Six Key Principles for Measuring Human Capital Performance in Your Organization

By

Brian E. Becker
State University of New York at Buffalo

Mark A. Huselid
Rutgers University

Dave Ulrich
University of Michigan

February 2002
(Please do not cite without permission)

Questions about this manuscript should directed to Brian Becker at bbecker@buffalo.edu or 716/645-3235

Six Key Principles for Measuring Human Capital Performance in Your Organization

We hear a lot about the importance of intangibles as sources of competitive advantage, and in particular the importance of human capital. But if human capital is such an important asset, why don't we do a better job of managing human capital like an asset rather than a cost to be minimized. Organizations often trumpet that "people are our most important asset", and they may even believe it, but they have no way to translate that slogan into organizational practice.

Properly valuing human capital starts with understanding how to measure human capital's contribution to the success of the organization. Based on more than a decade of research, we've demonstrated that when organizations enable, develop and motivate human capital, the result is improved accounting profits and shareholder value [see inset]. While this research provides a compelling business case for managing human capital like a strategic asset, we find that both HR professionals and line managers often have difficulty translating this academic research into practice.

Managing human capital performance effectively requires new perspectives and new competencies on the part of both line managers and HR professionals. Drawing on both our research and our work with senior HR professionals and line managers, we've developed six key principles for measuring human capital performance so that it can be managed as a strategic asset.

#1 Focus on the strategic impact of human capital. Human capital is an illusive concept. Managers are not used to thinking in terms of human capital because accounting systems make it difficult to capitalize investments in skills and other intangibles. So what is the best way to measure human capital? First of all we have to remember that measures are answers to questions, not ends in themselves. Determining the appropriate measure depends on the question one is trying to answer. If your organization is looking to drive out costs and the HR function is being asked to justify its performance based on efficiency, you might focus on the cost of human capital (i.e. annual expenditures on training or cost per

hire). If we compare human capital to another intangible, research and development, focusing on cost and efficiency would be equivalent to valuing the R&D function by the size of the annual R&D budget. Alternatively, if we are interested in questions about how intangibles drive strategy so we can do a better job managing firm performance, efficiency measures of this kind are a blunt instrument at best.

Another possible measure is the *stock* of human capital where the level is compared against a desirable benchmark. This approach might include measures such as hours of training per year, leadership competency levels, or other measures designed to capture the *level* of human capital in the firm. After all, we've been told there is a "war for talent" so presumably it's important to know how much talent you have. The R&D equivalent of focusing on stocks might be the number of new products developed per year, or even the number, education and experience level of the R&D staff. This has been a very common approach among HR professionals where the emphasis is on counts and activities such as number of employees trained per year, number of courses offered, etc. These measures capture a type of *functional* performance, but they tell us nothing about the value of those outcomes. At best they are the first step in a long value chain that culminates in improved firm performance. At worst, they turn out to be well-intentioned initiatives with no evidence of any influence on the firm's strategy drivers. Line managers see them as overhead to be controlled, while HR professionals are hard pressed to demonstrate their contribution to the bottom line.

By contrast, the real focus should be on the "productive results" of human capital. Consider the illustration of a college education. It is a classic example of human capital. The "value" of a college education is not the cost of the tuition, or the number of years of education, but the increased earning power one derives from that education. Similarly, we should value human capital in the organization based on the *performance* of that *human capital*. By human capital, therefore, we mean the productive efforts of an organization's workforce. By performance, we mean employee performance that effectively implements the firm's strategy. In short, the relevant human capital measures are the performance behaviors that influence the key strategy drivers in the organization. Returning to our R&D analogy, the equivalent focus on "productive results" is to value R&D performance by the annual change in revenue attributable to new product ideas.

A simple example from the retail sector illustrates what we mean by human capital performance. Imagine that a retail business determined that one of the drivers of future sales

growth is improved customer satisfaction, which is in part driven by the quality of the buying experience. Where does human capital performance enter the picture? As a leading indicator, it is the foundation of subsequent revenue growth by the impact it has on the customer buying experience. In this industry, the buying experience is in part driven by front-line staff who are knowledgeable, timely, helpful and courteous. Those performance behaviors represent the "productive results" of human capital because of their impact on the performance drivers (customer buying experience, customer satisfaction, wallet-share) that ultimately drive revenues. Managing human capital in this context means managing those performance behaviors.

