How Science and Technology Are Remodeling HR Management

We can improve decision making in today's complex and ever-changing marketplace by capturing and accounting for the forces that affect human performance.

By Dr. Jac Fitz-enz, Human Capital Source

More data does not necessarily correlate with more information. Now that human resource information systems have improved processing speed and search capability while lowering operating costs, the willingness to develop or expand measurement systems has risen. What should be collected and measured? The answer is found in the alleged purpose of measuring human resources programs, not to mention human capital management.

Why Measure?

In most cases the search for answers to the measurement initiative starts somewhere short of the ultimate goal. We are like a two-year-old who has just been given a toy hammer. Suddenly, we go lurching off pounding on everything as though it were a nail. In this case our imaginary measurement nails are found at three levels. First, we want to know how we are doing. Second, we want to know how we compare to others like us. Third, we wonder who will or should be the audience for this information.

These are interesting questions but they come at the wrong point and at the wrong time. They are third- or fourth-generation questions. Rather than ask how are we doing, the first and better question is: Why are we doing it? This relates to aligning HR with organizational initiatives. Purpose, initiatives, goals and objectives change over time. For decades we processed employee records as a primary function of human resources, née personnel. Now we are outsourcing that function and turning our attention to other activities. So, the prime question for every function, especially staff units, is: What is our purpose? To shorten the discussion I posit that HR's purpose is to help management leverage the capabilities and potential of its human capital in the realization of corporate goals. This is a generation apart from cutting the cost of human resources services.

The Purpose Track

If you accept this position, the next issue is how HR should deploy its resources in support of the leverage goal. For the foreseeable future, HR activities will continue to be circumscribed by hiring, compensating, developing and retaining human capital. This causes us to consider the "how are we doing" question.

Now we should ask ourselves where, within the four activities, are we focused? That is, are we trying to cut costs, save time, speed delivery, increase our productivity, develop associates or just keep what we have? Again the answer goes back to the prime question of why are we here, here and now? Corporate goals change annually if not more often. In order to stay relevant, human resources has to move with those changes.

Once we are on track with how well we are servicing corporate initiatives we can move toward comparisons. This is now called benchmarking. Robert Camp's 1989 book, *Benchmarking,* launched this old process dressed in new clothes. Over the past dozen years benchmarking has become quite popular. Even HR departments that had not solved the purpose question moved on to benchmarking themselves against some type of peer group. Benchmarking demands clarity of definitions and comparability of the target group as a minimum. It subsumes that the benchmarking firm understands something about the drivers of the target firm(s). In practice, this is not always the case and thereby significantly decreases the value and validity of any conclusions drawn from the comparison.

Still, having solved the why and how we are doing what we do, we come now to the distribution of data. Who are the audiences? Certainly, HR management is the primary user of the data. And many line managers and senior executives want to know what HR is doing and how well it is doing it. Different levels of management want different amounts of information structured in different forms. HR needs to find out what its various audiences want to know and in what form and frequency they want to receive the updates. Only after these purpose and publication issues are being well serviced will HR be ready to move to the next generation of human capital performance analysis. Enter science and technology.

Up the Evolution Chain

Scientific methods mark the natural progression of performance analysis. Social psychological science has been around human resources for nearly 100 years. One could argue that Taylor, Galbreath, et al. were social scientists, although their methods were more industrially oriented. They cared more about the work process than about the worker. The Hawthorne Studies of the late 1920s jarred the social scientists of the day

Dr. Jac Fitz-enz *heads Human Capital Source, a strategic-level planning, analysis and development service. He has published seven books and more than 170 articles and book chapters and is the only two-time winner of the SHRM Book of the Year Award. In 2004, Dr. Fitz-enz was elected a fellow of the National Academy of Human Resources.*

by showing that productivity was a function not of processes, but of recognition of human effort. The early fascination with time and motion studies wore out prior to the Great Depression and was replaced with interpersonal relations and group dynamics in the 1930s. Both world wars spawned experiments in social psychology that influenced the way organizations were structured and performance addressed following World War II. Until the 1990s, most applications were directed toward employee attitudes, and more lately toward climate surveys. Now the applications are broadening and we are beginning to get a glimpse of deeper potentials for human capital management. Of late we are seeing the beginning of a confluence of social psychology, workforce analysis and performance measurement.

Assessment

It took the advent of metrics in the late 1980s to stimulate the usage of decision science tools such as assessment in the 1990s. Assessment found its first solid foothold within the process of selecting job applicants. Vendors convinced staffing managers that selection could be improved with standardized assessment instruments. At the very least it cut down on the number of appli-

been in use since World War II. In the past 10 years, workforce analytics has grown slowly thanks to vendors such as PeopleSoft and SAS Institute. Until recently its use has been limited only by the interest of HR practitioners. Now, it too is moving into deep analysis and projection. SAS Institute has been able to apply its analytic experience to predicting turnover. Now, with the application of decision science and workforce analysis, issues of long- term and succession planning are beginning to surface as valuable human capital management tools.

