond the high-potentials, the scorecard will reveal individuals who are high-performers on the critical business drivers who may not have been considered part of the original pool of future leaders. Reconsidering talent will help the organization to avoid missing opportunities to develop talent that may have been overlooked. This highly objective, analytics-based approach also helps reveal high-potential leaders who are vastly underperforming on competencies/results that are critical to the business. Reconsidering the placement of such individuals in the future leader pool can save the organization from over-investing in under-performing employees.

### Final Thoughts

The analytics process presented here is straightforward and numerous organizations have used it to gain competitive advantages. It is time for HR leaders to start attacking business outcomes versus trying to improve an employee engagement score or increase participation rates on their initiatives. The proper implementation of analytics is a key initiative to making HR a strategic function in any organization.

Scott Mondore, Ph.D., is currently a managing partner of Strategic Management Decisions (SMD) and is the co-author of “Investing in What Matters: Linking Employees to Business Outcomes” and the upcoming book: “Business-focused HR: 11 Processes to Drive Results” both published by SHRM. Mondore has significant experience in the areas of strategy, talent management, measurement, customer experience and organizational development across numerous industries.

Mondore holds a master’s degree and doctorate in Industrial/Organizational Psychology from the University of Georgia. He can be reached at smondore@smdhr.com.

Shane Douthitt, Ph.D., is currently a managing partner of Strategic Management Decisions (SMD) and is the co-author of “Investing in What Matters: Linking Employees to Business Outcomes” and “Business-focused HR: 11 Processes to Drive Results.” Douthitt has significant experience in the areas of measurement, training, talent management, executive assessment and coaching, and organizational development across a variety of industries. Douthitt holds a master’s degree and doctorate in Industrial/Organizational Psychology from the University of Georgia. He can be reached at sdouthitt@smdhr.com.

Marisa Carson, Ph.D., is a senior consultant with Strategic Management Decisions (SMD) and is the co-author of “Business-focused HR: 11 Processes to Drive Results.” Carson has extensive experience in the areas of HR data analytics, leadership development and coaching, employee selection and assessment, performance management and succession planning. She holds a master’s degree in Industrial/Organizational Psychology and a doctorate in Organizational Science from the University of North Carolina at Charlotte. She can be reached at mcarson@smdhr.com.
Connecting People Investments and Business Outcomes at Lowe’s:

Using Value Linkage Analytics to Link Employee Engagement to Business Performance

By Cedric T. Coco, Lowes Companies Inc., Fiona Jamison and Heather Black, Spring International
The ability to formulate and implement strategy is one of the most important and elusive enablers of sustained organizational success. Successful strategy execution requires that the purpose and priorities of the organization be defined and the strategy and tactics for achieving them be clearly aligned.

Aligning strategy and execution is a difficult task for most businesses. Research indicates that 70 to 90 percent of organizations fail to realize success from their strategies. Human resource leaders, in particular, often find it difficult to strategically align and integrate their HR functional strategies, outputs and measures to business priorities.

HR measures are typically cost-based, laggard metrics that either measure workforce-related expenditures (e.g., headcount costs) or efficiencies in the HR function itself (e.g., position-fill rates). Most HR executives lack forward-looking data that help drive business strategy. This puts the people agenda at a significant disadvantage when HR engages in strategy and execution discussions with other executives. While there is general recognition that people truly are an organization’s greatest asset, there are limited ways to measure their activities effectively.

Over the past 20 years, employee engagement has become generally accepted as one indicator of business performance. Applied correctly, engagement data can act as an early warning system for revenue and profits. The statistical relationship between engagement and financial success has been shown in numerous studies. For example, in the report Employee Engagement Underpins Business, companies with highly engaged employees outperformed those with less-engaged employees in three key financial measures—operating income, net income growth and earnings per share.

However, two critical issues are still keeping most organizations from measuring the actual financial impact of engagement on their bottom line. First, identifying the financial impact of engagement is, to date, mostly correlative—organizations know there is a connection but do not have sufficient cause-effect data necessary to make specific improvements for people or operational performance. Second, as a recent survey of HR leaders showed, companies who test these relationships statistically typically only examine relationships among different HR data points rather than making linkages to non-HR data as well. In fact, only a handful of organizations link HR to financial or other non-HR data.

Ongoing research on the evolution or maturity of engagement practices in organizations shows the limited connection companies are able to draw between engagement and business outcomes. Fewer than a fourth of respondents agree to the statement: We establish and quantify direct cause-effect linkage between employee engagement and specific business results (e.g. reduced shrinkage, increased sales, etc.). To show how HR helps drive business strategy, the relationships of HR data points to other non-HR data metrics throughout the organization must be measured, and the statistical techniques must be sophisticated enough to show cause and effect while managing the complexity of the organization’s business processes.

The Importance of Integrating Data

For many organizations, integrating HR, customer, operations, financial and other types of data can be daunting. Barriers to conducting this type of analysis can range from simply not knowing all the types of data the organization is currently collecting, to dealing with incompatible or redundant systems housing the data, to data quality issues (information gaps) and issues in working across organizational silos.

Only four of more than 200 companies surveyed have reached the most mature level of engagement measurement practices—that is, the ability to integrate engagement with business outcomes. U.S.-based home improvement retailer Lowe’s Companies is one of these few companies that quantify the people impact on their business.

In 2007, Lowe’s began the journey to establish a data-driven, HR business model to show causal linkages from HR to business outcomes. Lowe’s understood employees are critical to competitive advantage, and could not accept that people were the largest single most unmeasured asset. Business leaders intuitively knew the relationships existed, but a proven decision model would help identify the people and HR priorities by showing which areas had the greatest business impact.

Designing Value Linkage

Lowe’s collaborated with Spring International, an employee research and analytics firm outside Philadelphia, to develop a systematic methodology for determining the impact of people on financial results. Spring’s People Value Linkage methodology was designed specifically to measure the relationships of HR data points to other metrics throughout the organization. It uses statistical data modeling techniques such as factor analyses, correlations and structural equation modeling, to show cause-and-effect linkages and provides a methodology for managing complex business processes.

This approach is more than an analysis technique—it is a structured methodology of steps that lead an organization through a process of discovering the data, building a model with the data that reflects how their business actually works, and then using that model to make strategic decisions. It has been tested in a num-

number of organizations, but in many ways the large size, sophisticated systems and forward-thinking leadership at Lowe’s served as the ideal proving ground to fully develop the methodology. The goal at Lowe’s was to develop strategic and operational insights through measuring the workforce’s impact on the company’s bottom line.

The strength of the value linkage process is developing a model to drive a company’s strategic and financial priorities. It should not be used to create a single normative model across companies. Each value linkage model should be built from company-specific business data so relationships can be tested based on a company’s unique operating environment. This creates the best fitting and most predictive model for that company.

Lowe’s set out to create a value linkage decision model to define the causal linkages between people measures and key metrics such as shrink, revenue and customer satisfaction. Lowe’s used PVL to link HR data (engagement surveys, turnover data, sick time, etc.) to marketing data (customer satisfaction, loyalty, value, etc.), operations data (inventory shrink [a retail metric related to inventory loss due to shoplifting, employee theft, or supplier fraud], safety, etc.) and financial metrics (sales per square foot, net income before tax, etc.).

Step 1: Establishing Buy In

The first step for Lowe’s was to establish executive buy-in. HR is the steward for many people decisions, but Lowe’s objectives went beyond making HR more efficient or effective. Lowe’s wanted to make better people decisions for the organization, not just better HR decisions. Lowe’s had already seen the impact of its engagement work, and the HR leadership team championed linkage analysis as an extension of this work.

But Lowe’s had skeptics at the beginning for creating a viable model to show the impact of engagement to the bottom line. The Lowe’s HR team recognized early on in the process that a cross-functional team was required to build and achieve support for a linkage model. A cross-functional team was created with an emphasis on finance, market research and operations to help build the model.

Beyond building the cross-functional project team, HR’s primary role in the model development was to facilitate the process. HR’s larger role for organization alignment would come after the model was built.

Step 2: The Discovery Process

The second step was to conduct a data audit and evaluation process starting with the employee attitudinal data from Lowe’s employee engagement results. Establishing quality metrics is essential before embarking on any linkage analysis approach. For example, organizations cannot assume that simply conducting an engagement survey provides sufficient data to conduct a linkage analysis. Many organizations collect only a sample survey each year, may use a limited response scale (less than a five-point scale), may not identify results by location or group or even distinguish results by manager and non-manager. These components have been found to be very important for linkage analysis.

After assessing the employee opinion data and other data traditionally collected by HR, the project team turned their attention to the non-HR data. They initiated a discovery process with the key holders of data—finance, marketing, customer service, business development and operations—to find the metrics that are most relevant to the way Lowe’s business operates. Multiple meetings, facilitated by HR, were conducted over the course of a six-week period. In addition to gathering data, these meetings were important to establish credibility and buy-in. In the meetings, data holders had the opportunity to ask questions about how their information interacts with data from other parts of the company. They designed each meeting to share purpose, establish “what’s in it for me” for stakeholders, identify data availability, clarify outcomes and address the skeptics. Even with leadership buy-in and HR as the facilitators, gathering all of the data from multiple sources required both patience and persuasion.

At the conclusion of the discovery process, the cross-functional team developed a people value linkage blueprint to document the data that was available, evaluate the quality of the data and provide a roadmap for the model. This blueprint also captured all of the expectations, or hypotheses, from the key stakeholders. These expectations translated into various stakeholders’ perceptions. Some examples included the expectation that there would be a causal linkage between engagement and customer satisfaction and the expectation that the level of employee engagement would drive a reduction in accident and
Shrinkage rates. These expectations became the first set of hypotheses that the resulting models would measure.

The initial Lowe’s store model blueprint and roadmap for the final models represented initial hypotheses from the key stakeholders about how the data would interact in the model.

Step 3: Building Behind the Firewall

As most financial and operational data is too sensitive to take off site, the modeling itself took place within company firewalls with a two-part consultant analysis team consisting of a statistician and a strategist. The combination of these two minds ensured that relationships tested in the model reflect both statistical accuracy and the reality of business.

The modeling process began with collecting all the data from the various data holders in the various systems and cleaning it before merging it into one cohesive system. Lowe’s include nearly 600 variables in the initial data set to be analyzed. The team used a combination of correlations, factor analysis and regression to reduce the number of variables to the most predictive in each core area on the blueprint. For example, analysis determined which observed variables had the most predictive impact to be used to measure important metrics in retail, such as store performance and customer focus.

Structural equation modeling (a statistical technique that combines confirmatory factor analysis and path analysis) was then used to build and test the model created in the blueprint. Structural equation modeling is a deductive technique that tests a pre-determined model. Most organizations have already chosen a structure and ways to interact within that structure to maximize business results. Decisions are made within organizations with express purposes. Deductive models allow organizations to test how well their structure and processes are working. While the PVL process is rigorous, it is also adaptive.

The process allows for revisions to the blueprint as variables are added or removed and for the testing of more than one model as new information is presented. The final model is constructed through creating different versions and testing each with different theoretical assumptions to look at new relationships that make sense in the context of the company. The model continues to be adapted until it reflects the best fit.

When the structural equation modeling process was complete, Lowe’s had several core models that clearly delineated data correlations and causal linkages and the strength of those relationships.

EXHIBIT 2: LOWE’S FIRST STORE MODEL BLUEPRINT

In this model, ovals indicate an item that is constructed of multiple variables and rectangles indicate individual variables. Lines with arrows on both ends are co-varying relationships, meaning that the two items impact each other. Lines with arrows pointing in one direction indicate that one item is impacting the other. The numeric values are regression error terms that show how much impact one item has on another (e.g., if A impacts B with a score of .14, then when A moves one unit, B will move .14). Positive values indicate that when one item goes up, the other item will also go up. Negative values indicate that when one item goes up, the other item will go down.

Once the base models were established, Lowe’s was able to quantify the results into tangible financial impact measures within the organization and then further refine the models over time with additional metrics and insights. In this stage, the models are used to answer critical questions such as:

- Training increases cost, but it also should influence efficiency. How does that play out in reality based on a company’s actual financial results?
- Leadership tenure and staffing levels should contribute to customer satisfaction, but do they?
- What is the most effective HR program or investment to increase customer satisfaction?

Step 4: Identifying Performance Themes with Executive Buy-In

Upon development of the initial models, the researchers and Lowe’s HR team conducted a working session with the data holders to fully explore the implications and refine the model. The team validated the model and results and then analyzed the data to make sure it was pulling out the right initial themes that existed across the enterprise.

Lowe’s was careful to focus on key strategic themes to ensure management would focus on business priorities with the follow-up engagement action planning. Once the themes were understood from an HR perspective they were shared with the executive team. Through dialogue with the executive team, they agreed upon enterprise-wide themes and they shared the themes with each function (Finance, Operations, etc.)

While the executive team was supportive of value linkage’s objectives, some questioned whether models could establish the cause-effect relationships. As the models were built in concert with finance, operations and research, the insights were acknowledged from functional stakeholders. With this acceptance, Lowe’s was able to use the models to prove a direct connection between engagement and customer satisfaction and the linkages to revenue, shrink rates and a number of other areas.

Lowe’s started the review and buy-in process with the HR leadership team, then the execu-
Every business leader and each business unit believes in the importance of engagement...

tive staff including the CEO, the functional leaders across the board and then down to the workforce. The concept of working at the enterprise level helped to get agreement and work across silos.

The models were used to identify areas with the strongest relationship and greatest impact on Lowe’s business priorities. These models became a foundation for prioritization of effort—influential in decision making for the HR team and operators within the organization. The models were then finalized and the sharing and buy-in process across the organization began.

Step 5: Cascading Results and Taking Action

Many organizations find it difficult to disseminate value linkage data and results. The impact on performance is measured over time, and is often part of a larger change initiative. A key success factor at Lowe’s was sharing a combination of the visual models, simple charts and graphs and themes that represented the findings of the complex statistical models, and then communicating the findings in concrete financial measures that held meaning for key operators.