#2 Beware of Human Capital Alchemy. An organization cannot simply begin to collect different measures and all of a sudden expect to reveal hidden value where employees are traditionally viewed as a cost to be minimized and the HR function is focused on administrative efficiency and transactions. There are three steps to managing human capital as a strategic asset: the right perspective, the right HR system and the right performance measurement system. First, HR professionals and line managers both need a new perspective on the management of human capital. Line managers need to view HR as something more than administrative overhead and HR professionals need to take a shared responsibility for driving those business outcomes that have a significant human capital component. Second, HR professionals and line managers need to take a shared responsibility for developing an HR system (hiring, rewards, development, etc.) that is aligned with the human capital requirements of the firm's strategic drivers. Third, measures designed to reflect human capital performance should focus on how well the HR system generates the employee performance behaviors required to drive the firm's key business outcomes (Principle #1).

The first two steps provide the foundation for human capital value creation that is revealed in the third step. Management of human capital has to go hand in hand with measuring human capital performance. Consider the example of Hi Tech, a software manufacturer headquartered in the Western U.S. Its innovative products have earned it recognition as an industry leader. Like many companies, HiTech for several years had emphasized the importance of people as a source of competitive advantage. However, although the company had prominently emphasized a host of "people policies," it had never articulated how human capital might drive its business outcomes. Nevertheless, HiTech's CHRO commissioned a feasibility study to measure the strategic impact of HR.

Because HiTech had not committed to articulating the mechanism by which people create value throughout the business, it did not manage (and therefore measure) the relevant drivers within that value chain. Not surprisingly, the measures it *did* have available were designed for other purposes. The company used people measures from the traditional annual employee survey, for example, and financial measures such as budget variance. The CHRO focused his feasibility project on a service call-center operation, not because it was part of HiTech's core business, but simply because it was one of the few business units that currently collected data on all three components in the value chain.

Not surprisingly, the results of the study were disappointing. There was little relationship between the available "human capital" measures and the limited measures of financial impact. Disappointed and frustrated, the CHRO abandoned the project.[i] In retrospect, it was obvious that the foundation of human capital performance measurement was missing.

#3 Need to Measure both HC levels and Relationships: Principle #1 is so important because it reminds us that human capital has value when it drives business results. This doesn't mean that human capital performance will always, or even often, have a direct influence on bottom line measures of financial performance. Using the Balanced Scorecard terminology, human capital is a leading indicator. Its influence on financials is indirect via its influence on the strategy drivers in the organization. This indirect line of sight poses a challenge for measuring human capital performance. It means that organizations have to focus on more than the levels of human capital. They also have to focus on the *relationship* between human capital and the drivers of firm financial performance.

The experience at GTE (now Verizon) illustrates the importance of focusing on relationships rather than levels. Their Network Services unit (approximately 60,000 employees) "hypothesized" that market share was driven by customer valuation of their service, which in turn was driven by customer service quality, brand advertising and inflation. The driver (the leading indicator) for customer service was a set of *strategic employee behaviors* focusing broadly on employee engagement. GTE HR created what they called the Employee Engagement Index based on a subset of 7 questions from the GTE employee survey as a measure of these strategic behaviors.

The traditional management of "people measures" might have compared the level of the Employee Engagement Index to previous levels, or perhaps if an outside survey firm had collected the data they could have been benchmarked against industry norms. But neither of

those performance measures directly addressed the business problem facing GTE. Instead, the analysis focused on the relationships between human capital performance (EEI) and strategy drivers in the Network Services unit. They found that a 1 percent increase in the EEI resulted in nearly a ½ percent increase in customer satisfaction with service, demonstrating clearly not only how human capital drives business performance, but by how much.[ii]

Perhaps the most systematic effort to quantify the relationships between human capital and firm performance was undertaken at Sears. First they developed a very clear strategic logic linking human capital, customer service and financial performance. What set the Sears approach apart, however, was that they were able to calculate the quantitative magnitude of those links in a way that allowed them to forecast future financial performance based on current human capital measures. As an example, they found that "a 5 point improvement in employee attitudes will drive a 1.3 point improvement in customer satisfaction, which in turn will drive a .5% improvement in revenue growth."[iii]

