



Human Capital Financial Statements

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About [Human Capital Management Institute](#):

The Human Capital Management Institute (HCMI) was founded on the belief that organizations can, and must, find better ways of measuring their investments in human capital. Our goal is to help organizations transform workforce data into a source of value that drives fact based decision making, workforce measurement, planning, and analytic modeling. HCMI leads and educates organizations on what to measure, what it means, how it fits and how to improve it. While many organizations state people are their most valuable asset, few have the tools to assess, manage and optimize their workforce. For questions or more information on products, services, and future HCMI white papers, please visit our website at www.hcminst.com.

The Current Environment of Financial and Human Capital Disclosure

Even after several years of global recession, the pace of change in the global economy has accelerated the shift to a knowledge economy. Globalization, increased connectivity, and technology are speeding the transition to an economy based on information and knowledge rather than goods. In this changing landscape, human capital is the critical differentiator. Companies need smart, effective employees to compete, so understanding and quantifying human capital is critical for success and future growth.

Around the world organizations frequently state that employees are their most valuable asset, and yet publicly traded organizations provide little or no information on this “most valuable asset” to investors or the public. Regulatory securities commissions, such as the Securities and Exchange Commission (SEC) in the United States, require extensive disclosure regarding all major assets including financial assets, physical assets, and technological/intellectual property such as patents. However, they do not require disclosure of what, for most organizations, is their largest annual operating expense: the workforce (Huselid, Becker, & Beatty, 2005). This creates two issues of significance:

First, and perhaps most alarmingly, there is a transparency issue when publicly traded organizations fail to adequately disclose human capital issues and risks of significant value to potential investors.

Second, the lack of disclosure obscures a company’s talent management effectiveness, creating a potentially significant human capital risk. With no visibility into the efficient utilization of the typical firm’s single largest expense, investors are expected to rely on historical financial performance and management’s discussion of the business to voluntarily disclose such information. One need not be an expert to recognize that some organizations have substantial unreported human capital risks.

We are seeing a change in the post-TARP era of unparalleled scrutiny on governance, risks, disclosure and compliance. In a recent article in ERE.net, Dr. John Sullivan (2010) called attention to the internationally known corporate bond rating service Moody’s Corporation. Moody’s Healthcare Industry Outlook Report lists primary profit contribution factors that made a direct connection between financial performance and talent management success in recruiting and retention. Lisa Goldstein of Moody’s wrote that an effective strategy focusing on quality could “result in improved market share, better ability to recruit and retain physicians, lower nursing vacancy/turnover rates and improved financial performance.”

As an investor in the 21st Century, isn’t it reasonable and appropriate to ask for more information about a public company’s most critical assets? Just how impactful is human capital as a business driver? Are employees, including the CEO, expendable and replaceable? While these questions have merit, the real question is if human capital turnover creates a material cost or business impact. From a 20th century viewpoint, human capital turnover had minimal impact. However, one need only examine Hewlett Packard’s stock price following Mark Hurd’s resignation, or Apple’s stock price decline when CEO Steve Jobs takes a leave of absence (“What Happened to Apple Shares,” 2011) to see that talent does impact the business (see “Certain Job Roles Create More Organizational Value than Others” page 11).

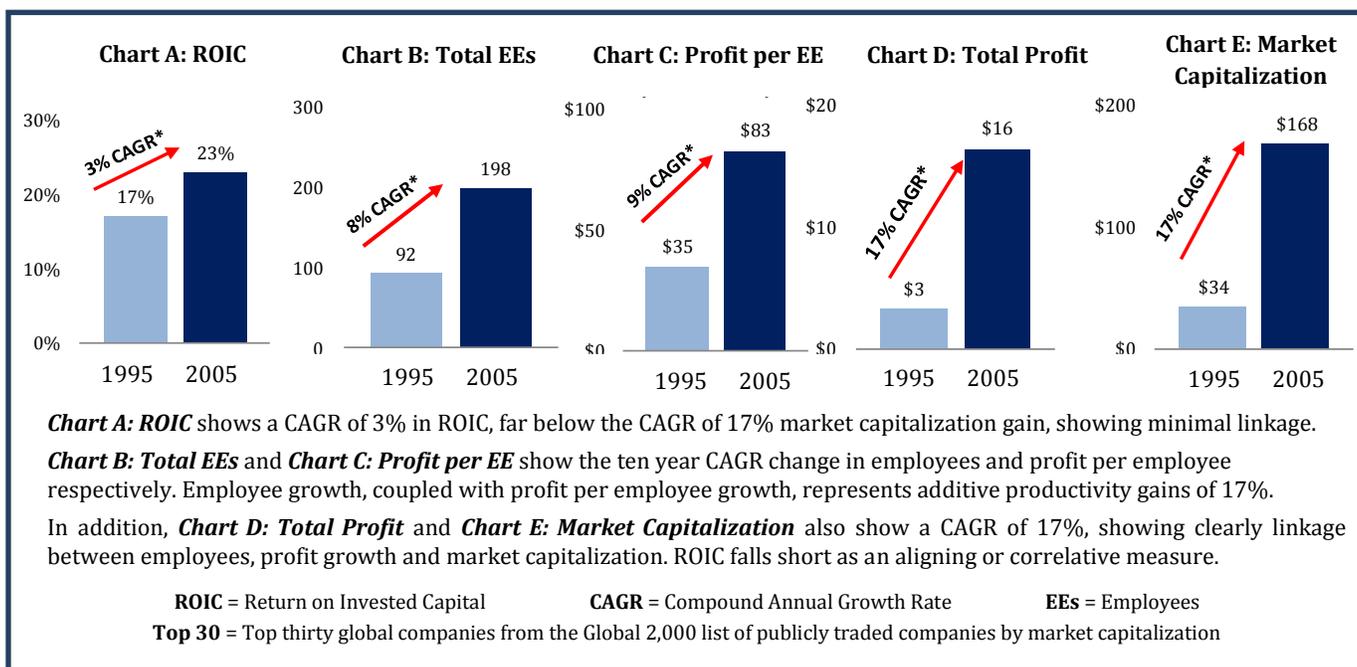
Would you invest in a company with 20% annual turnover in their management ranks?