Benchmark Metrics

On the one hand benchmarking has reached its full potential as a stand-alone management tool. Used wisely and within its boundaries it helps management position itself vis-à-vis other organizations with similar characteristics. However, in this format it is only a broad indicator. It is not capable of very specific comparisons unless a great deal of time is spent on term definitions and background data of the benchmark partners. In this sense it is no more or less useful than comparing sales figures from competitors. Sales are a function of a great number of variables from the price performance ratio of its products to marketing and branding

Having examined the capability and limitation of decision tools, analytics and benchmarking, it has become clear that progress demands that we learn and evolve. Understanding is the first step in progress.

cations that had to be viewed. With increased experience the validity and reliability of assessment methods improved, and lately it has begun to move beyond simply selection recommendations. PDI, Kenexa and Unicru, among others, offer assessment services as an integral part of an enterprise staffing technology solution. Unicru, a Beaverton, Ore., firm, has conducted 30 million assessments for more than 60 large employers such as Costco, Blockbuster, Nordstrom, Circuit City and CVS Pharmacies and is the only vendor currently "closing the loop" and optimizing candidate selection using data on employee performance. Learning from this experience, Unicru has gone beyond assessment into analytics providing information for other types of decision making. For example, it can tell clients the optimum amount of training time for a given job. It can assess management, leadership and growth potential among professionals and middle managers. In short, decision science is just beginning to expose its capability as a new-era management tool.

Analytics

Statistical analysis is not new. It has been applied for decades to all types of macro and micro questions. The government analyzes everything from agriculture to weather patterns. In business, financial and systems analysis and management science have

programs to the capability of its salesforce. Thus, like all other tools, benchmarking is useful, but not the complete tool needed for decision making. Still, in the hands of an experienced practitioner who understands data patterns, benchmarking can take on new powers.

The Next Generation

Having examined the capability and limitation of decision tools, analytics and benchmarking, it has become clear that progress demands that we learn and evolve. Understanding is the first step in progress. To that must be added imagination. Albert Einstein reputedly stated, "Imagination is more important than intelligence."

Imagine what it would be like to have a practical, cost-effective method for collecting and processing data on strategic initiatives, marketing and branding campaigns, financial results, human resources services and employee attitudes *all in one time and place*. Imagine how it could eliminate delays, prevent misguided actions, cut costs and improve service. Imagine that there was a monitoring and reporting system that not only displayed past results (as accounting does), but also pointed out how to increase return on future human capital investments.

Third Millennium Problem Solving

Significant problems seldom come from a single source. In fact, most problems in today's large organizations spring from multiple errors and omissions. For example, the failure of a sales associate to make a sale or a customer service representative sending a customer away unhappy can be the result of any combination of factors. Sources can encompass errors and omissions in the executive suite, product design, production, distribution, merchandising, supervision, or employee attitudes, skills or retention. Figure 1 is an example of the forces and factors that can affect organizational outcomes at any level. Given this array it is no wonder that organizations frequently suffer from misalignment when so many factors are in play. Solving a basic problem such as flat year-to-year sales in a given store can be a daunting task.

Typically when decision tools are not employed, problem solving is an inefficient hit-and-miss experience. In the new

while also suggesting meaningful connections. Decision science extracts data from other sources, runs its analysis and drops it into the display, contributing another type of predictive value. Benchmark patterns contribute a third perspective to the display. Finally, experienced analysts apply imagination to answering the "what if" and "what difference" questions that only human experience can impute.

Did a failure in sales or service result from a high-level mistake or a low-level omission? Did marketing fail to provide customers and sales associates with a common branding message? Did the supervisor fail to provide training and support for the front-line associates? Could reluctance to spend brought on by a recession be overcome without giving away the merchandise? Only by looking at all levels and angles simultaneously can we be certain that we have found the true source of the problem.

| Figure 1 | Variables and Interactions Capable of Affecting Employee Performance |

Initial data collection includes all variables, internal and external, that might affect corporate performance.
Focus is on uncovering correlations and causations between and among the outer ring and the operating results in the center.

millennium market, this is the path to obscurity. It is where the coordinated application of decision tools such as social psychological instrumentation, workforce analytics and benchmark metrics come into play. Each tool has its limitations. Yet when applied simultaneously in a comprehensive process each contributes to an efficient and effective solution. Workforce analytic tools extract data from various sources and array them for efficient analysis

Human performance is affected by human, structural, economic, competitive and governmental forces. Only by capturing and accounting for each of these, in chorus, can we improve decision making in today's complex, fast-paced and ever-changing marketplace. The good news is that the early adopters are picking up on this idea and pushing the envelope of performance management once again. ∎