#4 **Recognize the limits of benchmarking**. Interestingly, the traditional focus on levels based measures has a corollary. If there was no obvious internal relationship between measures like cost per hire and firm performance, an organization had to look outside and compare its levels to those at other firms. This has been particularly true for the HR function, where the line of sight to the firm's bottom line has traditionally been difficult to unravel. As a result, the HR function is often managed as an administrative cost center so using efficiency metrics appropriately described their performance. However, as HR professionals increasingly take responsibility for human capital management, these efficiency metrics are inadequate and misleading. Managing human capital as a strategic asset implies measuring the performance of human capital in terms of its impact on strategy implementation. Looking to external benchmarks for measures of strategic performance would imply that every firm had the same strategy and the same implementation system. Effective strategy implementation is not a commodity and the human capital drivers of strategy should not be measured as commodities. External validation that is appropriate for efficiency-based measures is inappropriate for human capital's strategic performance. This follows from the new *perspective* on human capital required of both line managers and HR professionals.

The unintended consequences of benchmarking are illustrated by the experience of a large multi-national firm where line HR professionals were under increasing pressure from line managers to define HR performance by efficiency measures such as cycle time to fill

jobs. HR responded by significantly improving their performance on these measures compared to industry benchmarks. Unfortunately, the consequences for the firm's business performance were both unanticipated and unacceptable. HR had reduced cycle time by shifting from recruiting channels that emphasized college graduates and experienced professionals to temporary agencies and job bank applicants. The result was higher training costs, higher turnover and, of more concern to line managers, lower customer service levels among front line employees. The reliance on benchmarking for performance metrics was entirely inconsistent with the strategic human capital requirements of the business.

#5 Don't start with the measure When we discuss these ideas with managers, the most common question we hear is "do you have a list of measures I can use"?. By now it should be clear that no useful list of "best practice" measures does exist, or for that matter *should* exist. The best practice is a measurement process, not the measures themselves. Beginning with the measure is putting the cart before the horse. Just as the particulars of your firm's strategy implementation process should be unique to your company, or at least your industry niche, it follows that the really meaningful measures of human capital performance are equally unique to your firm.

So where do you begin? Measuring human capital performance is about measuring the contribution of human capital to the firm's strategy implementation process. In order to measure that contribution an organization needs to begin with the story of the how its strategy will create value. Where are the strategy drivers that culminate in successful firm performance? This means starting at the top, with your strategy, and working backward, to identify the appropriate human capital measures. The best tool for linking the human capital measure to firm performance is the strategy map developed by Robert Kaplan and David Norton.[iv] This follows from our earlier point; namely, that measures are answers to questions. There is no strategic question that is answered by knowing the rate of return on training or or the cost of this year's HR initiative. The question is, how does human capital drive business performance? The answer is by enabling the strategy drivers in the organization.

Consider the example of Petro Pipeline. Petro competes in an industry where hard assets are considered the principle source of competitive advantage, and people metrics tended to be efficiency oriented or attitudinal employee surveys. Human capital performance might traditionally emphasize turnover rates or even pipeline repair times. But there was no attempt to understand how such human capital performance might ultimately drive firm

success. By contrast after a strategy map exercise Petro discovered that a principle revenue driver was heavily influenced by customer satisfaction, which in turn was largely a function of pipeline reliability. Pipeline reliability had traditionally meant minimizing repair time once a problem developed. Understanding the strategic importance of reliability now highlighted a critical new role for preventative maintenance. This required a shift in the development and reward systems at Petro, but also pointed to a whole new set of human capital performance measures such as: use of life cycle cost analysis in maintenance decisions, effective analysis and diagnosis of relevant data to predict failure and maintenance actions, and evidence that new learning is incorporated into maintenance process. This illustrates how the concept of human capital is not so much a function of the level, such as years of education, but rather the impact on key strategy drivers in the firm. In this industry, pipeline workers with little formal education had the potential to represent valuable human capital when their performance was appropriately aligned with the firm's strategy. Measures that tracked this type of human capital performance were much more valuable to Petro Pipeline than any efficiency measure, and they wouldn't have shown up on any list of "best practice" measures.

#6 Think in terms of the human capital "architecture" Managing and measuring human capital in an organization is such a challenge because there is often confusion about what it is, who should have responsibility for managing this important asset, and how it should be managed? Is it a characteristic of individual employees? Is it the responsibility of the HR function? How is it influenced by the HR system and other organizational policies? We've said that both line managers and HR professionals need a new perspective on human capital and we believe this perspective should begin with central role of the human capital *architecture*. It is important to think in terms of an architecture because the creation and management of human capital, as well as the measurement of human capital performance, are by necessity an interrelated process. Firms need to manage the component parts with an eye on these interrelationships or they can't expect to transform that architecture into a strategic asset.