These companies turn over 100% of management every five years.

Author and McKinsey & Company Director Lowell Bryan believes companies are using measures designed for capital intensive 20th century companies rather than the knowledge intensive 21st century. In short, organizations today focus on the wrong measures. An example is return on invested capital (ROIC). Bryan argues, “To boost the potential for wealth creation, strategically minded executives must embrace a radical idea: changing financial-performance metrics to focus on returns on talent rather than returns of

capital alone. Times have changed. Metrics must change as well.” According to Bryan’s book *“Mobilizing Minds, Creating Wealth from Talent in the 21st Century Organization,”* human capital, such as the knowledge, relationships, brand and other intangibles created by people and represented by investments in activities such as R&D, marketing, and training,” (Lowell, 2007) explain performance more effectively than traditional metrics such as ROIC. The charts below show an analysis of the top 30 global companies from 1995 to 2005 comparing ROIC, Total Employees, Profit and Market Capitalization.

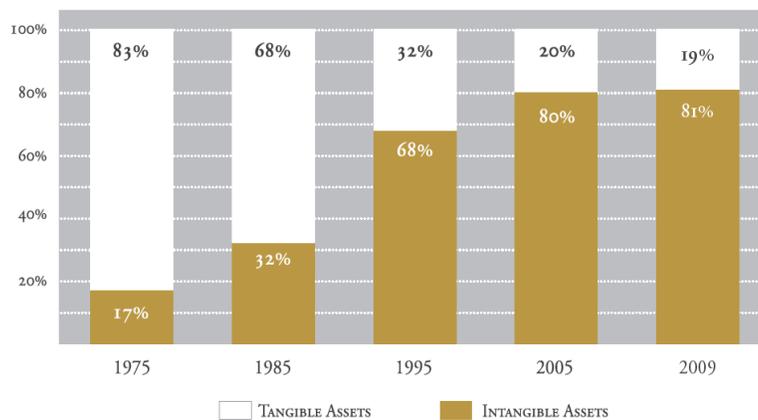
Figure 1: Top 30 Global Company Key Performance Metric Comparison (1995-2005)



According to a published Intangible Asset Market Value Study from Ocean Tomo, a specialized intellectual capital merchant banc™ company, the overwhelming majority of the US Standard & Poors 500 company equity market valuations reached an all-time high of 81% of total S&P 500 market value.

Ocean Tomo states that over the last quarter century, the market value for S&P 500 companies has deviated greatly from their book value. This “value gap” indicates that the physical and financial accountable assets reflected on a company’s balance sheet comprise less than 20% of the true value of the average company, as indicated in *Figure 2: Components of S&P Market Value*. Ocean Tomo’s focus on patents and other intellectual property aligns with that of Bryan, who reports that in 2005 the intangible capital of the world’s largest 150 companies was \$7.5 trillion, versus \$800 billion in 1985.”

Figure 2: Components of S&P Market Value



Leading work by Dr. Lauri Bassi, CEO of McBassi and Company, along with other human capital research thought leaders (Bontis, & Fitz-enz, 2002), demonstrates a clear linkage between investments in human capital and public US company stock prices (Bassi, Harrison, Ludwig, & McMurrer, 2004). Dr. Bassi’s basic research shows a relationship between a company’s training investments and stock performance in the following year. Dr. Bassi states that there appears to be a “super normal” return to companies’ investments in human capital.

Dr. Bassi and Dan McMurrer of McBassi and Company believe so strongly in this relationship that in 2001 and 2003, they started an investment fund company (Bassi Investments; a registered advisory company). Based on their research, they launched two different investment portfolios to prove that companies that invest significantly in training and developing their employees subsequently outperform the market (Bassi & McMurrer, 2004). Since 2001, the Bassi Investments portfolios have outperformed the S&P 500 market by an average of 3.1% and 4.4% annually or a combined 29.2% and 37.5% over the last 7 years.

The Challenge of Measuring Human Capital

If human capital is simultaneously an organization’s greatest asset, largest expense, source of workforce productivity, link to stock market value gains, and source of intangible value creation, why are more companies not more aggressively measuring and managing this critical element of success?

“The head of HR at every company should be at least as important as the CFO”

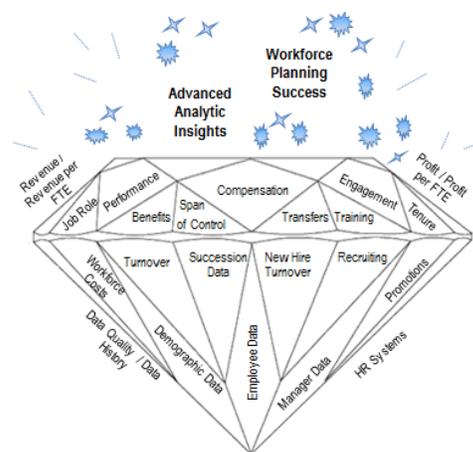
- Jack Welch, GE CEO 1981-2001

Perhaps Jim Collins in his book “Good to Great” (2001) put it best: only the executives at truly good to great companies first started with people rather than strategy, focusing on getting the right people on the bus, the right people in the right seats and the wrong people off the bus, then figuring out how to take the organization to greatness.

What if critical human capital talent was more scarce than traditional financial capital? With increasing frequency, it is. For startups as well as many established companies, the access to financial capital can be linked to the level of talent in the organization. If some organizations recognize that intangible (i.e. human capital), are a primary source of corporate wealth, why do companies still tightly control discretionary spending on them?