There are two ways to approach data sharing and follow up. A functional approach allows individual business units to choose their own focus. An organizational approach looks at themes across the enterprise and provides direction to the functions. Lowe’s chose an organizational approach to allow the time to educate the organization and business units on how to use the data and enhance control of the change process. In retail-focused operations—where operational excellence is a top priority—the tendency is to fix and deploy something as quickly as possible. Keeping the results at the thematic level within the enterprise ensured that the HR and operations components were created simultaneously to drive systemic and holistic change.

Over the past five years, Lowe’s has placed significant focus on employee engagement, and now it has permeated across the entire organization. Every business leader and each business unit believes in the importance of engagement and wants to know how their workforce perceives them. Employees want to know how the decisions and investments the organization is making impact not only themselves, but customers and the corporate infrastructure.

Now at Lowe’s, management teams are eager to receive their information and, in the spirit of healthy competition, are energized to raise engagement. HR continues to partner with management teams to help maintain focus on key areas with the greatest impact to both engagement and the business.

Step 6: Evolving the Model

Lowe’s conducted employee research to ask the workforce for input, by theme, to determine what employees needed to drive engagement in these priority areas. Lowe’s used their employee communication platform to collect employee input as well as to communicate their engagement investments. In some cases, employees wanted changes that Lowe’s would not be able to provide, and it was important to be transparent and show the engagement priorities were aligned to the business priorities.

At Lowe’s, one of the most compelling findings was the relationship between employee engagement and customer satisfaction and the impact on revenue. Traditional retail sales impact analysis includes the measurable factors that ultimately drive sales—customer traffic, revenue generated by advertising, online traffic, inventory, etc. Employees are typically missing from this equation because their impact is too difficult to measure.

Lowe’s intuitively knew there was a connection between engagement and customer satisfaction, and by developing a value linkage model Lowe’s was able to confirm that link and translate their assumption into real dollars and cents. The engagement-customer satisfaction analysis made for a compelling first exploration of the enterprise-wide model. One example was the relationship between engagement and average ticket, which is the amount of money a customer spends per transaction.

Consider this scenario: If a customer walks into a Lowe’s store to buy a gallon of paint, a disengaged employee would probably respond, “Here’s your paint, have a nice day.” Alternatively, an engaged employee may respond, “What project are you working on? If you need some paint, you may also need primer, as well as some paint brushes or rollers.” The level of dialogue, of support, makes Lowe’s customers feel better and at the same time helps drive average ticket sales.

Intuitively, Lowe’s knew this was how the relationship worked, but now it had the numbers to show the actual dollar impact. High employee engagement was driving four percent higher average ticket per store. Lowe’s went on to quantify other relationships found in the models, adding up all cost savings and additional revenue that could be generated by increasing engagement. In the end, Lowe’s found that a conservative difference between the highest and lowest engaged stores was more than $1 million in sales per year.

In addition, during the first year of modeling, Lowe’s conducted quarterly stratified sample surveys measuring employee engagement that mapped to financial quarters. This
Re-aligning HR to Business Priorities

Now that Lowe’s had validated linkage models with prioritized themes and had quantified relationships among metrics by financial impact, the HR leadership team was able to redesign the HR strategy and priorities around the business strategy and priorities. The HR function was re-aligned to drive the people-business outcomes from the model.

Lowe’s looked at all the processes, procedures, functions and deliverables across the HR function to optimize the delivery of the linked priorities. The HR leadership team re-crafted a business model for the organization, redefined the pillars of HR, and then wrote a multiyear business plan for the HR function to support the plan. Lowe’s used the plan to re-prioritize investments, halting some programs and shifting resources to align to the plan. For example, Lowe’s used the model to prove the return on investment for leadership training based on the measured impact on employee engagement and financial results.

From an executive standpoint, every function has a model to show its impact on the organization. Now that there is a model for people, for the area HR represents, the HR function has the ability to align its roles and objectives around it to show that HR and the workforce are continuing to deliver value. This allows the HR function to take a stronger ownership role in ensuring workforce alignment around the strategy of Lowe’s.

enabled the analytical team to create models that could account for lags and leads, and to determine which drivers and relationships stayed constant over time or weakened based on changes in the economy and market. For example, did increased engagement in Quarter 1 lead to improved customer satisfaction in Quarter 1 or did it lag until Quarter 2? How long did the effects of increased engagement last? This quarterly approach to modeling throughout the operational and financial year enabled the analytical team to test for seasonality and ebbs and flows of sales that are common to the retail setting.

This approach helps determine questions that need to be explored further or new questions that need to be asked. The models are designed to be adapted and improved to reflect the constantly changing economy, work environment, market demands and changing employee relationships.

Future Role for Value Linkage at Lowe’s

Today, Lowe’s has captured the impact of employee attitudes and how this affects the business—this is a milestone step for the HR business function. Lowe’s is beginning to translate these models into forward-looking, predictive analytics.

Value linkage is a key step in the journey toward predictive analytics. Lowe’s sees the next stage including forecasting retention and productivity issues and the corresponding financial impact to make predictive investments for ongoing improvements. To reach this stage, Lowe’s will need to continue to build out models with more details—market demographics, employee behavioral data, forecasts, etc. Lowe’s wants to know with a high degree of probability how the workforce will behave and the levers to pull for higher productivity—to predictively analyze business from a human capital perspective.

As a process, value linkage allows companies to bridge the gap between HR and operations by aligning strategies, prioritizing objectives, setting targets and tracking progress. Creating the causal linkage between engagement and business outcomes provides tangible data to show how programs that drive engagement lead to measureable business results. 

Cedric T. Coco serves as senior vice president of learning and organizational effectiveness at Lowe’s Companies. He has responsibility for Lowe’s organizational effectiveness, talent acquisition and development strategies, and human capital analytics. Coco has more than a decade of experience in learning and development and organization performance at Microsoft, KLA-Tencor and GE, where he held numerous leadership roles in engineering, business development, sales, general management and organizational learning. Named the 2009 Chief Learning Officer of the Year by Chief Learning Officer magazine, Coco sits on the boards of several industry and community organizations.

Dr. Fiona Jamison is a partner and senior vice president at Spring International, a research and consulting firm helping companies understand and act upon what is important to their employees. Jamison leads Spring International’s engagement solutions practice, which includes survey research, labor segmentation analysis and engagement across the employee lifecycle. Over the course of her career, she has worked with Fortune 100 corporations across a variety of industries, including retail, healthcare, education, aerospace, finance and telecommunications. Jamison has a Ph.D. in Human Resource Management from the University of Bristol and was an Honorary Research Fellow at University of Wolverhampton in the U.K. She is currently an active member of the Wharton Research Advisory Group. She can be reached at fjamison@springforsuccess.com

Dr. Heather Black is the vice president of research analytics with Spring International. She leads Spring International’s People Value Linkage™ practice, which includes model conceptualization, data collection, analysis and consulting. Over the course of her career she has worked with Fortune 100 corporations and non-profit organizations across a variety of industries, including retail, transportation, healthcare, biotechnology / pharmaceutical, social policy and education. Black has a Ph.D. in Mass Communications, with emphases in health services management and research, from the S.I. Newhouse School of Public Communications at Syracuse University. She can be reached at hblack@springforsuccess.com
Using Targeted Analytics to Improve Talent Decisions

By Alec Levenson, Center for Effective Organizations, University of Southern California
The past decade saw the emergence of analytics as a potential force for driving data-based decision making in HR (Lawler, Levenson, and Boudreau, 2004; Levenson, 2005). At the beginning of the decade, “human resources analytics” was not part of the language of business. Today, at the end of the decade, a Google search for the same term produces more than 1.5 million results. When the topic of HR analytics was raised at the Center for Effective Organizations annual sponsors meeting in 2003, it was not part of the formal agenda and there were no established courses or seminars on the topic in the HR consulting and training space. Today, an ever-expanding array of providers and content work to train and certify practitioners in HR analytics and automate HR analysis.

Yet despite the apparent progress, there is still much uncertainty regarding how best to design, apply and integrate analytics into the daily workings of the HR function. The challenge lies in understanding what analytics to apply where, and the time and resources needed to achieve true insights. This article discusses the variety of analytics and skills that can be used to achieve business insights related to HR and talent. Case study examples illustrate the importance of matching the analytic method to the issue under study.

There is a good-news/bad-news story. The bad news is that the statistical skills needed to do technically sophisticated analysis tend not to be located in HR, and, when they are, to be concentrated in HR analytics centers of excellence. The good news is that the limited availability of advanced statistical skills does not always restrict HR professionals’ ability to do meaningful analytics. What matters most is knowing what analytics to apply and where to apply them.

It turns out that some of the best examples of analysis-driven deep insights come from projects that require a large amount of time, energy and resources to complete but that do not necessarily require the most technically advanced statistical methods. The challenge is in determining how to improve decision making in everyday settings when very involved analytics projects are not feasible.

These three proven frameworks can be applied to make better on-the-spot decisions, even in situations where there is little time for extensive data collection:

(a) The Capability-Opportunity-Motivation model for diagnosing work-related behavior and productivity, a model that can be used for job design;

(b) A labor markets model of external opportunities and career development, which can be used to analyze the cost-benefit of job design, staffing and talent management decisions; and

(c) An organization design model for diagnosing structural barriers to enterprise-wide collaboration and performance.

When HR professionals master these models and apply them to everyday decision making, two things happen: 1) the path to identifying which analytics to apply becomes clear, and, 2) if there is no time for intensive analytics, the models—their logic and the empirical evidence behind them—are effective substitutes that improve the accuracy and impact of talent and organizational decisions.

Analytic Competencies in the HR function

Human capital analytics are most powerful when they help tell and validate a story that illustrates the driving forces behind individuals’ and groups’ behaviors and performance. As Boudreau and Ramstad (2006) point out, analytics need to be embedded within a logic framework that is linked to the business; and a change process is needed so they are used in a way that ensures maximum impact. The logic framework ensures that the analytics are focused on the right issues and are set up to maximize the discovery of data and analysis results that are actionable. The process for using the results of the analytics ensures the data is turned into action.

The first challenge in applying analytics is in choosing from the wide array of statistical and analytic techniques that are available. Providing an exhaustive list of techniques would be overkill. Instead, Table 1 lists categories of analytic competencies divided by type and level of complexity. The categories are drawn in part from Rothwell and Sredl’s (1992) competencies for a Human Resource Development Researcher and in part from my personal experience conducting and training others in human capital analytics and statistical analysis.

The top panel of Table 1 focuses on analytical competencies related to statistical techniques, and the bottom panel contains other analytic competencies. The second column provides examples of techniques and concepts, while the third column provides a rough approximation (my own calculations) of the coursework and on-the-job experience needed to become proficient for each competency, as well as the general education level associated with people who are proficient. Note the latter does not imply an educational requirement. Instead, it can be thought of as a proxy for the population characteristics that an organization might target when recruiting for a role that required that competency.

Of course, this begs of the question of just how prevalent these skills are in today’s workforce and especially in HR functions. While definite answers are hard to come by, Table 2 provides data on the proficiency of two different groups of HR professionals: people who work in HR analytics groups and others in HR outside of HR analytics groups.
The data in Table 2 are from Levenson, Lawler and Boudreau (2005), and they were collected in 2005 from a survey of HR analytics professionals and people who work with them; there were 47 respondents from 40 companies. Given the relatively small sample size, the results in Table 2 are useful for identifying potential patterns in the HR profession. They should not be taken as the final word—for that, we need more comprehensive data.

Despite the limitations of the data, the patterns in Table 2 are consistent with conventional views of the HR function, particularly the gap between the analytic skills of HR professionals versus what their organizations ask of them. For example, HR professionals outside of analytics groups are often called upon for basic analytics tasks such as conducting root-cause analysis, calculating univariate statistics (means, percentiles, etc.), and communicating the results of statistical analyses in a clear and understandable way. Yet only a minority of HR professionals has the skills needed to perform those tasks.

The good news is that the skills gap for HR analytics group members for those tasks is much smaller: The vast majority of analytics group professionals can do those basic analytics tasks. Yet the gap persists for more advanced, multivariate analytics tasks, with less than half of analytics group members possessing at least an intermediate ability to execute them. This suggests a fundamental gap for the HR function overall: Conducting multivariate analyses currently is not a core competency, even for many HR analytics groups.

This presents a challenge for conducting HR analytics in some cases but not, as we will discuss below, a barrier to insightful analysis in all cases.

Analytics group members’ skills in another key area match up well with the demands put upon them: identifying the data needed for analysis and obtaining it from others. In contrast, when HR professionals outside the analytics groups are called upon to demonstrate these competencies, about two thirds of the time less than one third of them are capable of doing so. Does this make the glass half empty or half full? It depends on how you look at it. On the one hand, analytics group members—in organizations where such groups exist—tend to have the skills needed to get the requisite data. On the other hand, analytics group members are responsible for acquiring the data only some of the time. Non-analytics group members are also often called upon to identify and acquire the data needed for analysis (about two-thirds of the time).

This presents a key challenge: HR business partners typically have the best access to identify and obtain the right data, are often called on to do so, and yet they typically are not proficient at these tasks. Even in organizations with HR analytics groups, the small size of such groups, relative to the total number of HR professionals in the organization, greatly restricts their ability to engage the organization in analytical analysis in the broad array of issues that are ripe for examination. The inability of HR professionals outside of analytics groups to define and guide others down analytical paths is a major impediment to deeper insights.