Figure 1 describes elements of the human capital architecture, and as importantly, how the human capital architecture creates value through its link to the firm's strategy drivers. In answer to the question of where should attention be focused in an effort to manage human capital, we say "all of the above".

(put Figure 1 about here)

The HR *function* is the administrative home of the HR professionals who will take the lead in managing human capital. The HR *system* is the set of organizational policies and practices that acquire, develop, motivate and appraise the human capital in the organization. While HR professionals will take the lead in developing the HR system, line managers will share responsibility in managing that system. Finally, the human capital *deliverables* are the strategic employee behaviors described in #1 above. This strategic impact flows from the efforts of the HR function and the structure of the HR system, but the management of the HR function and the development of the HR system are guided first and foremost by an understanding of the HC deliverables required by the organization's strategy. Hence the link between the HC architecture and the firm's strategy map in Figure 1.

These concepts are illustrated by the experience at Saatchi and Saatchi, a global leader in the advertising industry. Figure 2 illustrates the entire process by which strategic human capital is created and transformed into strategic employee performance. In short, Saatchi & Saatchi had a strategy that focused on creating Big Fabulous Ideas. Human capital was the major driver for these BFIs. But how is that rather simple notion operationalized in a human capital management and performance measurement system? Figure 2 highlights the key lesson. Human capital initiatives and the HR system are often the focus of such efforts by HR professionals, but too often they look no further. At Saatchi and Saatchi this would have focused on the successful roll-out of these initiatives and the breadth of their application. Performance measures might have included "percent of new hires who complete Ideas Brief training", etc.

A wider understanding might have emphasized the immediate outcomes of these initiatives, such as new competency levels, better alignment of rewards with the firm's strategic goals, and a clearer understanding of the link between an individual's job and the BFI strategy. Performance measures at this level would show progress toward building strategic human capital, but would not provide a very accurate estimate of the strategic impact of that human capital. In other words, has any of this development work made any difference in the business outcomes of interest to senior line managers?

The human capital *deliverables* are the element of the HC architecture that reflects how human capital actually contributes to successful strategy implementation. As we described in #1, these measures would focus on "strategically appropriate employee behavior". In the case of Saatchi and Saatchi, this is employee performance that effectively implements the

firm's unique methodology of generating ideas and selling them to clients.

(insert Figure 2 about here)

Following our reminder (Principle #5) not to start with the measure, the human capital deliverable is only valuable if it serves to effectively implement the firm's strategy. In effect, it is a *lagging* indicator for the human capital architecture, but a *leading* indicator of successful strategy implementation. Aware of the role of human capital as leading indicator, Saatchi and Saatchi mapped those strategic employee behaviors to both short run and long run indicators of strategic success. In the short run they looked for evidence that clients accept the ideas being presented and were satisfied with the process. The ultimate measure of whether an idea was indeed a Big Fabulous Idea was the full value of media coverage it generated relative to the client's cost. Since these hard financial measures could be linked directly back to individual project teams the line of sight between human capital and financial performance was very salient.

To summarize, adopting the perspective of the human capital *architecture* has several benefits: First, it allows an organization to clear identify appropriate measures of the HR function's strategic performance. Second, it provides decision-making guidance for managing the HR system as strategy driver. Third, it emphasizes the role of HC deliverables as measures of human capital performance by establishing their link to strategy drivers. Finally, an architectural perspective highlights human capital as an organizational asset and facilitates a shared responsibility for human capital management between line managers and HR professionals. Line managers will increasingly see the strategic value of organizational decisions that in the past might have been considered the purview of HR professionals. Perhaps more importantly, HR professionals will accept a shared responsibility for the strategy drivers that are the traditional focus of line managers.

Human Capital Measurement in Transition Understanding these six principles for measuring human capital performance is particularly important now because many businesses are going through a performance measurement transition. There is an increasing emphasis on measuring and managing intangibles, but there is no clear agreement about how to actually do it. Figure 3 illustrates this evolution with a particular focus on human capital. The base of the pyramid is the traditional approach to measuring human capital performance, or people related metrics. In our experience it continues to be the most common approach. The emphasis is on the administrative efficiency of the HR

function and the cost of human capital.