One problem, Lowell Bryan suggests, is the difficulty of accounting for the specific contribution of each intangible. However, he sees a bigger problem in the persistence of a financial capital mindset in performance measurement. Balance sheets, cash flow reports, and income statements will continue to be the principal metric for evaluating a company and its managers, but executives should accept and act on the idea that financial-performance metrics need to focus on returns on talent rather than solely on returns on financial capital. Naturally, this shift in perspective has major implications for measuring performance, evaluating executives and how analysts measure company value. Human capital data is complex and constantly changing. However finance data is measured in a single dimension, currency, either as a debit or credit, cost or revenue, profit or loss. Human capital data, unlike finance data, is multidimensional; perhaps best represented as a diamond in its complexity with facets representing the many dimensions. Diamonds, like human capital, attain maximum value when flaws are minimized and facets are cut to optimally reflect light, working in concert with all other facets.

Figure 3: Human Capital Complexity



The complexity of human capital is compounded by the fluid and rapidly changing nature of job roles, structure, movement, hiring or terminations, and ultimately cost. This means definitive workforce measurement is an ongoing challenge for all but the most advanced organizations.

A lack of standards in measurement adds to the confounding effect for many organizations embarking on the human capital measurement and analytics journey. Whereas accounting has Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS); both of which have independent standard setting bodies who publish rules, guidelines, and recommendations for accounting issues. The lack of well-defined human capital measurement standards has led to many variations and different interpretations in human capital measurement. While the Society for Human Resource Management (SHRM) recently launched a measurement standards group, existing HR information systems have no definitive standards with which to comply.

Proving the Value of Human Capital

Clearly, measuring, managing, and leveraging human capital to improve productivity and financial performance is difficult. Additionally, from the Human Resources perspective, improvements that link to financial performance and stock market valuation must be driven through what is commonly referred to as the talent management lifecycle. The most common elements include: recruiting, training, leadership/management, engagement, performance, career development and retention/turnover. Each of these separate elements of the talent management life cycle have the potential to generate significant cost savings, productivity improvement, and revenue gains.

While the size and cost of human capital in an organization seems clear, tools and understanding of how to leverage improved workforce productivity and efficiency are not. Even with mounting success stories, case studies, and research, human resource functions in most Fortune 500 organizations have yet to invest in the staff, skills, or tools necessary for data driven decision making.

However, a few best practice organizations are getting it. According to a recent Harvard Business Review Article by Tom Davenport (Davenport, Harris, & Shapiro, 2010), "Competing on Analytics", "leading edge companies are increasingly adopting sophisticated methods of analyzing employee data to enhance their competitive advantage. Google, Best Buy, Sysco, and others are beginning to understand exactly how to ensure the highest productivity, engagement, and retention of top talent." For example, best in class companies such as Starbucks, Limited Brands and Best Buy know what the value of a 1% to 10% increase in engagement among employees at a particular store equates to in operating income. At Best Buy for example, that value is more than \$100,000 in a store's annual operating income (Davenport, Harris, & Shapiro, 2010).

Figure 4: Sysco Corporation Case Study (Davenport, Harris, & Shapiro, 2010, *Competing on analytics*. HBR)

Case Study: Sysco Corporation

Sysco, a \$36.8 billion Fortune 100 global food service company with about 51,000 full-time employees, began workforce analysis with three gross measures for each operating unit: work climate/employee satisfaction, productivity, and retention. Over six years, it improved the retention rate for delivery associates from 65% to 85%. Sysco tracked the group's satisfaction scores and made immediate improvements to get them back on track when needed. Sysco states that they have saved \$50 million in hiring and training costs for new associates as a result.

Other leading edge retail organizations have generated documented savings and revenue gains of from \$100 to \$200 million, including the famous Harvard Business Review case study by Tony Rucci on Sears Corporation, which documented \$125 million in profit gains associated with increases in store level employee engagement levels.

The Case for Human Capital in Financial Statements

What if human capital could be valued as an asset and their contributions quantified in the form of an annual productivity contribution? Financial statements allow investors and creditors to compare and contrast companies, gauge an organization's financial performance, and evaluate their investments. A savvy investor will pore over a company's financial statements before making any investment decisions. They will review balance sheets to see what a company owns and owes as well as shareholders' equity and interests. They will also review income statements to see how much income a company generates. They will also analyze cost structure and cash flow statements to see the sources and uses of cash. Combined, this information gives investors a good understanding of a company; except for its most valuable asset: the workforce.

*"The Average
FORTUNE 500
Company makes a
\$3 billion annual
investment in
Human Capital it
cannot measure"*

- Hewitt Associates

There is little disagreement or dispute regarding human capital and talent management as key differentiators of success, source of competitive advantage, future intellectual capital value creation and, major business cost. Therefore, there should be equal agreement that significant reporting of human capital adds value for all businesses, public and private as a critical element of performance.

The workforce can be measured, it can be controlled, and it can be managed. Therefore, it can and should be reported as a part of public financial statements or as a supplement to financial statements. Unfortunately, while there are many time-tested ways to value tangible inputs that drive all businesses, few exist to provide an accurate means to value and manage intangibles, particularly the workforce.

The Solution: Human Capital Financial Statements (HCF\$™)

What if organizations could quantify the workforce with objective, verifiable, and value-based conservative valuation principles? Human Capital Financial Statements embody far more than a set of reports. Human Capital Financial Statements are a clear, quantitative, standard - a surgical tool - with which investors gain insight. Senior leadership can use these tools to better manage the workforce using data instead of gut instinct. These tools create opportunities to optimize workforce decisions regarding job structure, performance, training, career development, hiring, turnover, rewards and more.

Human Capital Management Institute (HCMI) developed three unique statements collectively known as Human Capital Financial Statements (HCF\$™), for organizations to disclose human capital information:

- **Human Capital Impact Statement** - The human capital peer or supplement to the income statement, measuring quarterly or annual impact of human capital on financial performance.
- **Human Capital Asset Statement** - Like a balance sheet, this statement clearly and concretely quantifies the total value of the workforce. It breaks down differential value contributions by job category and can drill down into critical job roles at a micro level.
- **Human Capital Flow Statement** - Similar to a cash flow statement, this schedule traces the flow of human capital across multiple dimensions by period such as a quarter or year, showing where and how human capital is allocated and used in an organization.

