

# *Appendix: Human Capital Financial Statements Telecommunications Industry Case Study*

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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.*

## Introduction

The following case study is an appendix to HCMI's *Human Capital Financial Statements* whitepaper, published in April, 2011. The findings below are based on analysis conducted using HCMI's proprietary Human Capital Financial Statements (HCF\$™), the Human Capital Impact Statement, Human Capital Asset Statement and Human Capital Flow Statement. These statements provide a standard basis for human capital measurement and transparency into the financial linkage and impact of an organization's most valuable asset: the workforce. While the organizations analyzed are actual telecommunications companies, their names and certain numbers have been changed for confidentiality purposes. For a detailed description of key foundational concepts, assumptions, metrics, and formulas, please refer to the corresponding sections in HCMI's *Human Capital Financial Statements* (HCF\$™) whitepaper.

## Background

BroadTek, a leading regional telecommunications company, is the most experienced telecommunication provider in their market and region. BroadTek's steady and consecutive revenue growth quarter after quarter has received numerous awards and accolades along with their reputation for innovation and exceptional service. BroadTek was the first carrier to establish a nationwide wireless network to approximately 97% of the country. Despite BroadTek's success, increased competition, market saturation, and an increasing shift in consumer preferences from voice usage to lower margin text and high volume data usage has presented a challenging environment.

Competitors have tiered their product offerings effectively, grabbing market share of both high volume data users and low cost prepaid texting users. In addition to continued product innovation and expanded service offerings, BroadTek's future goals include increasing workforce productivity and efficiency. As a result, BroadTek has been considering restructuring, outsourcing and reductions in workforce to compete more aggressively with competitors and satisfy questions about productivity.

In the telecommunications industry, as in many other technology intensive industries, the workforce is a tremendous source of value creation. The ability to innovate and outperform competitors is vital, and that ability is driven by human capital rather than physical capital and infrastructure. However, unlike many other industries and businesses, in the telecommunications industry, the total cost of the workforce, while significant is not the single largest expense of the organization. Rather, network and infrastructure costs exceed the total cost of workforce (see HCMI white paper, "[Managing an Organization's Biggest Cost: The Workforce](#)", 2010).

As an example, for telecommunications companies the overall impact of a 10% decrease in workforce costs, while not insignificant, pales in comparison to a 10% increase in workforce productivity measured as profit or revenue per FTE. This is true because the Total Cost of Workforce represents a smaller percentage of revenue, (i.e. from as little as 3% up to 20% of revenue), as well as profit and overall expenses. Conversely, the incremental return on high value-add talent in telecommunications is very high.

This high return or leverage is represented by the Human Capital ROI Ratio (see definition, in the HCMI *Human Capital Financial Statements* white paper page 9), which for telecommunications companies can run from 5 to 1 all the way up to 11 to 1 in terms of return. Therefore, the value of a high performing workforce is magnified, and the ability to analyze and understand how talent management and data-driven workforce decisions impact productivity and overall business results is paramount.

## Quantifying Workforce Productivity with Human Capital Financial Statements

The following analysis leverages the Human Capital Impact Statement to measure workforce productivity and quantify workforce impact on financial performance. BroadTek was benchmarked against key competitors RayFi and ClearTel for the fiscal years 2009 and 2010. The Human Capital Impact statement blends traditional metrics such as Revenue, Profit, Total Expenses, EBITDA, and Market Capitalization on a per FTE basis, with critical workforce metrics that link to financial impacts such as Total Cost of Workforce (TCOW), Human Capital ROI Ratio, and Return on Human Capital Investment.

Utilizing recognized, auditable metrics in combination, a high level productivity impact value can be calculated and compared across current and prior periods. This represents a balanced view of human capital productivity within financial results and a high level picture of human capital efficiency and effectiveness.