Moving to Level 2 is an important divide, though in practice sometimes it is more illusion than real. This is where the organization elevates key intangibles, typically the customer and "people", along with financial performance to strategic prominence. It is important because it is a step back from sole reliance on traditional financial metrics. There is, however, no "meat on the bone". Neither line managers or HR professionals have a clear understanding of how these intangibles fit together and actually drive the firm's financial performance. Hence, they are poorly managed and poorly measured. In many respects it's like an R&D function that focuses on basic research. No one can point to how this work contributes to the commercial success of the organization, but everyone thinks its probably important.

Moving to Level 3 is like increasing the focus on the commercial value of R&D. This is the level of measurement we have been describing. Not only is human capital managed as a strategy driver, but the relationship to other strategy drivers is also well understood throughout the organization. The organization focuses not only on the costs of human capital, but it's strategic impact. It requires the organization to clearly define how it's strategy will be implemented (the strategy map), the role of human capital in that strategic logic and, as a result, measures human capital performance within that framework. Embedding your organization's management and measurement of human capital within that strategic logic is what distinguishes firms that operate at Level 3.

Level 4 optimizes human capital performance measurement because it quantitatively measures the magnitude of the impact of human capital on various strategy drivers in the organization. Our earlier examples from Sears and GTE illustrate this level of sophistication and provides several advantages. First it provides more concrete input into resource allocation decisions because the benefits of human capital can now be evaluated along with the costs. Second, it facilitates a shared responsibility for human capital between line managers and HR professionals because the impact of human capital is reflected in business outcomes that matter to line managers. Finally, these results can validate the efforts of HR professionals whose work is often viewed as simply administrative overhead. Moving to Level 4 can often appear to be a significant leap into the unknown. But it's not an all or nothing proposition. Begin slowly, by focusing on one or two key strategy drivers that have a heavy human capital component, in a particular business unit that might be particularly amenable to this process. Think of these initial steps as demonstration projects

that will illustrate the importance of human capital in those parts of the organization where such sophisticated analysis is not currently feasible.

In sum effective measurement of human capital performance is both an immediate need for most organizations, and at the same time a daunting challenge. It requires new perspectives on the role of human capital and new competencies on for both HR professionals and line managers. Meeting this challenge, however, can give your firm an important new competitive advantage in the 21st century.

Inset for page 1

Academic Research Supports Human Capital-Firm Performance Link

Academic research over the last decade has demonstrated that intangibles in the aggregate are an increasingly importance source of firm value, and that *human* capital is an important part of that asset value. For example, Baruch Lev and his colleagues have demonstrated that an increasing share of a firm's market value can be attributed to the value of its intangible assets. In *Intangibles: Management, Measurement, and Reporting* Lev identifies several sources of intangibles including unique organizational designs and human resource practices. Similarly, then-CFO James Chestnut (Fortune, July 1998), after transferring the bulk of its tangible assets to its bottlers, observed that Coke's $150 billion market value derived largely from its brand and management systems. The implication is that intangible assets are increasingly important as sources of value creation, and that both organizational practices and management systems are key dimensions of these intangible assets. Our research has specifically focused on linking human capital and HR issues with firm financial performance. An analysis of nearly 3000 firms has consistently shown a strong relationship between what we call a *high performance* HR system and shareholder value. We find that a 35 percent improvement in our HR index is associated with a 10-20 percent increase in firm's market value. Our research also supports the notion that strategy *implementation,* not just strategic choices, has a powerful influence on firm performance. Moreover, one of the most effective drivers of successful strategy implementation is strategic alignment of the HR system. This research and their implications for effective human capital management systems are described in detail in Brian E. Becker, Mark A. Huselid and Dave Ulrich, *The HR Scorecard: Linking People, Strategy and Performance*, (Harvard Business School Press, 2001) .

[i] See Brian E. Becker, Mark A. Huselid and Dave Ulrich, *The HR Scorecard: Linking People, Strategy and Performance*, (Harvard Business School Press, 2001) p. 108.

[ii] See Brian E. Becker, Mark A. Huselid and Dave Ulrich, *The HR Scorecard: Linking People, Strategy and Performance*, (Harvard Business School Press, 2001) p. 122.

[iii] See Anthony J. Rucci, Steven P. Kirn and Richard T. Quinn, "The Employee-Customer-Profit Chain at Sears," *Harvard Business Review* 76, no.1 (1998): 91.

[iv] See Robert S. Kaplan and David P. Norton, "Having Trouble with Your Strategy? Then Map It", *Harvard Business Review,* September-October 2000.