"Human Capital Financial Statements represent the endpoint HR has been searching for to standardize measurement and enable comparison of human capital performance across industry and geography."

- Dr. Jac Fitz-enz, recognized as the father of human capital measurement

These three unique statements provide a wealth of value to companies and investors, including:

A Standard for Human Capital Measurement

The value and function that regular financial statements provide in our world today cannot be understated. Traditional financial statements provide a standard way in which to evaluate, benchmark, and compare performance across industries and countries separating great from average performers and identifying undervalued and overvalued companies. Much of today's financial investment marketplace is based upon metrics and ratios derived from traditional financial statements. HCF\$™ can be a tool to achieve similar standardization, measurement, and identification of the best and worst; greatly improving investor ability to assess long term company performance potential.

Transparency

HCF\$™ can provide transparency into the workforce. Today's financial statement reporting requirements leave a large gap in disclosure and transparency (workforce data), thereby creating undisclosed business risk. Organizations are not required by current US SEC or international financial reporting standards (IFRS), to provide detailed information about their workforce.

A Supplement to Financial Statements

HCF\$™ are not a substitute for current financial statements. They are a resource for workforce insight and a supplement into a key success differentiator and source of future intangible value creation. Company workforce costs should continue to be reported and treated conservatively as a period expense for traditional accounting and reporting, with one possible exception: the capitalization of qualified training costs. With HCF\$™, human capital can finally be reported separately for what it is: a critical success factor in any organization and, therefore, a critical variable in investment decisions.

Figure 5: Key Questions Answered

HCFI's Human Capital Financial Statements (HCF\$™) answer the following questions:

- How do you quantify the impact human capital has on financial performance?
- How do human capital metrics integrate with commonly accepted financial metrics?
- How do you measure total workforce costs to drive workforce effectiveness and efficiency?
- How do you quantify value creation in the organization across the talent management life cycle?
- What is the impact of training on profit, productivity and total human capital value?
- What is the differential human capital value creation of different job roles?
- How do you measure workforce flow, changes, and growth like a cash flow statement?

Human Capital Financial Statements quantify and trend shifts in workforce productivity, costs and value creation across the talent management lifecycle. HCF\$™ establish a relationship between an organization's financial performance and its workforce and allow organizations to make better-informed strategic workforce decisions. Managing the workforce size and cost has a direct impact on the bottom line, and it is crucial to get the right people in the right roles at the right time.

The following sections address components of the Human Capital Financial Statements and key foundational concepts and assumptions. Examples, extracts and summary schedules are included to provide background for selected sections, and detailed descriptions of key metrics and formulas are explained. As described on the previous page, Human Capital Financial Statements (HCF\$™) consist of a Human Capital Impact Statement, Human Capital Asset Statement, and Human Capital Flow Statement.

Human Capital Impact Statement

The Human Capital Impact Statement quantifies the workforce impact on financial results. Using the Human Capital Impact Statement, organizations can build and show a business case and quantify the impact of HR, as well as assess historical and projected future impacts of workforce decisions and changes upon the organization's financial results.

The Human Capital Impact Statement assumes that ***the workforce creates value greater than its collective total cost***. Employees and workers provide a value beyond what they are paid in wages and benefits. All organizations trade compensation, benefits and rewards in exchange for human capital performance and outputs regardless of profit motive. The costs of human capital are part of the investment the company makes in its business. In for-profit organizations, this number can be quantified on an aggregate basis as the *Return on Human Capital Investment* and *Human Capital ROI Ratio*; formulas linked to net operating revenue, total operating expenses, total cost of the workforce and net operating profit financial measures.

Figure 6: Human Capital Impact Statement Summary

Revenue	Prior Year	Current Year	Variance	% Chg
Net Operating Revenue	\$1,400,000,000	\$1,540,000,000	\$140,000,000	10.0%
Total Workforce Headcount (FTE)	15,000	16,400	1,400	9.3%
Revenue per FTE	\$93,333	\$93,902	\$569	0.6%
Costs				
Total Expenses	\$1,170,000,000	\$1,285,000,000	\$115,000,000	9.8%
Total Operating Expense	\$725,000,000	\$795,000,000	\$70,000,000	9.7%
Total Cost of Workforce (TCOW)	\$779,950,000	\$861,000,000	\$81,050,000	10.4%
TCOW Percent of Revenue	55.7%	55.9%	0.2%	0.4%
TCOW Percent of Total Expenses	66.7%	67.0%	0.3%	0.5%
TCOW Percent of Operating Expenses	107.6%	108.3%	0.7%	0.7%
Profit				
EBITDA	\$310,000,000	\$340,000,000	\$30,000,000	9.7%
Net Operating Profit	\$143,750,000	\$159,375,000	\$15,625,000	10.9%
Profit per FTE	\$9,583	\$9,718	\$135	1.4%
Productivity and ROI of Human Capital				
Total Market Capitalization ⁽¹⁾	\$2,156,250,000	\$2,390,625,000	\$234,375,000	10.9%
Average Market Capitalization Value per FTE	\$143,750	\$145,770	\$2,020	1.4%
Human Capital ROI Ratio	1.29	1.30	0.00	0.1%
Return on Human Capital Investment	18.4%	18.5%	0.1%	0.4%
TOTAL WORKFORCE PRODUCTIVITY IMPACT:	\$34,570,000	\$41,294,200	\$6,724,200	19.5%

The entire Human Capital Impact Statement contains three distinct sections, including:

- **Workforce Productivity Impact** - Calculations in this section compare current and prior period value of productivity (*see formula on page 9*).
- **Total Cost of Workforce (TCOW)** – This section calculates detailed workforce costs by cost element or subcomponent. (*see HCMI white paper, “Managing an Organization's Biggest Cost: The Workforce”, 2010*)
- **Talent Management Impact**– Productivity and value creation are broken down in this section by talent management lifecycle subcomponent, showing HR where in the lifecycle workforce value is created.