**Figure 1: BroadTek Human Capital Impact Statement (Workforce Productivity Impact Section)**

| <b>Revenue</b>                               | <b>Prior Year</b>    | <b>Current Year</b>  | <b>Variance</b>      | <b>% Chg</b> |
|--|----------------------|----------------------|----------------------|--------------|
| Net Operating Revenue                        | \$4,114,540,000      | \$4,444,560,000      | \$330,020,000        | 8.0%         |
| Total Workforce Headcount (FTE)              | 4,645                | 4,750                | 105                  | 2.3%         |
| Revenue per FTE                              | \$885,800            | \$935,697            | \$49,897             | 5.6%         |
| <b>Costs</b>                                 |                      |                      |                      |              |
| Total Expenses                               | \$2,788,752,921      | \$2,809,406,376      | \$20,653,455         | 0.7%         |
| Total Operating Expense                      | \$2,262,997,000      | \$2,377,839,600      | \$114,842,600        | 5.1%         |
| Total Cost of Workforce (TCOW)               | \$447,661,952        | \$467,567,712        | \$19,905,760         | 4.4%         |
| TCOW Percent of Revenue                      | 10.9%                | 10.5%                | -0.4%                | -3.3%        |
| TCOW Percent of Expenses                     | 16.1%                | 16.6%                | 0.6%                 | 3.7%         |
| TCOW Percent of Operating Expenses           | 19.8%                | 19.7%                | -0.1%                | -0.6%        |
| <b>Profit</b>                                |                      |                      |                      |              |
| EBITDA <sup>(1)</sup>                        | \$1,316,652,800      | \$1,511,150,400      | \$194,497,600        | 14.8%        |
| Net Operating Profit                         | \$573,155,422        | \$680,017,680        | \$106,862,258        | 18.6%        |
| Profit per FTE                               | \$123,392            | \$143,162            | \$19,770             | 16.0%        |
| <b>Productivity and ROI of Human Capital</b> |                      |                      |                      |              |
| Total Market Capitalization <sup>(2)</sup>   | \$6,304,709,642      | \$6,800,176,800      | \$495,467,158        | 7.9%         |
| Average Market Capitalization Value per FTE  | \$1,357,311          | \$1,431,616          | \$74,305             | 5.5%         |
| Human Capital ROI Ratio                      | 3.96                 | 4.50                 | 0.54                 | 13.5%        |
| Return on Human Capital Investment           | 128.0%               | 145.4%               | 17.4%                | 13.6%        |
| <b>TOTAL WORKFORCE PRODUCTIVITY IMPACT:</b>  | <b>\$355,630,545</b> | <b>\$700,578,523</b> | <b>\$344,947,978</b> | <b>97.0%</b> |

<sup>(1)</sup> EBITDA = Earnings before interest, taxes, depreciation and amortization

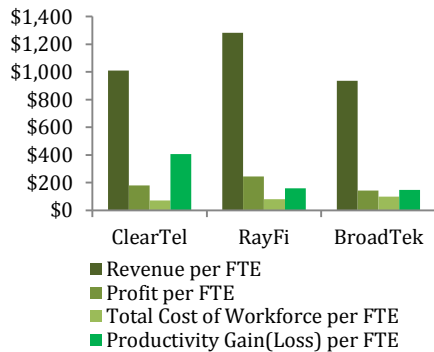
<sup>(2)</sup> Total Market Capitalization for publicly traded organizations or independent bank/financial market valuation for private entities

The charts on the following page compare BroadTek, RayFi and ClearTel on financial performance, workforce productivity, and the percentage change in performance and productivity year over year. *Figure 1: Financial KPIs* shows 2010 full year Revenue per FTE, Profit per FTE, TCOW per FTE, and Productivity Gain or Loss per FTE. *Figure 2: KPI Variance* illustrates the year over year percentage change from 2009 to 2010 in Revenue per FTE, Profit per FTE, and TCOW per FTE. *Figure 3: Productivity Variance* captures the year over year percentage change from 2009 to 2010 in Human Capital ROI Ratio and Return on Human Capital Investment.

