

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

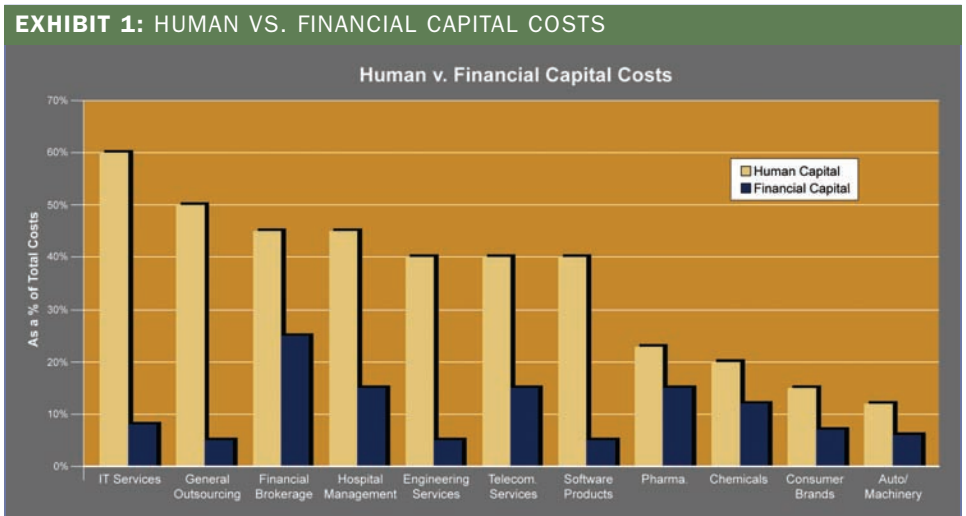
Two types of investments drive business results: human capital and financial capital. While financial capital (cash) is the lifeblood of the business, it is human capital, the body

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,



Source: Boston Consulting Group (2005)

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 χ) 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

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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.

Working Definitions

Financial Capital Costs = Interest, Depreciation, Amortization and Cost of Equity

Human Capital Costs = 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 1: FINANCIAL CAPITAL FORMULAS AND THEIR HUMAN CAPITAL COROLLARIES¹

Metric	Financial Capital	Human Capital
ROI	profit/assets	(profit - FCC)/HCC
Productivity	revenue/assets	(revenue - material costs)/(HCC + FCC)
Liquidity	accounts payable/cash + accounts receivable	Incentive Comp/Profit Goal

¹ The Human Capital formulas discussed here are patent-pending and copyrighted by the Vienna Human Capital Index.

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 Closer Look at New Human Capital Metrics

Human Capital Return on Investment (HC ROI)

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

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.

1. Analysis of financial performance metrics: HC ROI, productivity and profit sensitivity.
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 dissect performance data and discern the important relationships between human capital financial metrics.

TABLE 2: HR QUESTIONS FOR DISSECTING PERFORMANCE DATA

Questions to apply	HC ROI	EBITDA	Financial Capital Costs	Human Capital Costs (as a whole, and each line item segment)	Productivity	Material Costs (if applicable to the business)	Incentive Compensation
Is it at or below target level?	√	√	√	√	√	√	√
Is it improving as a percentage of revenue?	√	√	√	√		√	
Is it consistent across divisions?	√	√	√	√	√	√	√
Is productivity improving?					√		
Is revenue increasing? On target?					√		
Is incentive compensation increasing as a percentage of EBITDA?							√
Are any line item costs increasing at a disproportionate rate to revenue?		√	√	√		√	

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, publically 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 benefit 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:

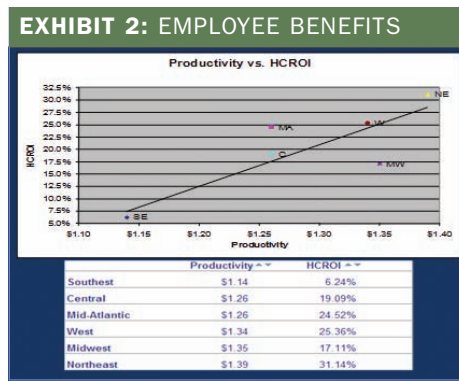
- **Productivity:** Costs were variable and inversely correlated with productivity. Across regions, there was a wide range in human capital costs (HCC) and a meaningful variance in financial capital costs (FCC). As a percentage of revenue, HCC ranged from a low of 61 percent to a high of 76 percent.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



Source: Vienna Human Capital Advisors

- 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) **P&S**

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