The Workforce Productivity Impact Section blends traditional metrics such as Revenue, Profit and Market Capitalization and calculates those measures on a per FTE basis. This section of the impact statement also utilizes critical workforce metrics that link to financial impact such as Total Cost of Workforce, Human Capital ROI Ratio, Return on Human Capital Investment (*see below*). Utilizing recognized, auditable metrics in combination, this section calculates a high level productivity impact value that can be compared or benchmarked across current and prior periods.

By combining recognized financial information with total workforce FTE headcount, an organization can develop a high level picture of human capital efficiency and effectiveness. This represents a balanced view of human capital productivity driving financial results. Key indicators used in the Human Capital Impact Statement measure historical performance such as revenue, cost, and profit indicators. However, *Average Market Capitalization Value per FTE* is added to reflect future expected performance in the stock price.

Key workforce productivity and value measures in the Human Capital Impact Statement include:

- A. *Revenue, Profit and Market Capitalization per Full-Time Equivalent* – These are integrated measures of financial performance represented as a ratio of the organization’s full-time equivalent (FTE) workforce. To reflect a balanced high-level workforce impact upon organization financial performance, these metrics measure and contrast changes in key financial performance indicators versus workforce changes.
- B. *Total Cost of Workforce (TCOW)* – TCOW is the total of all salaries, wages (direct or indirect), cash or equity compensation, and benefits for all employees, total HR costs, plus contingent temporary or contract workers’ costs meeting certain criteria. This metric links to financial performance as a percentage of Revenue, Total Expenses, and Total Operating Expense. A TCOW growth rate above revenue growth rate can be an indicator of inadequate staffing or workforce cost controls.
- C. *Human Capital ROI Ratio* – Measures the ratio of return-on-revenue (net of non-workforce costs) versus the total costs invested in the workforce (i.e. Total Cost of Workforce). Human Capital ROI Ratio acts as a measure of the expected return on \$1 invested in the organization workforce, assuming other cost factors remain constant. For example, an organization with a calculated Human Capital ROI Ratio of 1.2 indicates that for every \$1.00 invested in cost of the workforce, that \$1.20 should be returned to the business.
- D. *Return on Human Capital Investment* – Compares TCOW versus a *selected* Net Operating Profit metric (such as NOPAT or PATAMI). In some cases, Human Capital ROI Ratio and Return on Human Capital Investment will return similar results. This metric shows the expected percentage return by the organization of \$1 invested in workforce costs, assuming other factors and costs remaining constant.
- E. *Total Workforce Productivity Impact* – The final blended calculation including elements in item A and B above on a per FTE basis, combined with item B above compared to revenue percent change, multiplied by Total Cost of Workforce.

Figure 7: Total Workforce Productivity Impact Formula and Components

$$TWPI^n = (R_{vfte} + P_{vfte} + M_{vfte}) * TWH_{cy} - (TCOW_r - R_r) * TCOW_{cy}$$

TWPI = Total Workforce Productivity Impact	TWH = Total Workforce Headcount
R = Revenue	TCOW = Total Cost of Workforce (<i>see item #B definition</i>)
P = Net Operating Profit	cy = Current Year
M = Total Market Capitalization	n = Period
vfte= Variance per Full Time Equivalent(FTE) Workforce	r = Rate or percentage change between periods

The **Total Cost of Workforce (TCOW)** section is a foundational component used in both the Human Capital Impact Statement and the Human Capital Asset Statement. *TCOW* is a critical measure, as it is considered a key singular measure used to represent total workforce cost implications. *TCOW* is a major organizational cost component that includes all workforce costs involved in products and services as well as workforce costs in operating expenses. In traditional financial statements, the total cost of the workforce is hidden in items such as *Cost of Goods Sold (COGS)* or *Cost of Services (COS)*. *TCOW*, by virtue of both its size and criticality, deserves to be a disclosed line item even in traditional financial statements. The *TCOW* schedule (*not shown*) measures the workforce as an asset and allows for valuation and projection of an organizations human capital value over time and across job roles.

The **Talent Management Impact** section of the Human Capital Impact Statement measures, calculates, and quantifies the organizational impact of practices across the talent management lifecycle. It includes all of the following workforce practice areas: recruiting and hiring, mobility, leadership and management, training, performance and engagement, turnover and retention. The Talent Management Impact Schedule (*not shown*) acts as a series of integrated scorecards, with each talent management segment comprised of a series of advanced metrics linked to financial results, that quantify value creation or destruction. These scorecards show a financial impact for each talent management segment. Individually and in aggregate the talent management sections quantify productivity, revenue and cost savings impacts, providing insights to drive workforce productivity and performance (*summary shown in figure 8 below*).

Measuring the impact of the talent management across the lifecycle is challenging. Yet, in order to turn high level productivity metrics into actionable data for the business, it is critical that HR be armed with the ability to drill down into components of talent management across the lifecycle to specific metrics and areas where value is created or destroyed. A series of advanced metrics and indices included within each talent management component calculate the impact in key workforce practice areas. As shown in *Figure 8 below*, the six primary components include recruiting and hiring, mobility, leadership and management, training, performance and engagement and turnover and retention.

Figure 8: Example Talent Management Impact Summary

Talent Management Segment	Prior Year Productivity Impact	Current Year Productivity Impact
Recruiting and Hiring	↓	↑
Mobility	↔	↑
Leadership and Management	↔	↔
Training	↑	↑
Performance and Engagement	↑	↑
Turnover and Retention	↓	↔
Overall Productivity Impact	↔	↑

The green arrows show dramatic improvement year over year in Recruiting and Hiring and Mobility practices.

The result is a large gain in Overall Productivity Impact linked to talent management practices and financial results.