### TABLE 1: HR ANALYTICAL COMPETENCIES

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Level of statistical expertise required (and approximate educational equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic data analysis</strong></td>
<td>• Mean</td>
<td>• Beginning course in basic statistics</td>
</tr>
<tr>
<td></td>
<td>• Median</td>
<td>• Minimal on-the-job experience applying the techniques</td>
</tr>
<tr>
<td></td>
<td>• Minimum &amp; maximum; range</td>
<td>• High school / undergraduate level education</td>
</tr>
<tr>
<td></td>
<td>• Percentiles</td>
<td></td>
</tr>
<tr>
<td><strong>Intermediate data analysis</strong></td>
<td>• Correlation</td>
<td>• One to two courses in basic statistics</td>
</tr>
<tr>
<td></td>
<td>• Statistically significant differences</td>
<td>• 3-6 months on-the-job experience</td>
</tr>
<tr>
<td></td>
<td>• Standard deviation</td>
<td>• High school / undergraduate education</td>
</tr>
<tr>
<td><strong>Basic multivariate models</strong></td>
<td>• ANOVA / ANCOVA</td>
<td>• Course in advanced statistics</td>
</tr>
<tr>
<td></td>
<td>• Regression</td>
<td>• 1-2 years on-the-job experience</td>
</tr>
<tr>
<td></td>
<td>• Factor analysis</td>
<td>• Undergraduate / MBA education</td>
</tr>
<tr>
<td><strong>Advanced multivariate models</strong></td>
<td>• Structural equations models</td>
<td>• Degree or concentration in statistical methods</td>
</tr>
<tr>
<td></td>
<td>• Hierarchical linear models</td>
<td>• Substantial experience applying the techniques on-the-job (multiple years)</td>
</tr>
<tr>
<td></td>
<td>• Bivariate / multivariate choice models</td>
<td>• Graduate degree (Masters or Ph.D.)</td>
</tr>
<tr>
<td></td>
<td>• Cross-level models, including adjustments</td>
<td></td>
</tr>
<tr>
<td><strong>Other analytic competencies</strong></td>
<td>• for grouped and non-normal errors</td>
<td></td>
</tr>
<tr>
<td><strong>Data preparation</strong></td>
<td>• Identify data for analysis</td>
<td>• One to two courses in basic statistics</td>
</tr>
<tr>
<td></td>
<td>• Prepare / clean the data for analysis</td>
<td>• 3-6 months on-the-job experience</td>
</tr>
<tr>
<td></td>
<td>(transform, identify outliers, etc.)</td>
<td>• High school / undergraduate education</td>
</tr>
<tr>
<td><strong>Root cause analysis</strong></td>
<td>• Identify causal paths</td>
<td>• One to two courses in basic statistics</td>
</tr>
<tr>
<td></td>
<td>• Six Sigma analysis</td>
<td>• 6-12 months on-the-job experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High school / undergraduate education</td>
</tr>
<tr>
<td><strong>Research design</strong></td>
<td>• Treatment vs. control groups</td>
<td>• Course in advanced statistics</td>
</tr>
<tr>
<td></td>
<td>• Experimental design (exogenous variation</td>
<td>• 1-2 years on-the-job experience applying the techniques</td>
</tr>
<tr>
<td></td>
<td>created by researcher) vs. “natural”</td>
<td>• Undergraduate / MBA education</td>
</tr>
<tr>
<td></td>
<td>experiments (exogenous variation that already exists in the data)</td>
<td></td>
</tr>
<tr>
<td><strong>Survey design</strong></td>
<td>• Sample selection</td>
<td>• Course in advanced statistics</td>
</tr>
<tr>
<td></td>
<td>• Survey item design; validity; reliability</td>
<td>• 1-2 years on-the-job experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Undergraduate / MBA education</td>
</tr>
<tr>
<td><strong>Qualitative data collection and analysis</strong></td>
<td>• Interview techniques</td>
<td>• Course in research design</td>
</tr>
<tr>
<td></td>
<td>• Interview coding</td>
<td>• 1-2 years on-the-job experience</td>
</tr>
<tr>
<td></td>
<td>• Content analysis</td>
<td>• Undergraduate / MBA education</td>
</tr>
</tbody>
</table>
Which human capital analytics and analytics strategies have the greatest potential to affect business results?

Table 3 reports on analysis applications for a number of HR processes. Most functionally driven processes are subjected to data-based analysis with a high degree of frequency, including both intermediate and advanced analysis. Compensation is the clear winner here, with 98 percent of respondents saying they use HR analytics in this area. Moreover, 44 percent need an advanced level of data analysis to deal with compensation-related issues. This is a key application of HR analytics, of course, but just one of many.

Despite this apparent abundance of analysis, Table 4 shows that analytics is much less commonly applied to decision making where it matters the most:

Note: Percentages and Averages are computed with Not Applicable and Don’t Know responses coded missing.
Source: Levenson, Lawler, Boudreau (2005)
An example illustrates these challenges. Turnover reports are commonly used as a type of “temperature gauge” for what is happening with employees. High turnover at face value is usually interpreted as bad because talent is being lost. Yet turnover is a function of both voluntary turnover and productivity will be low. If the job demands are raised, then both turnover and productivity will increase and productivity should increase. And if the time to productivity in the role is short (i.e. very little on-the-job training is needed for a new employee to become fully productive), then high job demands and high turnover may be the right choice, depending on the pool of people available to be hired.

Indeed, for certain roles, the only way to attract high productivity people may be to hire them with the knowledge that they will leave after a specified period of time (and thus have higher turnover than lower-productivity people who are happy to stay): they might only choose to come work for you if there is a clear career path to other jobs they can move on to that build on the skills and experiences gained while working in the role. For example, early-career school graduates are often willing to trade lower compensation and job security for the reward of building skills and experience they need for higher level positions. Thus, “low” turnover can signal that productivity is low and “high” turnover can signal that productivity is high. Turnover reports alone cannot provide the full picture.

(i) to aid decisions that reflect the organization’s competitive situation;
(ii) to identify where talent has the greatest potential for strategic impact;
(iii) to connect human capital practices to organizational performance;
(iv) to assess and improve the human capital strategy of the company; and
(v) to assess the feasibility of new business strategies.

Therefore, the problem for HR is not a lack of analysis but the inability to target that analysis so it creates the kind of insights that matter most to the organization.

### TABLE 4: HOW EXTENSIVELY ANALYTICS IS USED FOR HR DECISION MAKING

<table>
<thead>
<tr>
<th>Please indicate the extent to which HR analytics is used to:</th>
<th>Not At All (1)</th>
<th>Some Extent (2)</th>
<th>Moderate Extent (3)</th>
<th>Considerate Extent (4)</th>
<th>Very Great Extent (5)</th>
<th>Don't Know</th>
<th>Average</th>
<th>Percent indicating “considerate” or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Measure routine HR process execution (payroll, benefits, communication, etc.)</td>
<td>8.7%</td>
<td>23.9%</td>
<td>26.1%</td>
<td>21.7%</td>
<td>19.6%</td>
<td>2.1%</td>
<td>3.20</td>
<td>41.3%</td>
</tr>
<tr>
<td>b. Assess and improve the HR department operations</td>
<td>10.9%</td>
<td>19.6%</td>
<td>32.6%</td>
<td>15.2%</td>
<td>21.7%</td>
<td>2.1%</td>
<td>3.17</td>
<td>36.9%</td>
</tr>
<tr>
<td>c. Support organizational change efforts</td>
<td>10.9%</td>
<td>21.7%</td>
<td>23.9%</td>
<td>26.1%</td>
<td>17.4%</td>
<td>2.1%</td>
<td>3.17</td>
<td>43.5%</td>
</tr>
<tr>
<td>d. Measure the cost of providing HR services?</td>
<td>10.9%</td>
<td>26.1%</td>
<td>23.9%</td>
<td>17.4%</td>
<td>21.7%</td>
<td>2.1%</td>
<td>3.13</td>
<td>39.1%</td>
</tr>
<tr>
<td>e. Make recommendations and decisions that reflect your company’s competitive situation</td>
<td>13.6%</td>
<td>22.7%</td>
<td>27.3%</td>
<td>22.7%</td>
<td>13.6%</td>
<td>6.4%</td>
<td>3.00</td>
<td>36.3%</td>
</tr>
<tr>
<td>f. Evaluate the effectiveness of HR programs and practices</td>
<td>6.8%</td>
<td>36.4%</td>
<td>27.3%</td>
<td>15.9%</td>
<td>13.6%</td>
<td>4.3%</td>
<td>2.93</td>
<td>29.5%</td>
</tr>
<tr>
<td>g. Contribute to decisions about business strategy and human capital management</td>
<td>15.2%</td>
<td>30.4%</td>
<td>13.0%</td>
<td>28.3%</td>
<td>13.0%</td>
<td>2.1%</td>
<td>2.93</td>
<td>41.3%</td>
</tr>
<tr>
<td>h. Measure the effects of HR programs on the workforce in terms of competence, motivation, attitudes, behaviors, etc.?</td>
<td>17.4%</td>
<td>26.1%</td>
<td>23.9%</td>
<td>13.0%</td>
<td>19.6%</td>
<td>2.1%</td>
<td>2.91</td>
<td>32.6%</td>
</tr>
<tr>
<td>i. Measure the business impact of HR programs and processes?</td>
<td>17.4%</td>
<td>26.1%</td>
<td>21.7%</td>
<td>17.4%</td>
<td>17.4%</td>
<td>2.1%</td>
<td>2.91</td>
<td>34.8%</td>
</tr>
<tr>
<td>j. Assess and improve the human capital strategy of the company</td>
<td>15.9%</td>
<td>31.8%</td>
<td>13.6%</td>
<td>22.7%</td>
<td>15.9%</td>
<td>6.4%</td>
<td>2.91</td>
<td>38.6%</td>
</tr>
<tr>
<td>k. Identify where talent has the greatest potential for strategic impact</td>
<td>20.5%</td>
<td>18.2%</td>
<td>31.8%</td>
<td>18.2%</td>
<td>11.4%</td>
<td>6.4%</td>
<td>2.82</td>
<td>29.6%</td>
</tr>
<tr>
<td>l. Connect human capital practices to organizational performance?</td>
<td>25.0%</td>
<td>25.0%</td>
<td>18.2%</td>
<td>25.0%</td>
<td>6.8%</td>
<td>6.4%</td>
<td>2.64</td>
<td>31.8%</td>
</tr>
<tr>
<td>m. Conduct cost-benefit analyses (also called utility analyses) of HR programs?</td>
<td>27.3%</td>
<td>25.0%</td>
<td>25.0%</td>
<td>9.1%</td>
<td>13.6%</td>
<td>6.4%</td>
<td>2.57</td>
<td>22.7%</td>
</tr>
<tr>
<td>n. Assess HR programs before they are implemented – not just after they are operational</td>
<td>25.0%</td>
<td>36.4%</td>
<td>18.2%</td>
<td>13.6%</td>
<td>6.8%</td>
<td>6.4%</td>
<td>2.41</td>
<td>20.4%</td>
</tr>
<tr>
<td>o. Evaluate and track the performance of outsourced HR activities?</td>
<td>26.7%</td>
<td>40.0%</td>
<td>13.3%</td>
<td>13.3%</td>
<td>6.7%</td>
<td>4.3%</td>
<td>2.33</td>
<td>20.0%</td>
</tr>
<tr>
<td>p. Assess the feasibility of new business strategies</td>
<td>39.5%</td>
<td>27.9%</td>
<td>11.6%</td>
<td>4.7%</td>
<td>16.3%</td>
<td>6.4%</td>
<td>2.30</td>
<td>21.0%</td>
</tr>
<tr>
<td>q. Pinpoint HR programs that should be discontinued</td>
<td>37.0%</td>
<td>28.3%</td>
<td>21.7%</td>
<td>8.7%</td>
<td>4.3%</td>
<td>2.1%</td>
<td>2.15</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

Source: Levenson, Lawler, Boudreau (2005)
of how human capital contributes to business performance. For that a deeper understanding and more targeted analysis is needed.

That deeper understanding comes first from knowing how to assess the job design, economics and organization design factors that drive behavior in a system; it does not necessarily come from conducting highly technical statistical analysis. Before defining and interpreting the relevant statistical analyses, whether basic or advanced, the more important first steps require analyzing the context and engaging directly with key stakeholders and decision makers. If advanced statistical analysis is needed, the number crunching tasks can be assigned to internal and/or external statistical experts and that is a straightforward task. The real challenge lies in defining what should be analyzed and turning the analysis results into meaningful information for the stakeholders and decision makers.

Financial Services Case Study

Consider the following two examples, both from a financial services firm. The first case was a multivariate statistical analysis of the relationship between the characteristics of an incentive pay scheme and sales performance for a key role in the organization. The analysis was conducted by a dedicated HR analytics person whose statistical approach was impeccable. The insights derived by the analysis questioned a large number of assumptions about the pay plan and what drove behavior in the role. Yet the general manager (GM) responsible for that part of the business was not engaged in the investigative process from the beginning, and it was presented only with the gift-wrapped results at the end of the analysis. The response was a complete rejection of the analysis and a questioning of the analytics behind it. The key mistake of the HR analyst was not engaging with the GM at the start of the process to ensure that there was alignment around the potential need for the analysis and interest in receiving and potentially acting on the results.

The second case was a straightforward employee survey conducted in the midst of a large amount of organizational change and upheaval. Senior leaders viewed the survey as an important vehicle for monitoring the employees’ responses to the changes and the leaders’ success in mitigating the negative impacts of the changes. The analytics used to analyze the survey responses were very basic, including only means and frequencies. But because the questions were designed to directly address employee responses to a critical transition period, the survey results were given great weight in the leaders’ process of assessing and adapting their approach to managing the changes.

So advanced statistical techniques are not necessarily a prerequisite for deep insights and actionable information. They are, however, often a key part of a comprehensive set of analyses that may be needed for the deepest insights.

Two case studies illustrate this point. Both started as problems that appeared related to compensation. After conducting extensive analyses, meaningful insights to the limits of compensation as a solution were achieved, and actions were taken that led to lasting positive impacts. Both cases included the following:

- advanced statistical techniques for one part of the work;
- simple data analyses for other parts of the work; and
- introspective, thoughtful consideration of causal factors using logic only and virtually no (new) data analysis for the remaining parts of the work.