HCMI uses a number of proprietary advanced human capital index metrics in the Talent Management Impact Schedule. These advanced index metrics enable the measurement of critical and highly complex human capital areas in the talent management lifecycle. Examples include *Quality of Hire*, *Talent Management Index*, *Training Effectiveness Index*, and *Employee Engagement Index*. Companies measuring and managing such metrics have advanced tools for superior human capital decision making.

The Human Capital Asset Statement

As previously stated, for most organizations, the workforce is the largest expense and its publicly stated greatest asset. However, few have the tools to measure and quantify the value of this critical asset. According to Peter Cappelli, professor of management and director of the Center for Human Resources of the Wharton School at the University of Pennsylvania, “Everyone understands that the quality of people is the key differentiating factor, whether they’re great as individuals or because they’ve set up systems that work best, the hard part is how do you measure it?” (Cappelli, 2005).

The Human Capital Asset Statement is a powerful tool to quantify total human capital value and the total human capital value added over and above Total Cost of Workforce (TCOW). The Human Capital Asset Statement reflects and values human capital as an asset, or as value producing, not just as a cost. Analyzing the fluctuation of human capital by period can provide workforce insights to drive business strategy and bottom line impact. At its most basic level, the Human Capital Asset Statement shows a reasonable and calculable total value for the workforce, and how much that value contribution is changing over time (a portion of the Human Capital Asset Statement is shown in Figure 9).

Figure 9: Human Capital Asset Statement – Human Capital Headcount Deployed

Human Capital Headcount Deployed	Prior Period	% of Total	Current Period	% of Total	Variance
Employees	13,300	88.7%	14,450	88.1%	8.6%
- Management & Senior Leadership	1,250	8.3%	1,300	7.9%	4.0%
- Professional Staff	2,300	15.3%	2,500	15.2%	8.7%
- Sales Staff	3,000	20.0%	3,400	20.7%	13.3%
- Specialists and Technicians	900	6.0%	1,000	6.1%	11.1%
- Skilled Trade Staff	250	1.7%	250	1.5%	0.0%
- Operations Staff	1,450	9.7%	1,600	9.8%	10.3%
- Service Staff	2,750	18.3%	2,900	17.7%	5.5%
- Administrative Support Staff	950	6.3%	1,000	6.1%	5.3%
- Laborers and Helpers	450	3.0%	500	3.0%	11.1%
Contingent Staff	1,700	11.3%	1,950	11.9%	14.7%
- Temporary	1,100	7.3%	1,200	7.3%	9.1%
- Contractors	600	4.0%	750	4.6%	25.0%
Total Workforce	15,000	100.0%	16,400	100.0%	9.3%

The Human Capital Asset Statement is designed with these foundational concepts:

Workforce Value Increases Over Time - Whether via a defined career path, accumulation of work experience, education, qualifications or certifications, the value of workers increases over time. Notable exceptions exist for low or non-skilled roles, a significant percentage of the workforce in some industries. In many job roles, the value of a career path over time can be quantified, enabling organizations to make strategic and insightful decisions about whether to build, buy or lease workforce for any given position. This is considered the ROI of a career path.

The Workforce Creates Value Far Greater than its Cost - It is generally accepted in business that human capital creates significant value beyond its cost. Otherwise, why would firms employ or contract with workers in a for-profit organization if they could not reasonably expect a significant return over and above their total cost? Even if we were to add one-time costs associated with hiring, paying, training, promoting or transferring the workforce, the workforce value still far exceeds its cost in a profitable business.

Certain Job Roles Create More Organizational Value than Others - The Human Capital Asset Statement breaks down differential value contributions by major job role and category across total human capital headcount. Like peeling an onion, these job roles and categories can be drilled into and further broken

down by critical and core versus non-core job role. Roles which create substantially higher value-add are referred to as critical or high value job roles. Roles are also classified as “core” or central to business strategy and execution or “non-core”, often support, risk mitigation, compliance and administrative roles. When all sections of the Human Capital Asset Statement are combined, they result in Retained Human Capital Value (depicted in a portion of the Human Capital Asset Statement in Figure 10 below).

Figure 10: Human Capital Asset Statement – Total Retained Human Capital Value

Total Retained Human Capital Value					
- Management & Senior Leadership	\$114,084,012	33.7%	\$123,219,761	32.1%	8.0%
- Professional Staff	\$47,543,560	14.0%	\$51,831,010	13.5%	9.0%
- Sales Staff	\$95,732,611	28.2%	\$114,783,537	29.9%	19.9%
- Specialists and Technicians	\$3,200,000	0.9%	\$3,750,000	1.0%	17.2%
- Skilled Trade Staff	-\$842,500	-0.2%	-\$1,400,000	-0.4%	66.2%
- Operations Staff	\$16,505,337	4.9%	\$18,808,362	4.9%	14.0%
- Service Staff	\$41,025,572	12.1%	\$45,474,989	11.8%	10.8%
- Administrative Staff	-\$9,340,000	-2.8%	-\$9,750,000	-2.5%	4.4%
- Laborers and Helpers	-\$3,487,500	-1.0%	-\$3,875,000	-1.0%	11.1%
- Contingent Staff	\$0	0.0%	\$0	0.0%	0.0%
Retained Human Capital Value Add ⁽³⁾	\$304,421,092	89.8%	\$342,842,660	89.3%	12.6%
Annual Workforce Productivity Impact ⁽⁴⁾	\$34,570,000	10.2%	\$41,294,200	10.7%	19.5%
TOTAL HUMAN CAPITAL VALUE ADDED ⁽⁵⁾	\$338,991,092	100.0%	\$384,136,860	100.0%	13.3%

Higher job levels or grades, while more likely to be classified as high value, are rarely critical in all instances. The key differentiating factor is the job role, not grade or level. Even in management ranks, some roles create substantially more value than others. Likewise, using compensation to identify high value roles can be misleading.

Training Costs are More of an Investment Than an Expense - Training costs can produce benefits and productivity gains in the future to enable the workforce to grow into more valuable job roles over time. Training investments also often provide value that lasts more than a year and, therefore, are reflected in the Human Capital Asset Statement as a capitalized value add. Training, similar to certain assets capitalized on financial statements, has an argument to be reflected as an asset for traditional accounting purposes. Like enhancements and additions that improve and extend manufacturing machine useful life, qualified human capital training improves productivity but loses value over time. Therefore, capitalized training should be subject to a conservative “depreciation rate.” This rate is applied each period to properly adjust the training investment for applicable changes to qualified training. Changes include write off of older training, addition of new relevant training, and adjustments for employee turnover impacts.

The value of training is calculated by measuring the total training investment, the number of employees with productivity gains from training, and in some cases the total quantified performance differential of employees before and after training. However, not all training costs are better valued as an investment. Training must qualify for such treatment just as business purchases must qualify to meet the accounting definition of an asset. To qualify, training must be shown to increase workforce efficiency, effectiveness, quality and or competency, or enable future career growth in market level and wages.

HCMI, in conversations with major US airlines, asked about their largest, most critical job role.

Without hesitation the answer was “pilots”.

However, when a traditional six sigma value-add definition is applied; how much more are customers willing to pay for the pilot? In a world with top quality, experienced and certified pilots, the answer is zero.

Customers are however, willing to pay \$5.00 more per flight for friendly, engaged flight attendants

¹ NOTE: In the airline industry, pilots are generally considered a critical job role as are certain technician, planning, and ground crew roles in addition to customer facing flight staff.

Training meeting all of the following criteria is capitalized in the Human Capital Asset Statement:

- Provides a quantifiable value to the business for greater than one year.
- Increases the total output, efficiency or quality of output from what it was prior to the training.
- While the organization does not own trained employees, they do meet a slightly lower test in that organizations exercise substantial control of employees and workers.

The Human Capital Asset Statement uses the following key workforce value measures:

- Total Workforce FTE + Cost of Workforce (TCOW) split by workforce job category or critical job* – Includes total cost of workforce as defined in the Impact Statement, however the Asset Statement provides a detailed breakdown of workforce headcount and costs by job category or critical job role. Distribution of headcount and costs enables trending and comparison of the relative level of importance and investment on the part of the organization across the high-level job categories.
- Human Capital ROI Ratio differentiated by high level workforce job category* – Differentiation of the Human Capital ROI Ratio by job category enables assessment and, when trended over time, quantification of organizational workforce productivity, as well as value-added by high-level and secondary “critical job role” workforce job category levels. Such quantification enables more accurate assessment and determination of high value-added “core” workforce job roles.
- Return on Human Capital Investment* – Compares TCOW versus a selected Net Operating Profit metric (such as NOPAT or PATAMI). In some cases, Human Capital ROI Ratio and Return on Human Capital Investment will return similar results. This metric is a measure of the expected return by the organization of \$1 invested in workforce costs, all other factors and costs remaining constant.
- Capitalization of Workforce Training Costs* – Qualified workforce training costs are capitalized over a number of years specified by the organization (typically 3 or 5-year depreciable periods). This metric enables better measurement of total organizational value invested in each workforce role and job category.
- Retained Human Capital Value* – Measures the total cumulative value creation of the workforce over time. When combined with Annual Workforce Productivity Impact from the Human Capital Impact Statement, and treated similarly to additional capital or retained earnings, it reflects the relative value of the workforce above cost, due to shifts in both workforce and key financial performance measures.

The Human Capital Flow Statement

Today's HR systems should automatically provide an exact report by category or critical role of workforce size, gains, losses, tenure and talent level.

The Human Capital Flow Statement does exactly that.

Most companies struggle to report an exact count of their total workforce. While many believe they have a correct employee count, confidence drops when contingent workers, leaves of absence, and backdated HR transactions are included. Today's HRIS systems struggle to effectively manage these populations. Many do not properly account for them in reporting, leaving HR to manipulate data manually. Rarely can organizations accurately report all workforce data in one format. To further add to the data complexity, the workforce is always in constant change (Atwater & Jorgensen, 2008).

The Human Capital Flow Statement (*not shown*) quantifies headcount by major job category from top management to temporary or contingent staff including core and non-core, critical and non-critical job roles. It breaks down major workforce flows across the talent management lifecycle (i.e. hiring, transfers, promotions, and terminations), tracking the ins and outs by period. Analyzing the fluctuations provides insight regarding changes and relative talent gains within each category and job group.

Why haven't companies disclosed human capital data in the past?

Perhaps the simplest response as to why human capital data has not been disclosed in any significant way is because disclosure isn't currently required by public company reporting entities. Organizations have executed unprecedented restructuring, retrenchment and downsizing in recent years, yet most still lack the metrics to measure the workforce or they measure everything and are unable to determine which numbers really matter. Perhaps the most well disclosed human capital information is not about current deployed human capital at all, but rather the retired workforce, due to accounting and financial risks associated with pension and retirement funding.

Complexity, fluidity, and lack of human capital data standards have contributed heavily to the lack of confidence and minimal human capital reporting in existing financial statements. However, the last decade saw the rise of sophisticated software tools to automate HR and human capital transactions. Soon, a critical mass may be achieved. Today's systems and tools are increasingly able to leverage deep human capital data sets to do more than just basic workforce and HR reporting and analysis.

Still, a problem remains. The lack of standards, and systems filled with inconsistent and incomplete data, means even organizations with advanced systems are often stymied in their attempts to get true intelligence from their workforce data, also known as workforce intelligence.

Conclusions

Human Capital Financial Statements represent an opportunity to fundamentally change the way organizations make workforce decisions. An in depth objective set of standard reports offers the potential to shine a spotlight on something critical to every business and investor: the workforce.

Companies that adopt Human Capital Financial Statements (*HCF\$™*) can gain:

Greater Transparency - Organizations lack the ability to make data-driven decisions for their stated "most valuable asset," the workforce, and insight into effective talent management of that most valuable asset. Transparency into knowledge capital fills a critical gap in today's disclosure reporting.