PricewaterhouseCoopers Case Study

The first case comes from a talent management and retention challenge faced by PricewaterhouseCoopers (PwC). Extensive details of the case are described in Levenson, Fenlon and Benson (2010). Here, I briefly discuss the issues addressed and focus on the types of analytics used and insights derived from them.

PwC had relatively high turnover for a key talent pool: senior associates, the second stage in the career ladder that starts at entry-level associate and ends at partner. Deferred compensation was a solution under consideration to improve retention: Offer the promise of greater pay in the future for those who stayed longer with the firm. The firm also had anecdotal evidence that people who left the firm at later career stages (after achieving manager or senior manager status) had better career outcomes in the long run, such as achieving CFO, compared to those who left at earlier career stages (associate or senior associate). What the firm needed was evidence on whether a deferred compensation program would work as a retention tool, and whether more accurate information—data-based, not anecdotal—on career outcomes after leaving the firm might cause people to choose to stay voluntarily without the additional incentive of a deferred compensation program.

PwC collected data by surveying current and former employees on their experiences at the firm and, for those who left, career progression outside the firm. Some of the most difficult parts of the project included identifying the right samples of people to survey among the former employees, getting them to respond, and figuring out which responses were best to use for the analysis—none of which required doing any advanced statistical analysis. To start, this required deep knowledge of the firm’s culture and relationships with former employees. That led to identifying offices that were representative of the firm’s business that had stronger networks among the former employees. It also required knowledge of how to get the former employees to respond—that is, by appealing to their ongoing goodwill with those relationships and to former employees’ satisfaction with their developmental experiences at the firm and what those experiences delivered in terms of career success.

PwC used basic statistical techniques to estimate the total number of former employees to survey, based on typical responses rates for comparable surveys, and to determine which responses to use in the analysis. The final analysis sample focused on former employees who had left the firm more recently (within the prior 15 years), because their response rates were higher and more representative and because their recollection of their experiences at the firm was subject to less recall bias (versus those who had left more than 15 years prior to the survey). Advanced statistical techniques—multivariate regression—was used to compare the following:

- the career outcomes among former employees who left at different career stages;
- work-life balance for former versus current employees at comparable career stages; and
- drivers of retention for current employees.

For all of the analyses, multivariate regression enabled an apples-to-apples comparison by controlling for factors that might otherwise have led to perceived differences among the groups and between individuals such as
level of education, whether the person had a CPA or other professional certification, gender, race, office location, total years of work experience, and the line of service in which the person worked at PwC before leaving. For the retention models, multivariate regression further enabled an analysis of which factors were more important in driving employee decisions to leave; this was essential to identifying non-compensation factors, such as work-life balance, that figured prominently in the process.

The combined efforts of the analysis and subsequent retention initiatives by the firm had a clear impact. The analysis revealed that the practice of adding a deferred compensation program would have had a much smaller impact on retention when compared with the practice of addressing work-life balance and concerns about career development and progression. The actions the firm took included strengthening relationships between partners and staff, focusing on coaching and development, and providing new tools for leaders and HR to manage workload balance issues. The end result was a marked decrease in voluntary turnover that met the firm's operational and strategic goals.

The actions the firm took included strengthening relationships between partners and staff, focusing on coaching and development, and providing new tools for leaders and HR to manage workload balance issues. The end result was a marked decrease in voluntary turnover...

Frito-Lay case study

The second case also involves a talent management and retention challenge, faced by Frito-Lay, a division of PepsiCo, and detailed in Levenson and Faber (2009). The key talent pool in this case was the Route Sales Representatives (RSRs), who perform three tasks:

(a) take orders and negotiate for additional display shelf space, which drives incremental sales volume (sales). The company was experiencing low productivity and high turnover in the role. They knew that compensation was a potential issue because some regions had fallen behind the company's local benchmarks for target compensation.

An initial regression analysis revealed that regions with larger compensation gaps tended to have higher turnover. Yet the statistical relationship was stronger for new hire turnover and weaker for longer-tenured RSRs who have greater productivity and sales. So closing the compensation gap would have positively impacted the talent supply of RSRs but not necessarily productivity. To better understand the situation, Frito-Lay launched a study that included surveys of both the RSRs and their supervisors.

The employee survey collected information on years of experience before joining the company in jobs that required the three different skills related to the job's components (driving/delivery, merchandising, sales), along with many attitudinal measures. The supervisor survey collected ratings of each RSR's ability to execute the three different job dimensions, and a measure of how much time the supervisors spent covering RSR routes and the estimated lost sales as a consequence: Covering routes takes away from supervisors working directly with the accounts, which limits their ability to increase sales above what the RSRs can do on their own. This represented one of the most difficult parts of the work because an extremely high response rate from the supervisors was needed to ensure that a large and sufficiently representative sample of the RSRs would be rated. The high response rate was achieved by close coordination between the analysis leaders and the

(c) take orders and negotiate for additional display shelf space, which drives incremental sales volume (sales). The company was experiencing low productivity and high turnover in the role. They knew that compensation was a potential issue because some regions had fallen behind the company's local benchmarks for target compensation.

An initial regression analysis revealed that regions with larger compensation gaps tended to have higher turnover. Yet the statistical relationship was stronger for new hire turnover and weaker for longer-tenured RSRs who have greater productivity and sales. So closing the compensation gap would have positively impacted the talent supply of RSRs but not necessarily productivity. To better understand the situation, Frito-Lay launched a study that included surveys of both the RSRs and their supervisors.

The employee survey collected information on years of experience before joining the company in jobs that required the three different skills related to the job's components (driving/delivery, merchandising, sales), along with many attitudinal measures. The supervisor survey collected ratings of each RSR's ability to execute the three different job dimensions, and a measure of how much time the supervisors spent covering RSR routes and the estimated lost sales as a consequence: Covering routes takes away from supervisors working directly with the accounts, which limits their ability to increase sales above what the RSRs can do on their own. This represented one of the most difficult parts of the work because an extremely high response rate from the supervisors was needed to ensure that a large and sufficiently representative sample of the RSRs would be rated. The high response rate was achieved by close coordination between the analysis leaders and the

(c) take orders and negotiate for additional display shelf space, which drives incremental sales volume (sales). The company was experiencing low productivity and high turnover in the role. They knew that compensation was a potential issue because some regions had fallen behind the company's local benchmarks for target compensation.

An initial regression analysis revealed that regions with larger compensation gaps tended to have higher turnover. Yet the statistical relationship was stronger for new hire turnover and weaker for longer-tenured RSRs who have greater productivity and sales. So closing the compensation gap would have positively impacted the talent supply of RSRs but not necessarily productivity. To better understand the situation, Frito-Lay launched a study that included surveys of both the RSRs and their supervisors.

The employee survey collected information on years of experience before joining the company in jobs that required the three different skills related to the job's components (driving/delivery, merchandising, sales), along with many attitudinal measures. The supervisor survey collected ratings of each RSR's ability to execute the three different job dimensions, and a measure of how much time the supervisors spent covering RSR routes and the estimated lost sales as a consequence: Covering routes takes away from supervisors working directly with the accounts, which limits their ability to increase sales above what the RSRs can do on their own. This represented one of the most difficult parts of the work because an extremely high response rate from the supervisors was needed to ensure that a large and sufficiently representative sample of the RSRs would be rated. The high response rate was achieved by close coordination between the analysis leaders and the

(c) take orders and negotiate for additional display shelf space, which drives incremental sales volume (sales). The company was experiencing low productivity and high turnover in the role. They knew that compensation was a potential issue because some regions had fallen behind the company's local benchmarks for target compensation.

An initial regression analysis revealed that regions with larger compensation gaps tended to have higher turnover. Yet the statistical relationship was stronger for new hire turnover and weaker for longer-tenured RSRs who have greater productivity and sales. So closing the compensation gap would have positively impacted the talent supply of RSRs but not necessarily productivity. To better understand the situation, Frito-Lay launched a study that included surveys of both the RSRs and their supervisors.

The employee survey collected information on years of experience before joining the company in jobs that required the three different skills related to the job's components (driving/delivery, merchandising, sales), along with many attitudinal measures. The supervisor survey collected ratings of each RSR's ability to execute the three different job dimensions, and a measure of how much time the supervisors spent covering RSR routes and the estimated lost sales as a consequence: Covering routes takes away from supervisors working directly with the accounts, which limits their ability to increase sales above what the RSRs can do on their own. This represented one of the most difficult parts of the work because an extremely high response rate from the supervisors was needed to ensure that a large and sufficiently representative sample of the RSRs would be rated. The high response rate was achieved by close coordination between the analysis leaders and the
What can analytics and logic contribute when there is not enough time for in-depth analysis?

The case studies in the previous section provide rich examples of the range of analytical and statistical techniques that often are needed when conducting analysis that leads to meaningful business insights. The good news is that advanced statistical procedures can be part of the tool kit needed in a given situation, but they are not required in all situations. Yet it is not the sophistication of statistical techniques that typically poses a barrier to meaningful analytical insights.

What often consumes the most time and creates the greater challenges is identifying and collecting the new data required for the analysis that is most likely to reveal the deepest insights. Once the data has been collected, the time needed to carry out statistical procedures—even the most advanced ones—tends to be shorter, and sometimes, significantly shorter.

Both the PwC and Frito-Lay cases are examples of the kinds of analytics that can be conducted when there is a large organizational commitment in terms of resources and the study participants’ time. The timeline needed is also often quite lengthy, requiring typically four to six months of work when surveys have to be designed, administered and matched to other data sources. That does not necessarily include the upfront time needed to get stakeholder alignment and support for the work, which can significantly lengthen timelines.

Because of these time and resource commitments, the larger-scale initiatives represented by the PwC and Frito-Lay cases often are more the exception than the rule when it comes to HR analytics. For the vast majority of HR processes and decisions to be made about them, the time and resources are not sufficient for a comprehensive data analysis. This raises the question, “Can analytics be applied in these cases to improve decision making and, if so, how?” A comprehensive answer to this question cannot be provided in one article. The foundation of knowledge needed to do so can be outlined as follows in the remainder of this article.

The Capability-Opportunity-Motivation model

Exhibit 1 contains a version of the Capability-Opportunity-Motivation (COM) model that has strong roots in both the research and practice traditions (Blumberg and Pringle, 1982; Boudreau, Hopp, McClain and Thomas, 2003). It was a core part of the approach used to conduct the PwC and Frito-Lay case studies. The main point of the model is that each of the following is a potential causal factor behind individual motivation and performance. Usually, more than one, if not all three, factors are involved:

- **Capability**: knowledge/skills/abilities (KSAs); how they are built through on-the-job learning, training and development; the time it takes for someone to get to full (average) productivity in the role.
- **Motivation**: all the factors that influence motivation in the role including relationship with supervisor, fit, satisfaction, rewards, and work-life balance.
- **Opportunity**: the structure of the role and organization that enables and/or impedes performance in the role, including both formal and informal processes.

As a diagnostic tool, the COM model is a standard for identifying the complete range of factors that impact individual performance, and the collective performance of the entire group of people in a role. As in the PwC and Frito-Lay cases, it can be used to define the domains of data to be collected for an in-depth analytics project.

In cases where there is not sufficient time for in-depth analytics, the COM model can serve as a map for checking whether the appropriate questions are being asked about what is driving behavior and for testing alternative scenarios beyond what is initially identified. Many functionally oriented HR people consider only their own area of expertise and influence when determining a course of action to take. This typically means only the “capability” angle or only the “motivation” angle; it rarely means the “opportunity” angle, as that key aspect is often ignored when HR assesses possible solutions to productivity challenges. The COM model can help HR professionals to break the cycle of only inward-looking diagnosis and consider other factors. For example, a compensation and benefits person presented with the Frito-Lay RSR challenge might easily have chosen to focus on closing the regional gaps in compensation while ignoring other possible causal...
factors. Using the COM model, diagnostic questions that could be asked include:

- Could a lack of skills, including sales skills, contribute to low productivity? If we close the compensation gap but do not address recruiting profiles, would that ensure we get the right mix of skills in the role?
- What happens to the supervisors when turnover is so high? Do they have to compensate for RSR absences in ways that hurt overall sales performance?

Asking these questions without extensive survey data collection and analysis does not guarantee the exact same insights found by the study. But asking these questions and engaging with the other experts in HR and the line organization would greatly increase the chances of identifying viable options for improving the sales recruiting profile and addressing lost sales opportunities from supervisors who are being overloaded.

**Labor Markets Model**

Exhibit 2 embeds work design and organization design inside a framework that addresses external labor market and career issues as well as business model issues.

- External labor market and career issues, including:
  - external job opportunities;
  - alternative career paths available to each person and differences across people in their chosen career paths; and
  - job dynamics as people transition through different career stages, including trading off compensation today for development that can lead to greater compensation tomorrow.

- Business model issues:
  - What are the P&L assumptions behind the work design, including options for paying more (or less) to attract and retain higher (or lower) productivity workers?
  - How to evaluate the buy-versus-build decision for a given skill set, including options for outsourcing individual jobs/roles or entire segments of the production process?

Using both the COM and labor markets models is important for evaluating the full set of options available to an organization related to increasing profitability. The COM model alone addresses only productivity, not the bottom-line impact.

For example, in the Frito-Lay case, the labor markets model was critical for identifying the option of adding a dedicated merchandiser to the higher volume routes as a cost-effective solution for dealing with the challenges of low productivity on those routes. The labor markets model in both the PwC and Frito-Lay cases was important for evaluating the role of alternative jobs as drivers of motivation and productivity. One major benefit of the labor markets model is that it primarily relies on logic, which is very helpful when there is not sufficient time for extensive data collection and analysis. For example, the conclusion reached about Frito-Lay RSR compensation gaps based on the historical trends in college attendance and changes in the job design used elements of both the labor markets and COM models without time-intensive data analysis.

**Organization Design Model**

Exhibit 3 presents the classic organization design model pioneered by Galbraith (1977). Since then, there have been many other organization design models, yet the essence of the models is the same in the fundamental way that is relevant for our purposes: There must be alignment among all the key organization design elements, and both formal and informal processes are needed to ensure successful operations across the entire enterprise.