A Method to Value Knowledge Capital - The world of business has changed and it is time reporting and market disclosures changed with it. Knowledge capital drives market valuation far more than financial or physical capital. Today, knowledge capital is classified as intangible capital, as no measures exist to make reasonable and accurate valuations. Adoption of the Human Capital Asset Statement can bridge this important gap and give credit rating agencies, banks, public reporting entities and individual investors an objective set of numbers and values with which to make better decisions about the true drivers of value in the knowledge capital intensive 21st Century.

Ability to Make Improved Investment Decisions - Better information means improved ability to assess future growth, particularly innovation and long term value creation. This could lead over time to more efficient and effective deployment of human capital in organizations.

"Human resources can readily provide the number of people it hired, the percentage of performance evaluations completed, and the extent to which employees are satisfied or not with their benefits. But only rarely does it link any of those metrics to business performance."

- Keith Hammonds, Fast Company (Why We Hate HR, August 2005)

Standards in Human Capital Reporting and Analysis of Human Capital Data - Until now, human resources lacked a definitive set of statements that articulate the value HR and the workforce create.

Benchmarking and Comparison of Critical Expenses and Differentiators of Success² - Standards enable deep benchmarking and identify best practices to build workforce intelligence on a broad scale. Today's workforce data benchmarking is often more anecdotal than objective and quantitative.

A Definitive Methodology for Quantifying Workforce Impact on Financials - Human resources and finance can now integrate financial results with people metrics to quantify the bottom line impact of recruiting, mobility, training, productivity, retention and more. With tools such as the HCF\$™, ultimately, the possibilities are limited only by data availability and input metrics. Increasingly advanced capabilities should allow users to calculate additional metrics and indices unique to their industry, structure and strategy, creating powerful new key performance indicator (KPI) measures to further optimize human capital and drive business results.

“Workforce Intelligence goes beyond workforce planning. It is true integration and application of customer, financial and workforce data that supports predictability and superior resource allocation.”

*- Dr. Jac Fitz-enz, CEO,
Human Capital Source*

Imagine today's financial investment marketplace without the standard financial statements. Without financial statements, a reasonable investor would have little or no information to make informed investment decisions. They would be left to rely on information provided at the company's discretion. Companies typically do not disclose bad news or risks unless required to do so. In such a situation, investors could be overwhelmed with poorly substantiated claims in which organizations disclosed what they considered a fair and objective assessment.

Today, when it comes to evaluating an organization's human capital, an environment similar to the one above exists. Organizations are free to make unsubstantiated talent claims regarding productivity, training and innovation. Nowhere are they required to substantiate those statements with facts or data.

Next Steps

HCMI created the Human Capital Financial Statements in August of 2010, based on years of research and analysis dating to 2001. Since August, 2010, HCMI has been modeling these statements with approximately 25 organizations in a variety of industries, including financial services, manufacturing, telecommunications, retail, construction, utilities and conglomerates. Given the historical lack of disclosure by large organizations globally, comparative benchmarks are not easily obtainable. However, as case studies and insights are completed, HCMI will publish findings from leading edge early adopter organizations. *See Appendix I for a case study from initial findings using the HCF\$™.*

Now, top management, in cooperation with HR and finance, have the tools and methodology to truly manage and drive workforce performance through measurement, operationally and strategically. Will human capital be measured and more fully leveraged as a strategic asset for workforce intelligence and enhanced future business results? If so, Human Capital Financial Statements can help lead the way.

² Benchmarking standards and advanced workforce measures provide valuable insight. For most financial ratio metrics, primary value is in comparison to competitors and peers in the same or similar industries, and in particular against best in class organizations. For example, if an organization has an asset return ratio of 3.2, or a return on invested capital (ROIC) of 10%, one often cannot know if those numbers are good or bad without peer comparison. While improvement is always good, if competitors are at 4.2, and 18% respectively, your organization is in trouble. In the proper context, benchmarking using standardized metrics can be deeply insightful.

References

- Atwater, D. M., & Jorgensen, B. (2008). Best practices for headcount reporting. *Graziadio Business Review*.
- Bassi, L., & McMurrer, D. (2004, March). How's your return on people. *Harvard Business Review*.
- Bontis, N., & Fitz-enz, J. (2002). Intellectual capital ROI: a causal map of human capital antecedents and consequents. *Journal of Intellectual Capital*.
- Cappelli, P. (2005, January). Blind investment. *HR Magazine*.
- Collins, J. (2001). *Good to great*. New York, NY: HarperCollins Publishers Inc.
- Davenport, T. H., Harris, J., & Shapiro, J. (2010, October). Competing on analytics. *Harvard Business Review*.
- Higgins, J., & Cooperstein, G. (2010). Managing an organization's biggest cost: The workforce. Retrieved from http://www.hcminst.com/files/OrgPlus_Total_Cost_Workforce_.pdf.
- Huselid, M. A., Becker, B. E., & Beatty, R. W., (2005). *The workforce scorecard*. Boston, MA: Harvard Business School Press.
- Lowell, B. L. (2007). The new metrics of corporate performance: Profit per employee. *The McKinsey Quarterly*.
- Sullivan, J. (2010, November). *Game-changing: financial analysts begin assessing talent management effectiveness*. Retrieved from ERE.net.
- What happened to Apple Shares when Steve Jobs took medical leaves in 2009 and 2004? (2011, January). *International Business Times*.

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About [Human Capital Management Institute\(HCMI\)](#):

HCMI seeks to enable organizations to leverage their workforce as a source of transformational value creation and truly live up to the billing as an organization's most valuable asset. Previous HCMI products have shown HR Managers that it is possible to quantify human capital effectively while analyzing and predicting workforce cost and value implications. Human Capital Financial Statements move beyond the [Workforce ROI Calculator](#)³ and give HR and Finance professionals a new way to measure a company's greatest asset.

³ Workforce Quantifier (WORQ) ROI Calculator, an HCMI proprietary tool designed specifically to quantify and value certain workforce decisions using recognized financial analysis methods and valuation metrics.