Organization design is listed as a design element in the COM model in Exhibit 1, so it may seem repetitive to address organization design as a standalone model in Exhibit 3. It’s done to highlight the different levels of aggregation that must be addressed when analyzing organization behavior and performance. The COM model focuses exclusively on an individual or on groups of people who occupy the same role. It can be applied to different groups of people in different roles, but its accuracy diminishes greatly as the roles become more and more dissimilar and/or the people in the roles become more and more dissimilar.

The organization design model, in contrast, addresses the aggregate organization behavior issues that exist enterprise-wide, including, most importantly, where processes work well versus how they break down across divisional and functional lines. Neither the COM model nor the labor markets model addresses those critical determinants of organizational performance and success. Moreover, from an analytics perspective, the organization design model is data-light, meaning that organizational diagnoses often can be made through qualitative assessments of decision rights and the formal and informal processes by which work gets done in the organization. Advanced statistical techniques...
such as network analysis certainly have the potential to improve organization design diagnoses; yet deep insights often are gained through a series of carefully designed interviews, and a logical analysis of the way the work should be conducted versus the reality of the way the work is conducted. This is a type of targeted analytics that often does not require any statistical analysis at all, even basic statistics.

Conclusion

Analytics in the HR function to this point has been treated as an unusual competency, something to be applied more often by specialists residing in centers of excellence than the large mass of generalists who do the bulk of the day-to-day work in HR. In this article, I have shown a number of ways that analytics can—and should—be adopted more widely throughout the HR function and targeted toward a much broader range of issues. Part of the problem until now may have been a lack of understanding of the barriers to conducting meaningful analytics. Through the case studies presented here, I have shown that advanced statistical analysis is needed only some of the time to achieve the deepest insights. Moreover, even in those cases, the hardest part of the work typically consists of identifying, getting access to and collecting the data needed for the statistical analysis. Those tasks and competencies must be mastered by HR generalists, not analytic specialists, to increase the overall level of insightful, analytically based decision making in HR. Mastering them is doable for most people, so this is not an impossible challenge for today’s typical HR generalist.

Another key issue is the time needed to do deep analysis. The models discussed here—COM, labor markets, organization design—all have elements that can be applied as diagnostics using logic exercises when time is insufficient for intensive analytics. If HR professionals can master these models and others like them, that will raise the level of analytic competence throughout the function. It will not diminish the role of statistical analysis in HR decision making and, to the contrary, likely will enhance it because many more opportunities for applying advanced statistics to diagnose HR issues will emerge from applying good analytics more broadly.

References


Alec Levenson is senior research scientist at the Center for Effective Organizations, Marshall School of Business, University of Southern California. His action research and consulting work with companies optimizes job, HR and organization performance through the application of organization design, job design, human capital analytics and strategic talent management.

Dr. Levenson’s work with companies combines the best elements of scientific research and actionable knowledge that companies can use to improve performance. He uses economics, strategy, organization behavior and industrial-organizational psychology to tackle complex challenges that defy easy solutions and to derive lasting improvements in critical areas.

Dr. Levenson has trained numerous human resource professionals in the application of human capital analytics, representing a broad range of Fortune 500 and Global 500 companies.
The Missing Link:
Measuring and Managing
Financial Performance of the
Human Capital Investment

By Frank DiBernardino, managing principal and founder, Vienna Human Capital Advisors
For decades, common HR metrics such as turnover rates, costs per hire and per FTE numbers have been successfully gauging the efficiency of internal HR functions, but they have been woefully insufficient as business investment decision-making tools. While HR continues to measure disjointed efficiencies, decision makers really want a measure of effectiveness, such as ROI, to gauge the impact of human capital (HC) investments on enterprise-level value. At the October 2007 Society for Human Resource Management (SHRM) Symposium on Human Capital Analytics, practitioners and thought leaders agreed that traditional HR metrics must evolve into human capital analytics to demonstrate added value and better inform strategic decisions. As Jack Phillips of the ROI Institute noted at the Symposium, “We’re still measuring efficiencies, volumes, activities… the same things we were measuring 25 years ago. We’re not measuring effectiveness.” And this shortcoming puts HR at a distinct disadvantage as a strategic business partner in the C-suite.

In the “Strategic HR Management Survey Report,” HR professionals identified their most prevalent barrier to making effective contributions in the workplace as “the inability to directly measure HR’s impact on the bottom line” and a lack of “an established method for measuring the effectiveness of HR strategy through metrics and analytics.” (SHRM, 2006) Likewise, a 2011 report surveying 720 companies concluded that the single biggest challenge of the HR function is measuring HR programs in financial terms (Bersin & Associates, 2011).

It is clear that traditional approaches to HR metrics are inadequate, and we will explore the missing link in human capital analytics: The ability to isolate an organization’s entire investment in human capital so that its performance can be measured and managed with the same empirical precision paid to financial capital. Our view is that a financial approach to human capital analytics can help drive human capital strategy, revenues, margin and shareholder value.

What is at Stake? The Potential Impact of Human Capital Analytics

Two types of investments drive business results: human capital and financial capital. While financial capital (cash) is the lifeblood of the business, it is human capital, the body through which the lifeblood flows, that deploys the cash in the form of physical and intellectual assets and business processes and technologies that ultimately determine whether the deployed cash increases or destroys the value of the business enterprise. For many companies, the costs of human capital may far surpass those of financial capital, as illustrated across industries in Exhibit 1.

Because the HC investment of most organizations is significantly large, failure to measure and optimize its financial performance translates into a huge opportunity cost. Many American organizations continue to manage human resources as a necessary expense rather than the hefty financial investment it really is. Consider this cost magnified in today’s new economy, where all industries are experiencing a shift toward a greater proportion of service, knowledge and talent-driven revenues. Becker, Huselid & Ulrich (2001) state, “In the new economy, human capital is the foundation of value creation. Various studies show that up to 85 percent of a corporation’s value is based on intangible assets.”

While useful in other strategic applications, none of the traditional financial methods for evaluating business performance can isolate the human capital investment and determine whether it is improving or eroding a company’s economic value. Standard financial metrics—such as Return on Invested Capital (ROIC), Earnings Before Interest, Taxes,
Depreciation and Amortization (EBITDA), and cash flow proxies such as Free Cash Flow (FCF)—are simply too narrow or too broad to isolate and measure human capital performance. Business unit performance measures and functional measures for sales and marketing, operations and HR have similar limitations. They are unable to isolate the economic impact of people, and they are too segmented to explain what is driving the performance of the organization as a whole.

Worse, some of the most common human capital metrics can mask an organizational performance issue. Take, for instance, the time-honored measures of “Per Full Time Employee” (per FTE) and “Salaries and Benefits as a Percentage of Revenue.” Both are incomplete and misleading because neither considers the aggregate of all internal and external human capital costs. Even good per FTE numbers (FTE expense as a % of x) do not consider full outsourcing costs. Likewise, any metric that draws numbers from HR-specific data sources (e.g., an HRIS) is limited in its uses and cannot demonstrate a credible link between human capital performance and overall business results.

The investments that companies make in people (pay, benefits, training and development, and other support costs) are shown as expenses on the income statement. And nowhere on the balance sheet is the people investment shown as a capitalized asset with the exception of some intellectual property. People metrics are challenging to apply because human capital assets are dispersed throughout the general ledger in ways that disguise their scope and inhibit their comprehensive management. Thus, the first step toward the next generation of human capital analytic capabilities must be defining and isolating the entire human capital investment. Only then, can you evaluate its financial performance in terms of ROI, productivity and liquidity—the common and useful financial measures of business vitality. ROI is the following:

- the ratio of money gained or lost on an investment relative to the money invested;
- productivity is a measure of output (revenue) per measure of input (labor and capital); and
- liquidity is a measure of the ability of a debtor to pay debts as and when they fall due, expressed as a percentage of current liabilities.

A Closer Look at Per FTE Data

Several well-known organizations promote the use of “per employee” measures as a method to monitor how well their people investment is performing. For instance, McKinsey & Company regards profit per employee as a pretty good proxy for the return on intangibles (Cao, Jiang & Koller, 2006). The Corporate Leadership Council, in its 2005 report, The Metrics Standard: Establishing Standards for 200 Core Human Capital Measures, recommends the use of operating revenue per FTE as a broad measure of the productivity of the workforce. The Saratoga Institute also recommends the use of profit per regular FTE as a key metric to take a balanced approach to managing a workforce.

“Per employee” or per FTE measures can be useful to determine efficiencies in the HR operations space, but when it comes to measuring effectiveness for business planning purposes, per employee or FTE measures can be incomplete, misleading and suspect in the C-suite. Here are the problems:

- The definition of an employee is inconsistent. There is no universally accepted definition of an employee—no small problem. How do you define an employee among independent contractors, part-time or contingent employees, temporary employees, and outsourced jobs, projects and services? Attempts to do so are tortured at best. Even within the same organization, it is common for HR, finance and operations to define employees differently. As a result, per FTE numbers are not reliable as a valid common denominator across business units, peer organizations or industries.
- Apples-to-apples comparisons are elusive. Companies want to establish a baseline and measure performance and progress over time, across business units and against peer organizations. But for the previously cited reasons, per employee numbers do not provide standardized, credible data for apples-to-apples comparisons.
- Per employee or FTE are not ROI or productivity measures. By definition, any ROI calculation needs to define and isolate an investment amount. Nowhere in the profit-per-employee formula has the actual investment in people been identified. If a company outsources jobs or replaces employees with technology, profit-per-employee statistics will improve, regardless of the costs incurred to boost that statistic. As a result, this measure does not necessarily correlate with the overall financial performance of the company. While revenue, or some version of revenue, is the proper numerator in a productivity equation, use of a per employee number as the denominator is flawed for these reasons. To be useful in the C-suite or boardroom for business planning purposes, any metric must pass the CFO smell test. CFOs, by and large, do not trust per employee measures.

Seven Guiding Principles for Human Capital Analytics

After decades spent bumping up against the limitations of traditional metrics, my colleagues and I asked the question, “What would be the necessary features of a human capital analytical method that can meet executives’ needs and address current inadequacies? “Years of study and collaboration with human resource and finance executives led us to the conclusion that to be comprehensively useful in strategic planning decisions, human capital analytics must:

1. Measure the organization’s entire investment in human capital.
2. Use standardized, auditable data sourced from the organization’s financial system.
3. Define and measure data consistently over time.
4. Yield measures that are few in number, supported by diagnostic layers of detail.
5. Answer important strategic questions about what drives business results.
6. Provide a credible and clear line of sight between human capital performance and business performance.
7. Apply straightforward methods that are resistant to being gamed.

Working with a group of finance and HR experts, and adhering to our Seven Guiding Principles, we developed the following financial approach to human capital analytics. The approach isolates the entire investment in human capital and measures human capital return on investment (effectiveness), productivity (efficiency), and profit sensitivity (liquidity). We chose these three measures for their significance to the value of a business
HC ROI drives enterprise value; productivity drives the ROI; and profit sensitivity protects the ROI, thus protecting enterprise value.

This method isolates the human capital investment by combing through the general ledger and calculating the sum of all line item expenses that represent human capital costs—defined as employee costs, costs in support of employees and costs in lieu of employees.

We measure human capital performance (effectiveness) by applying the following formulas, which are corollaries to universally accepted financial formulas found in any finance textbook:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Financial Capital</th>
<th>Human Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI</td>
<td>profit/assets</td>
<td>(profit - FCC)/HCC</td>
</tr>
<tr>
<td>Productivity</td>
<td>revenue/assets</td>
<td>(revenue - material costs)/(HCC + FCC)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>accounts payable/cash + accounts receivable</td>
<td>Incentive Comp/Profit Goal</td>
</tr>
</tbody>
</table>

Results can be measured consistently over time both for the organization as a whole and by business unit. Data are assessed in comparison to each other, to goals set in the company’s operating plan and to a standard of performance.

**A Close Look at New Human Capital Metrics**

**Human Capital Return on Investment (HC ROI)**

\[
HC\ ROI = (\text{Profit} - \text{Financial Capital Costs}) \div \text{Human Capital Costs}
\]

Human capital return on investment measures the return on each dollar invested in human capital after adjusting for the cost of financial capital. This approach is known in the world of finance as a values-based formula. The formula’s premise is that human capital has added no incremental value to the enterprise unless it first generates enough profit to exceed financial capital costs (Charan, 2001). In this formula, profit is expressed as EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization). EBITDA is a credible, universal financial standard that works for all kinds of business enterprises—both privately held and publicly traded companies. EBITDA works in all cases because it reflects profit irrespective of financial capital structure, which can vary greatly by industry/organization.

**Productivity**

\[
\text{Productivity} = (\text{Revenue} - \text{Material Costs}) \div (\text{Human Capital Costs} + \text{Financial Capital Costs})
\]

Productivity measures the amount of revenue generated for each dollar invested in human capital, after adjusting for the costs of materials and financial capital. This formula is an adaptation of the traditional financial measure for productivity (Revenue ÷ Assets), and it normalizes all types of business models (those driven by products versus services) by controlling for material costs, which vary greatly by industry. It is necessary to normalize for material costs, because material costs can distort the productivity value of human capital. By subtracting materials as a pass-through cost, you are able to capture how people drive enterprise value.

**Profit Sensitivity**

\[
\text{Profit Sensitivity} = \text{Incentive Compensation} \div \text{Profit Goal}
\]

Profit sensitivity measures the ratio between incentive compensation and a profit goal determined by the organization. This formula is an adaptation of the quick ratio, also known as the acid test, used to measure liquidity. The quick ratio is the most stringent method finance professionals use to measure if liquidity levels are sufficient to protect an organization’s cash position. The profit sensitivity metric is a corollary of the acid test, but with a laser focus on the organization’s compensation structure. The formula’s premise is that performance-based incentive compensation is the most agile tool a business can use to protect its profitability. A favorable profit sensitivity value shows that the human capital investment is doing its part to maintain a stable earnings pattern, thereby protecting the value of the enterprise.

**Translating Human Capital Financial Performance into Strategic Interventions**

Having credible performance data is one thing. Knowing what to do with them is quite another. A comprehensive method is needed to identify the human capital drivers of business results, discover opportunities for improvement and project the economic impact of strategic interventions. Translating financial performance data into beneficial changes in human capital strategy is a five-step process.

2. Analysis of HR efficiency metrics.
3. Analysis of human capital strategy.
4. Strategy recommendations and priorities.
5. Financial projections.

While following the process, a story will emerge that will provide clarity about the human factors driving financial performance (good or bad) and the actions to take to improve business results. HR leaders can apply the following battery of questions to disect performance data and discern the important relationships between human capital financial metrics.
Strategy Recommendations and Priorities

Based on the story that emerges from the above analysis, needed human capital strategy interventions will become apparent. At this stage, HR leaders develop an action plan, tallying the necessary resources and estimating the time needed for implementation. Depending on the scope and scale of necessary changes, they may need to take a phased approach to implementation. Financially credible formulas then can be used to forecast the bottom-line impact of improved human capital performance. For example, an X percentage increase in HC ROI will create a Y dollar amount increase in EBITDA, leading to an increase in shareholder value of Z. Therein lies the business case for addressing substantiated needs.

Growth Versus ROI

As this article suggests, the right business intelligence can help an organization decide where and how to invest in human capital. Eventually, we all arrive at a common decision: the choice between growth and ROI.

McKinsey & Company developed a margin/growth model that helps companies make informed business decisions about prioritizing, managing and investing in growth (revenue) versus margin (defined as return on invested capital [ROIC]) — both vital to improving shareholder value. McKinsey’s advice: Companies that already have high ROIC should focus on raising revenues faster than their competitors. Conversely, companies with below-target ROIC should concentrate on improving ROIC (McKinsey Quarterly, September 2007; How to Choose Between Growth and ROIC; Bin Jiang and Timothy Koller). We believe the corollary to McKinsey’s recommendation should be that the first priority is to manage to an acceptable level of human capital ROI, then invest in growth.

A Case Study: Hilb, Rogal & Hobbs

Hilb, Rogal & Hobbs (HRH) was a $700 million, publicly traded insurance brokerage with more than 40 offices throughout the United States. HRH was a product-driven company, brokering all types of insurance for commercial companies, not-for-profits and individuals—primarily selling property and casualty and employee benefits products. HRH was organized into six geographic regions, with a regional manager responsible for revenue growth and profitability. A relatively young company, HRH had grown rapidly and primarily through acquisitions. The purchase price of these assets was typically paid over a three-year “earn-out” period. HRH was purchased by Willis Group Holdings in 2008.

Business Issues

While growing rapidly in revenues and profits, HRH was experiencing significant growing pains. Chief among these was a lack of organic growth, which was putting increasing pressure on the price of HRH stock. Another significant issue was the integration of acquired companies. Because of HRH’s favored purchase method—the three-year earn-out—former owners were reluctant to make any changes that would jeopardize their ultimate payout. Hence, there was limited opportunity during the three-year earn-out period to capture the full synergies contemplated in the purchase price, or to address human capital issues that were both basic and strategic in nature.

Human Capital Strategy

HRH had a basic financial system and general ledger architecture that met its financial reporting needs as a publicly traded company. No HR information system (HRIS) existed beyond the basic HR features of a payroll system, outsourced to a payroll administration company. HRH lacked a comprehensive, integrated human capital strategy for its business.

A senior vice president of human resources & branding had recently been hired. Due to the prevalence of acquisitions and the need to establish a brand in the marketplace, this individual was consumed in acquisition due diligence and integration, and branding strategy. Nonetheless, the SVP/HR was quite interested in measuring the financial performance of the human capital investment and using the results to drive HC strategy.

Human Capital Investment Analysis

A pilot study was conducted on HRH’s employee benefits line of business, which had sufficient scale ($150 million of revenue) and a wide range in revenues and financial performance among the six regions (Northeast, Mid-Atlantic, Southeast, Central, Midwest and West). The results were striking, as shown in Exhibit 2.
A significant variance in productivity and HC ROI among the six regions, with a high correlation (.983) between productivity and HC ROI begged the question: What was driving the results, and what changes in human capital strategy were needed to improve performance? The first step was to dissect the human capital ROI and productivity results. The analysis revealed:

- **Productivity**: Costs were variable and inversely correlated with productivity. Across regions, there was a wide range in human capital costs (HCC) and a meaningful variance in financial capital costs (FCC). As a percentage of revenue, HCC ranged from a low of 61 percent to a high of 76 percent. The FCC range was 8.6 percent to 11.5 percent. The lowest performing region had the highest HCC and FCC.

- **Human Capital ROI**: The company’s ROI standard was 20 percent. EBITDA ranged from a low of 18.2 percent to a high of 41.5 percent. The HC ROI range was 6.4 percent to 31.1 percent.

- **Productivity drove the HC ROI**: By and large, the higher the productivity the higher the ROI.

The second step would have compared and contrasted an HR data set to help understand what was driving these trends, but no credible historical HR data was available. The third step was to engage the CHRO and selected business leaders on the existing HR strategy. What we discovered quickly explained why performance was lower than standard and why there was such significant variance.

**Human Capital Strategic Actions**

Multiple prioritized human capital strategy interventions over at least two years were necessary to improve performance. We helped prioritize changes based on their strategic significance and the resources (time, people and money) required to implement them. We predicted that these recommendations would increase productivity through:

- A devoted executive management for the line of business, accountable for results, with the authority to act.
- The hiring of producers to create organic revenue growth.
- Better efficiency through consolidation and reconfiguration of resources.

- **Better alignment of performance and financial rewards.**

To accomplish this list, HRH estimated it would take an initial investment of $2 million over a two-year period. The CHRO needed to make the business case and showed how EBITDA would be impacted by improving the HC ROI for all six regions to the level of the highest performing northeast region. By increasing HC ROI to 31 percent for all six operating regions, the impact on EBITDA and after-tax income would result in an increase of $.11 earnings per share (EPS). Based on 36 million shares outstanding and a trading multiple of 19, the CHRO demonstrated that a $2 million investment would lead to an increase in shareholder value of $75 million.

**Implications**

A standardized financial approach to human capital analytics that can remove HR professionals’ most prevalent barrier to making effective contributions in the workplace is a lack of business intelligence and data. By demonstrating a clearer relationship between human capital and overall financial performance, CHROs will be able to demonstrate the significant value people and their support programs add to any business enterprise. Even better, financially credible metrics will make it possible to consistently track performance of the human capital investment over time, identify specific opportunities to increase productivity, ROI and shareholder value, and project the economic result of changes in human capital strategy. These exciting new analytic capabilities can close the empirical gap between finance and HR, allowing them to speak the same language and collaborate as true strategic partners in the C-suite.

New analytical capabilities will help HR professionals discern what’s working, what’s not, how and why. That knowledge provides a competitive edge. As observed in a recent review of current trends in human capital research and analytics, “Our challenge and opportunity is to move beyond the data to deliver compelling insight and influence. Organizations that can make this transition will gain significant advantages in their markets.” (Fink, 2010)

**References**


**Frank DiBernardino** is the founder of Vienna Human Capital Advisors and has more than 30 years of experience as a senior human resources advisor. DiBernardino background includes strategic planning, client relationship management, consulting practice leadership, labor negotiations, underwriting, staff development and line management. Prior to forming Vienna, DiBernardino was a principal at Mercer. He served as the national practice leader in both the Health & Welfare and Flexible Compensation practices. DiBernardino has served on the board of directors of the American Benefits Council, the Employers Council on Flexible Compensation and the Editorial Advisory Board of Benefits Quarterly.
The Analytics of Critical Talent Management

By Kathryn F. Shen, J.D., M.B.A, practice leader, Workforce Planning, Kaiser Permanente Northern California
Workforce planning today is an evolving business process, aimed at matching employees to jobs that align with critical business requirements and with individual talents and skill sets. Conventional workforce planning typically utilizes metrics of people, process and production to recommend hire, reduction and development actions. Most current workforce planning models include an environmental scan, a workforce profile, an assessment of what skills the business will need and what strategies to follow to close the gaps.

Introduction

Over the past 20 years, workforce planning has grown in sophistication, moving from staffing plans to employee supply-and-demand gap analysis. This movement looks to create high-impact, effective and efficient models for human capital much the same as in finance, production and engineering. Many experts talk about pivotal, critical or “A” roles as a method of differentiating the workforce. Dr. Jac Fitz-Enz characterizes the evolution of the field as moving from transactional monitoring to performance monitoring, to linking HR metrics with business goals and finally, to predictive analysis. What I term critical talent management arises from current developments in workforce planning.

I discern three key components in critical talent management, each of which involves HR partnering with business leaders and leveraging analytics.

1. Collect production and employee data and conduct in-depth analysis.
2. Gather and analyze information and trends to forecast challenges that your workforce will need to address.
3. Perhaps most important—Use predictive analytics to formulate what I would term talent philosophy.

The data collection and forecasting steps provide a backdrop to dialogue with organizational leaders about the best way to utilize employee talents. I advocate for a positive talent philosophy wherein the business practice includes hiring and developing employees who are nimble enough to address new challenges and use predictive factors of employee success; rather than to terminate employees and reinvent positions as the organization grows, and constantly to turn over the employee pool.

In the following pages, I discuss the basic concepts and practices in critical talent management and demonstrate how it has been used successfully in different sectors of business, especially where a high volume of employees are being managed. Various case studies conducted in diverse sectors will be given as examples of critical talent management application. The three key components in this process—employee information data and analysis, business and workforce forecasting, and predictive analytics—will be described in greater detail in each case study. Let me first briefly describe a few business scenarios and the traditional HR functions.

The Order-Taker in Traditional HR

The following scenarios are familiar to HR practitioners:

- An aerospace supplier wants to know how to recruit the requisite number of design engineers to ramp up business for a new airplane order. Here HR acts as a broker for recruiting services, by securing approvals to fill positions and then administering the hiring process. The focus is on low cost to recruit, short time to fill and as close an experience fit as possible (“Find 30 brake system engineers with at least five years’ experience designing brakes for Boeing 737s.”). The recruitment picture gets fuzzy when HR discovers that not enough young people want to enter aerospace engineering in college or the job market, and the remaining experienced workforce is preparing for retirement.

- A healthcare organization needs to design a method to transition patient-care providers into managers and hospital leaders when patient demographic shifts are currently very different from the demographics of providers and leaders. HR may turn to hiring managerial candidates from the outside to fill vacancies only to find that external candidates lack organizational knowledge and savvy while out-of-state candidates face certification hurdles.

- An automotive manufacturing company seeks to implement a group leader role that will lead lean manufacturing on the shop floor. HR might train the supervisors and crewmembers to use lean manufacturing tools and then evaluate supervisor performance.

Human resource practitioners used to carry out workforce planning in terms of a short-term forecast, creating a staffing plan based on past years’ experience. It is a specific view from a recruiting perspective that aims to achieve short-term production and service goals and the elimination of waste. The goal is to avoid having too many employees with idle time, or too few employees sharing the workload, leading to overtime costs and overwork burnout. An example of a staffing plan, long held as an essential management tool, is shown in Exhibit 1 (p. 52).

In Exhibit 1, inputs are workforce demographics: population, age, and percent at or near retirement, terminations and numbers required for business operations. The output is the number of positions that are needed to post and to fill.

From Order-taker to Planning Partner

In the above staffing scenario, HR functions as the order-taker from operations or

finance departments. It was a tradition, for example, that production planners on the factory floor would meticulously line up every machine with customer orders and provide employee shift schedules and overtime lists. In the critical talent management paradigm I am proposing, HR is a planning partner in guiding the analysis, the forecasting and a dynamic talent philosophy for today’s competitive and fast-moving business environment.

**Component I: Collect and Analyze Employee Data**

Before conducting any analysis of an organization’s internal job structure, HR should first collect information such as job types, employee demographics, termination rates and recruitment strategies. Internal Labor Market (ILM) mapping is one method for processing information that yields the best and most efficient way of creating reliable workforce profiles. Mercer Consulting’s *Play to your Strengths*, by Nalbantian, Guzzo, Kieffer and Doherty is an authoritative reference book on ILM and should be in every HR library.4 ILM looks at the entire set of employee transactions over time, including attraction and hiring, development, promotion, lateral movement, geographic or functional assignments and retention. ILM creates a compelling visual of employee movement, serving as a platform for workforce forecasting and talent philosophy discussions. Is the level of churn right for the organization, how much does it cost, and is the cost worth it in terms of talent management?

**ILM Case Study**

The following case study is an example of how a labor market mapping exercise provided the foundation for productive conversations with leadership about talent management. At one global aerospace manufacturing firm I will call “GH,” HR used the Mercer model to conduct an external scan, analyze internal production and employee data and create an internal labor market map. There were eight steps in this process, not necessarily in temporal order.

**Step 1: Frame the Business Issue.** The team, a group of HR and GH line professionals began with defining the issue: How can the business ramp up staffing for a new product line that would need to be designed, tested and manufactured to strict tolerances and with customer and agency oversight? Successful product development depended on the firms’ ability to attract, retain and develop top industry performers. Challenges abounded in a recovering market, a shortage of skilled workers, an aging workforce and anecdotal stories about employee turnover. The firm favored employees with very specific educational background, technical skills and industry experience. In addition, GH needed to drive a culture of continuous improvement in a highly unionized environment.

**Step 2: Research and Data Analysis.** The team researched the internal labor markets and external employment information, and analyzed the quantitative and qualitative data through focus groups and interviews.5 The resulting ILM maps were presented to the leadership team and stimulated a discussion around how to best use talent. The team developed recommendations that included a strategy designed to retain talented performers within the organization, to develop key leaders and to attract technical and professional candidates.

They conducted further analysis to stratify employee separations by key functions, age group, years of service and levels within the organization. The data naturally broke into patterns as follows:

- Employees with five or less years of service accounted for 68 percent of total separations.
- Employees with 16-plus years of service accounted for 22 percent of total separations. Leadership wanted to incentivize long-service technical and engineering professionals to stay with the firm up to and even past normal retirement. Separations among this group were not generally retirements; these professionals left for other career opportunities.
- High potentials and key business leaders constituted a 19 percent turnover rate.
- The core of active employees had five to 18 years of experience. They were the firm’s bedrock, stable workers who hold company and industry knowledge. They provided continuity to internal and external customers and knowledge of the design, testing and engineering process—all critical to the firm’s business. Leadership wanted to ensure that these employees were engaged and would not become flight risks.
- New hire rates compared with promotions showed that the firm was buying talent at three times the build rate.
- Experienced staff in engineering had little upward mobility, leadership levels being frequently filled externally.

**Step 3: External Benchmarking of Turnover, Retirement Risk, and Costs.** The team compared GH’s data with industry-specific separation rates published by the Department of Labor and by the Bureau of National Affairs, Inc. (BNA), and found that the GH turnover rates were double the national averages. Moreover, the Aerospace Industries Association6 cited an Accenture study concluding that the two most pressing issues for aerospace in the future are the aging workforce and an increasing lack of technical talent. NASA, for example, had three times as many technicians over the age of 60 as under age 30. By 2010, 50 percent of the existing U.S. workforce in GH would be retirement eligible.

On balance, the threat of a retirement onslaught is tempered by a trend to work
longer. A survey conducted by the AARP and Towers Perrin concluded that 70 percent of workers who were not yet retired planned on working during their retirement years and approximately 10 percent expected to work into their 70s. Fully 21 percent said they wanted to work full time in their current position past the age of retirement.

Given the aging workers and the trend to retire later, GH’s team hypothesized that 20 percent fewer retirement-eligible employees would actually retire than in previous generations, and that the organization will therefore have a greater percentage of workers past normal retirement age. Interviews with retirement-eligible employees validated this assumption. The interviews also stimulated a retention strategy, giving an enhanced role for the experienced workers as a guru, the knowledge holder who passes on the technical know-how to younger professionals.

Step 4: Assessing External Supply. Information was mined on the supply of future aerospace workers. The Bureau of Labor Statistics detailed a survey of 500 U.S. aerospace employees where 80 percent of respondents said that they would not recommend the industry to their children due to lack of employment stability. The aerospace industry thus predicted it would suffer a 17 percent decrease in employees from 2002 to 2012. Fewer entrants into the field were causing aerospace companies to make twice as many offers to fill their vacancies in the recruitment process.

Step 5: Calculating the Costs of Turnover. HR presented the high costs of the voluntary separation and replacement of aerospace engineers in relation to operating income, giving the leadership team a powerful business case to reduce turnover and thereby reduce costs. The team calculated cost of turnover as 150 percent of the exiting employee’s salary, using the Saratoga Institute’s research. As capital investments increased to gear up for the new aircraft program, the cost of turnover consumed increasingly larger portions of the firm’s operating income, from 14 percent to 34 percent.

On the other hand, in one critical engineering group, reducing 48 voluntary separations by one third would retain 16 employees, a direct translation into an annual savings of 4 percent operating income.

Step 6: Assessing Internal Movement. The internal labor market research included workforce demographics for the firm’s locations in the United States and overseas, covering a three-year period, for all business and technical employees. Data on both voluntary and involuntary separations were examined to identify who was leaving, for what reasons, and from which locations. The team also looked more closely at all movements within the firm. The internal labor maps showed in and out movements that resulted in churn at several key levels.

Exhibit 2 shows the employee movement for one critical business segment.

This visual chart dramatically highlights employee hiring, promotions and turnover. Read the map from left to right to follow external hires into a job group, current population, and then terminations. A bottleneck shows in the middle grades of engineers and technical employees, where odds were four-to-one against getting promoted. Not surprisingly, the highest turnover rates existed in these grades. The team mapped out each facility and key functional areas, and presented the maps to the leadership team for an in-depth look at what was happening in the firm.

Step 7: Developing Qualitative Data, Why Stay and Why Leave? In-depth exit interviews were conducted of employees who left voluntarily and were considered “regretted exits.” Culture and environment factors were most often cited, including communication, definition of roles and responsibilities, morale, vague accountabilities, lack of solid management and lack of personal recognition. The

EXHIBIT 2: MAP OF EMPLOYEE MOVEMENT IN ONE BUSINESS SEGMENT

---

9 Joinson, Carla, “Capturing Turnover Costs: In-depth analysis of your organization’s turnover may help gain support”, HR Magazine, July 2000.
• Direct costs include: last paycheck, accrued vacation, and separation pay, increased unemployment tax, benefit continuation, advertisements, recruiter fees, interview expenses, reference checks, drugs test, contract employee cost, overtime costs, and relocation expenses. Once the new employee is onboard direct costs include orientation materials and training materials.
• Indirect costs include: administrative costs for processing the separation, lower productivity of remaining peers, supervisor and subordinates, recruiter’s time, interviewer’s time, and orientations participants’ salaries.
10 Nalbantian, et al., Play to Your Strengths, Chapter 5, pp. 80-102
next most often cited category was career growth, including desire for increased responsibility, availability of future jobs and educational opportunities. Salary and location were cited less frequently and only 20 percent cited salary the biggest reason for exiting the firm.

HR conducted a series of focus groups and interviews among incumbents in mission-critical job categories. The data validated that employees were looking for more communication from their managers, career path advice and opportunities to grow within their functions. The relevant findings echo the 2004 Corporate Leadership Council (CLC) survey of 50,000 employees at 59 organizations. The CLC study revealed that internal communication, availability of career advice and career paths, and appropriate roles and responsibilities are the most significant drivers of retention.

Step 8: Developing Action Plan. HR then recommended a retention action plan that included the following:

- Pair employees in key roles for peer mentoring.
- Design special esteemed status for experienced engineers.
- Develop employees to embrace change and foster a passion for continuous improvement, an area that was identified as critical business objective.
- Create formal programs for exposure and development of staff.
- Provide greater access to career planning via open manager-employee communication.
- Reduce overall voluntary turnover by 30 percent.

The actions in these eight steps provided a compelling view of factors affecting employee movement, and contributed to leadership decisions to create a talent management review. In what follows, I have two more case studies illustrating the crucial roles HR played in partnering with leadership over business decisions.

Component II: Workforce Forecasting
Forecasting focuses on key occupations and skills that will drive the company’s core service and provide focused talent management plans. A supply and demand formula estimates how many employees with requisite skills are needed in the organization, where and when they will be needed, and if the supply is adequate. It does not help knowing that the organization needs 100 additional scientists over the coming three years when only a few universities in the geographic region have the right degree programs, or that standards for state certification are a barrier to entry for out-of-state grads. Forecast models rely not only on intelligence from employee demographics but also on operations data and qualitative feedback from business managers to construct probability scenarios.

The case in this section involves a situation at Kaiser Permanente Northern California where the question was how the organization can attract medical practitioners and diverse operations leaders given the changing demographics of the region. Kaiser Permanente (KP) is an integrated health insurer, hospital and medical service provider with over 64,000 employees in Northern California alone. KP’s efforts to enhance the diversity, cultural competency, and performance of the workforce are world-class. KP’s diversity quest is linked directly to the organization goals of providing evidence-based, culturally competent medical care, and to improve the health and satisfaction of their increasingly diverse plan membership. KP’s systematic focus to attract, develop, retain and deploy diverse talents has given it a competitive advantage over its rivals. HR plays a critical role in this whole process with forecasting.

Get Focused – The Kaiser Permanente case
In 2007, KP Northern California analyzed customer and employee demographic data and identified a gap between the homogeneous makeup of organization leaders versus the diverse makeup of patient and staff populations. For example, the patient population is 24 percent Latino, whereas 14 percent of providers and only 4 percent of leaders are of Latino origin. The HR, Diversity and Market Research departments partnered on a forecast, drawing upon information from census, and university and private research about the growth and changes in the ethnic, immigrant, gender and age mix of California’s population. The forecast recognized that in 2010 the Spanish-speaking Latino population equaled the non-Spanish-speaking White population in California, at 39 percent of total population each. Last year, was truly a tipping point toward the new order of “no majority.” Analyses of the demographic data has led to both marketing and human resource action plans as further growth in Latino, Asian, Pacific Islander and mixed-race populations are anticipated to 2020. Clearly, having diverse care providers who are culturally sensitive and who are able to flex and communicate with patients from various backgrounds is a must. Similarly, having culturally sensitive and diverse managers and executives will provide rich leadership to the organization.

Following this analysis, HR implemented a strategy to accelerate the development of the next generation of diverse leaders. The Leadership Diversity Development Program (LDDP) was initiated as an 18-month mentoring program aimed at pairing aspiring leaders from diverse backgrounds with seasoned mentors. The program has grown to include training and development events, exposure opportunities with senior leaders and stretch assignments. Measurements of success are promotions, lateral transfers with expansion of areas of responsibility and interim job assignments for the mentees. The program also provides mentors with development experiences to enrich their capacity as KP leaders. Executive sponsors formally recognize mentees and those who act as mentors.

This year, the program is in its third cohort and has become a valued leadership development link.

Supply – Demand Forecasting

In the meantime, KP also developed a comprehensive supply and demand forecast model in collaboration with the Center for Health Professions at University of California San Francisco. The model, shown in Exhibit 3, is designed to be very flexible and to identify and track its critical business drivers to identify a variety of scenarios. The model can be used to track such internal and external forces as process improvements, market growth or contraction, new technology and changes in healthcare delivery.

For example, in a forecast of required pharmacists, which is a pivotal position in healthcare, KP conducted analytics using pharmacy operations data of the numbers of prescriptions filled. The firm made assumptions based on demographics of patient age and acuity, and patient population growth. The pharmacy forecast then factored in trend data about how prescriptions for medications are filled and delivered, in-person versus mailed, big-box store versus hospital or local pharmacy. The firm also factored in improvements in business systems, team staffing and the new mail-order process.

Prior to using analytics at this organization, the metric driving decision making about how many professionals to hire was a recruiting metric called the vacancy rate. The vacancy rate was a function of budgeted slots available, not a reflection of true need and not tied to operations data. After KP presented the analytics to both recruitment and the pharmacy operations leadership teams, it made critical decisions about recruiting pharmacists in strategically important areas. This model is a critical tool for the HR professional and can be amended for a variety of industries and locations.

Component III: Predictive Analytics

Predictive analytics is relatively new to human resource practice. Dr. Jac Fitz-Enz describes it as “a logical structure to parse out the many variables that can affect human performance.” As an example, a global metals manufacturing company I will call, “AW,” implemented a lean production system and was searching for a way to add lean production leader roles in its workforce. In the old system, supervisors assigned work, distributed supplies and resolved bottlenecks. Under the new paradigm, lead personnel would transfer much of the problem solving to their teams while serving as coaches and conducting frequent team interactions to ask questions and guide the team in continuous improvements. AW implemented standardized methods of lean management throughout the business unit. Boards were placed at each work group’s station to document issues for which the crew was accountable to resolve. And on lights permitted the crew to stop production to resolve problems. A critical question was what makes a person a successful leader in such open airing of obstacles and crew feedback.

Human resources partnered with operations teams to conduct an in-depth analysis of manufacturing results under every supervisor: They measured quality, safety, delivery performance and innovative process improvements. The data yielded a matrix of each shop supervisor and their team’s results. Those highly performing supervisors whose results were 150 percent better on all measures were then invited to incident interviews with their leadership. Incident interviews focused on pivotal stages in the manufacturing process where events could hamper quality and productivity goals. They developed a preliminary model that described differentiating factors of their successes, including specific behaviors that were found to be common to all of the successful supervisors. Through feedback from line management, HR and lean team leadership, they also developed and refined a competency model.

The resulting data-based behavioral model focused on three critical behaviors that could predict success in leading a team of lean

---

13 http://www.futurehealth.ucsf.edu/
At KP, we are also looking at the upcoming generation of healthcare providers, administrators and leaders. Critical characteristics that KP has identified for its future workforce.

Our challenge is how to attract and retain Gen Y healthcare employees and leverage their technological savvy. KP is in the early stages of forming a “Business Resource Group” for KP employees who are members of Gen Y. The Workforce Planning department has conducted focus groups that validate that Gen Y employees look for career development and mentoring, and that they are invested in their personal and career growth with the organization. Retention drivers include the quality of their manager and the purpose of the organization. This is a work-in-progress, a stage in the process of managing the future now.

Envision the Future

The AW case echoes a recent KP initiative conducted in partnership with the Institute for the Future. The initiative created a 10-year model, “Envision the Future,” which looks at the impact of socio-cultural diversity on health and healthcare, identifying winning strategies for healthcare delivery and workforce development. The approach links macro trends such as health-reform legislation and the rapid development of mobile technology to strategic imperatives of the organization. Statistical modeling forms the basis for identifying the trends, for instance, models of newly insured to be expected under health reform, their age, acuity, domicile, income and language. The organization’s goal is to build capabilities in the care-delivery system to meet anticipated demand and to champion strategies that improve the well-being of patients.

At KP, we are also looking at the upcoming generation of healthcare providers, administrators and leaders. Much has been written about Generation Y: 80,000,000 strong and currently about 25 percent of the U.S. workforce. Generation Y has grown up with health reform and are savvy about adopting new technology platforms and applications. They are a diverse population, 57 percent white, 14 percent black, 19 percent Latino and 5 percent Asian, are more likely to describe themselves as mixed race and are thus generally more tolerant of persons from different backgrounds. It would seem that this generation already possesses some of the critical characteristics that KP has identified for its future workforce.

Our challenge is how to attract and retain Gen Y healthcare employees and leverage their technological savvy. KP is in the early stages of forming a “Business Resource Group” for KP employees who are members of Gen Y. The Workforce Planning department has conducted focus groups that validate that Gen Y employees look for career development and mentoring, and that they are invested in their personal and career growth with the organization. Retention drivers include the quality of their manager and the purpose of the organization. This is a work-in-progress, a stage in the process of managing the future now.

Envisioning is a powerful conceptual framework for anyone who would like to lead HR and business teams in a future-focused and analytical exercise. Envisioning the future brings us full circle in discussing how analytics will impact the practice of workforce planning, or, as I term it, critical talent management.

Conclusion

The three key components in critical talent management—employee information data and analysis, business and workforce forecasting and predictive analytics—have been presented through a number of cases and models. The analytics exemplified in these components allow HR to move from a conventional order-taking position to a dynamic partnering role. Through analytics, people are linked to jobs where critical success factors have been studied and enabled, while the organization reaps the benefit of increased overall productivity and profitability.

HR should seek out members with finance and consulting skills who can conduct a comprehensive workforce profile, assess what skills the business will need in the future, and create forecasts and scenario models. HR will then have the credibility to facilitate discussions with stakeholders about what management decisions would be appropriate for the organization based on the parameters in the prevailing analytics. The challenges and the corresponding opportunities for growth for HR, in my view, have never been greater.

References


http://www.iftf.org
http://futureworkinstitute.com
http://www.hci.org/
http://www.humancapitalsource.com/drjac2009/
https://clc.executiveboard.com

Kathryn F. Shen, J.D., M.B.A. is the practice leader of Workforce Planning at Kaiser Permanente Northern California. Workforce planning engages an internal team of consultants, career specialists and analysts to provide forecasts, business and training plans for hospital, health plan and business function employees. Its mission is to anticipate change, providing a future focus to customer and employee demographic analysis, retirement projections, staffing plans and leadership/succession planning. Shen joined KP in 2007 after 25 years of work in law, labor relations, human resources and diversity with LTV Steel Company, Alcoa Inc., Goodrich Aerospace, and ITT Industries.
Continuous learning creates sustainable business advantages. Amidst the fast-paced demands of the workplace, performance improvement is required in pursuit of business goals. This is where individuals and teams interact and work—this is the future of workplace learning and the future home of L&D.

Forum’s six foundational principles remain mission-critical L&D levers for any business struggling to make heads or tails of the current learning climate.

Download the full research report at www.forum.com/workplacelearning.
“The unexamined decision isn’t worth making.”
Thomas H. Davenport, et.al.

What could an HR professional learn from reading this book? That was my question as I read Analytics at Work. The answer is surprising because HR appears only once in the index and refers to only one paragraph in which the authors mention hiring and retention as areas where analytics is being used in HR today.

In their previous book, Competing on Analytics, Davenport and Harris let you in on what leading-edge companies are doing with analytics to create strategic competitive advantage. In Analytics at Work, the authors, along with Robert Morison, take a step back and walk mid-level managers through the value of using analytics to make day-to-day decisions. The book is tool-rich with questionnaires and charts for helping you evaluate your organization on a five-stage continuum from one that is challenged by data collection to one that uses analytics for a competitive advantage. As an organization progresses through each stage, the demand on HR increases for enhanced change management skills, as does HR’s impact on financial results.

Despite being passionate advocates for analytics, the discussion is not one-sided. You can begin to understand often-overlooked concepts such as the science and art of decision making, the limitations of analytics, the roles of quantitative and qualitative data, and the boundaries of what’s practical. The authors demonstrate the need to monitor models and assumptions so they reflect current changes in the environment. Their approach makes it easy to learn what analytics can do and how we can use data to make better decisions. Also, we learn that not every decision calls for analytics. The authors contend that analytics is an organizational capability for increasing good decisions that lead to higher value results and more accurate predictions of the future.

The DELTA model (data, enterprise, leadership, targets and analysts) provides the framework for organizing content into chapters. You won’t want to miss chapter one for an orientation to the language, chapter two for an understanding of data quality, chapter three for what it means to integrate analytics across silos from an enterprise perspective, chapter eight on culture, and chapter eleven on decision making. If you read the entire book, you will spend quality time enmeshed in business language focused on key HR contributions to results without ever reading a chapter on HR.

Analytics at Work, like Davenport and Harris’ Competing on Analytics, is well worth your time and attention. Two key areas have value for HR readers: First, the authors present functions generally associated with HR as business issues, such as, company structure, culture and managing analysts. Second, the process of thinking analytically when building a case, making decisions, or evaluating the analytic capability of an organization, is demystified. At minimum, you will learn the language. You will be able to talk to your line managers about how and when to apply analytics and to help them recognize what stage comes next in the development of an analytic culture.


How many fish are in a lake? Faced with this question, would you devise an overly elaborate measurement approach, make a SWAG (i.e., a scientific wild-ass guess), or just declare the question “unmeasurable?” Douglas Hubbard’s How to Measure Anything: Finding the Value of “Intangibles” in Business offers an alternative: measure effectively and thoughtfully, perhaps by unfamiliar ways.

A first point of difference lies in Hubbard’s definition of “measurement” as any quantified observation that reduces uncertainty and enables better decision making. The book’s first section shows how, freed from a need for exactitude, many “unmeasurables” can be gauged using relatively simple tools. Middle sections lead you through a number of examples showing how reliable methods can help diminish uncertainty. The book is not so much a tool-kit as a persuasive argument, for example, on how the fish-count problem could be solved in an afternoon by using a technique called “catch and re-catch.” Throughout, Hubbard emphasizes the vitalizing power of two questions: “How will knowing this help make a better decision?” and “What is the value of that decision?” The book’s final section explores handling subjectivity and Internet-assisted measurement.

How to Measure Anything has a number of strengths. First is its wealth of practical examples. Hubbard takes us into the many workshops and consulting engagements by which he has refined and applied his expertise. The examples are well-told and convincing,
How to Measure Anything (continued)

and bring home the point that most people shy away too quickly from measurement challenges. They also leave the reader with confidence that he or she could at least begin applying the techniques described.

Another strength is the book’s practicality. Throughout, Hubbard reminds us that measurement has value only to the extent that it reduces uncertainty and assists decision making. By tracing back the economics of cost and expected benefit, and unpacking the connections among things, the book shows how to help leaders think differently about both the what and the how of measurement.

The book’s handling of subjectivity is very strong. Emotions, preferences and other “soft stuff” are for Hubbard at the core of most business problems, and so must be measured. They can be accounted for using some novel techniques (e.g. examining how people really spend their money). Subjectivity also drives much thinking during measurement, and the book shows ways of offsetting its negative effects.

A final strength is the approach to tools and mathematics. While not a tool-kit type book, How to Measure Anything refers to a wide range of tools and explains their use. A book about measurement necessarily involves some math and formulas, for instance, regression analysis and the Monte Carlo method, but these are made clear and vivid with real-world examples.

While good as it stands, the book may have been helped by including a few more full-length case studies. Two of these are in the final chapter, but more integrative, step-by-step cases at the end of each section would help solidify understanding. Also, at a few points, mathematical solutions are shown in their fullness, displaying calculations in more detail than most readers would want. These might have been moved to the supplementary website along with other for-more-information content.

On the whole, though, How to Measure Anything is a powerful, clear, persuasive and well-told piece of work that will leave its readers feeling that they can and should start thinking differently about measurement, and by doing so help business leaders make better decisions.

Retooling HR

Author: John Boudreau
Publisher: Ingersoll Rand
Reviewer: Dwayne Lay, manager HR, Global Operational Excellence

There are too many books to count on the topic of changing HR into something it is not. Typically, the author is focused on changing the face of HR, the focus or HR or the language or HR. In Retooling HR, John Boudreau’s approach is not to try to make HR something different, but rather to frame HR discussions in terms that resonate with business leaders.

To earn a place in the C-suite requires speaking the language of operations, finance, marketing and sales, but rarely HR. So Boudreau takes the logical step of translating HR discussions into the language that business leaders already speak. He opens with a straightforward, logical discussion of using classic tools from engineering, specifically Kano analysis, risk-value analysis and process constraint (bottleneck) analysis, to redefine discussions on employee performance. By using these tools to define ROIP (return on improved performance), he accomplishes two tasks: One is to help HR professionals bring their message to leadership in a digestible format. The other is to introduce new measures to the HR profession, thereby filling the gaping need for data-driven HR discussions.

Boudreau then visualizes talent management through the eyes of portfolio diversification, a classic activity from the world of financial analysis, and enhances the view with lessons from consumer research. Few HR leaders have had the chance to learn about market segmentation and conjoint analysis, but Boudreau introduces these subjects in a way that can be readily applied to the HR world. His teachings are a wonderful explanation of how to use simple but powerful tools to make good decisions on talent management and talent retention investments.

Most interesting to me are the lessons he shares on dealing with talent from the perspective of supply chain logistics. First, he provides a discussion on inventory optimization tools, and how to apply those to a talent gap analysis. This addresses both turnover and talent acquisition, and reframes many of the classic debates about talent shortages versus over-trained and under-leveraged employees. He follows this discussion with a chapter on a new view of talent lifecycle management using workforce logistics and further supply-chain lessons, as well as an overall discussion on retooled HR using these ideas.

On the whole, Boudreau covers these non-HR analysis tools in a way that is both accessible and applicable. He introduces topics that will be new to most HR professionals, then covers their classic
Retooling HR

(continued)

usage and how your leadership team is likely to use them. He then teaches the reader how to apply the tools to the critical HR discussions in which those leaders need to be engaged.

*Retooling HR* is a wonderful resource for HR professionals who are struggling to engage their leadership team in talent discussions, for young HR professionals trying to drive decisions with data, or for anyone longing to change HR from a “soft” discipline into one that is understood and appreciated for the very real bottom line impact it can contribute. It is a worthy investment of time and shelf space in any HR professional’s library.

---

**The New HR Analytics**

*Author*: Jac Fitz-Enz  
*Publisher*: AMACOM  
*Reviewer*: Marcie Schorr Hirsch, HirschHills Consulting

Jac Fitz-Enz’s latest book, *The New HR Analytics*, helps cement his reputation for the effective application of analytics to HR issues. *The New HR Analytics* builds on *The ROI of Human Capital*, in which Fitz-Enz presented a methodology for quantifying the value of HR/employee contributions. This new work introduces HCM: 21, a four-phase model designed to take these analytics a step further and predict the monetary value of future human capital investments.

The idea is certainly seductive: Human resource analytics that can help organizations take current operational and strategic data and convert it into an active approach to tomorrow’s HR issues. HR has long envied the ability of its peer functions (marketing, for instance) to use quantitative, predictive projections to make their case. In business environments, numbers are the benchmarks used to evaluate programs and profits, and executives who can speak that language gain power at the senior table. HR analytics have become an important tool for success; leveraging current data to anticipate future ROI takes the HR tool kit to the next level.

*The New HR Analytics* offers a thorough grounding in the requisite methodology to use this approach. Ironically, this is both a plus and a minus in assessing the book’s readability. While clearly written, it is a dense manual, spanning subject matter that requires attention to detailed specifics. More a textbook than a business book, it reads like an instructional treatise to the point of being reference-like. You may choose to use it selectively as you benchmark specific issues. It provides a money’s-worth survey course in HR analytics, from the case for using this technology to examples of actual applications and sample worksheets.

Stylistically, it brought to mind Peter Senge’s *Fifth Discipline*, which was probably never read cover-to-cover. That said, for practitioners, the *Fifth Discipline Fieldbook* is a friendlier read. A workbook-style companion to *The New HR Analytics* could be a valuable way to deliver this information if you are seeking a way to put these ideas into action.

There is wisdom in Fitz-Enz’s book, especially about when not to leap on analytics for measurement. He sagely writes, “A sincere pat on the shoulder can do more to motivate than a bonus calculated with a rigorous algorithm.” My takeaway: The best use of HR analytics is as a means of evaluating investment. It is one tool among many qualitative and quantitative capabilities HR professionals bring to their work.

While complex analytics to HR concerns are better suited for very large organizations, Fitz-Enz makes a strong case for evaluating an organization’s investment in its people, and the methodology has become a central element in the strategies of companies.

Shifting toward a broad acceptance of metrics as a daily driver of HR decision making and prediction will require learning and a thoughtful reconsideration of assumptions. Fitz-Enz’s work opens the door to this reflection and provides a technology through which it can proceed.
Is Your Successor Ready to LEAD?

HR’s mission is simple.
Make people and organizations more effective. In a global, competitive market with growing talent scarcity, executing is the hard part.

To succeed, your successor will need to do more than just partner with business leaders to meet current and future talent needs. She must drive these initiatives.

Does your pool of potential successors have the skills and confidence to succeed?

HRPS Online Executive Development Programs are specifically designed to develop the next generation of HR executives into strategic business drivers who get results. How? By combining tailored training, action learning and peer collaboration into an online development model that respects busy schedules.

Contact us today to learn more.
HRPScertificates.com
1-800-316-6940
Gain Talent Acquisition and Development Secrets from Some of HR’s Best

The HRPS Fall Forum offers something different than other HR industry events – an exclusive community of senior-level HR executives from some of the world’s most prominent organizations and industries. You’ll walk away with big ideas and practical strategies that can give your organization a competitive advantage in seeking and developing the best and brightest in your industry.

We’ve assembled some of our own best and brightest industry experts and discussion panelists, including:

- **The Wharton School** of the University of Pennsylvania, Peter Capelli, George W. Taylor Professor of Management, Director, Wharton's Center for Human Resources and Author
- **American Express**, Gabriella Giglio, Senior Vice President, Global Human Resources
- **Google** on Project Oxygen, Neal Patel, People Analytics Manager
- **Citi**, Emily Dancyger King, Managing Director, Talent Management
- **Vistaprint**, Austin Cooke, Vice President, Human Resources & Talent Acquisition


2011 HRPS Fall Forum
Talent Tune-up: Creating and Leveraging a Talent Advantage