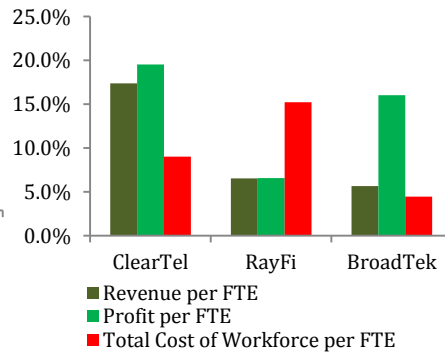
Please refer to the Human Capital Impact Statement section in the *Human Capital Financial Statements* whitepaper for detailed definitions on the preceding metrics.

Looking at *Figure 2*, BroadTek did not compare favorably with its' competitors in 2010. BroadTek had lower Revenue per FTE and Profit per FTE than both RayFi and ClearTel. This was of concern to management and a driver of their consideration to lower workforce costs to improve high level performance/productivity metrics. In addition, while RayFi had the highest Total Cost of Workforce (TCOW) per FTE due to paying above market as a strategy to recruit and retain top talent, BroadTek's overall TCOW (*not shown*) was higher in absolute cost than that of RayFi or ClearTel. This added to the argument that reducing workforce costs was the key to increasing efficiency and productivity.

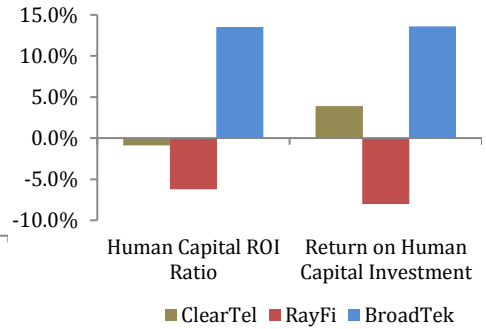
**Figure 2: Financial KPIs**



**Figure 3: KPI Variance**



**Figure 4: Productivity Variance**



Note: All Dollars in Thousands      Data for 2009 and 2010 Fiscal Years      KPI = Key Performance Indicator      FTE = Full Time Equivalents

However, from 2009 to 2010, BroadTek realized a 16.0% gain in Profit per FTE, and while this increase was slightly below ClearTel's gain of 19.5%, ClearTel also had an increase in Revenue per FTE of 17.4% versus BroadTek's gain of only 5.6% (shown in shown in *Figure 3*). RayFi on the other hand had growth of only 6.6% and 6.5% respectively in Profit per FTE and Revenue per FTE. This shows that while BroadTek's revenue growth had slowed, with lower Revenue per FTE gains than competitors, that BroadTek had effectively controlled costs, including TCOW, resulting in larger Profit per FTE gains from 2009 to 2010.

Furthermore, BroadTek had the highest percentage increase from 2009 to 2010 in Human Capital ROI Ratio and Return on Human Capital Investment at 15.3% and 19.0% respectively (*see Figure 4*). Human Capital ROI Ratio measures the ratio of return-on-revenue (net of non-workforce costs) versus the total costs invested in the workforce. Return on Human Capital Investment measures TCOW versus Net Operating Profit or an equivalent profit metric, and shows the expected return on investment in the workforce.

This means that BroadTek was improving workforce productivity and measurable return at a significantly faster rate than competitors. A reduction in workforce headcount, or costs, a highly disruptive process, could negatively impact the gains in productivity. More importantly, the results shown in *Figure 3* suggest the opposite; indicating a possibility for further strategic human capital investment if BroadTek could identify the source of the productivity gains.

If BroadTek increased their investment in human capital, could they surgically identify where to invest? To answer this question, the Human Capital Asset statement and Human Capital Flow statement provide insights into workforce productivity and costs by identifying the differential productivity contributions by job role, quantifying the financial impact of training, and tracking how workforce value creation and costs change over time. When critical job roles are identified across specific workforce segments, these value impacts can identify and quantify opportunities to increase workforce productivity and organization performance.

Figure 5: BroadTek Human Capital Asset Statement (Human Capital Headcount Deployed)

| Human Capital Headcount Deployed | Prior Period | Percent of Total | Current Period | Percent of Total | Variance      |
|----------------------------------|--------------|------------------|----------------|------------------|---------------|
| <b>Employees</b>                 | <b>4,395</b> | <b>94.6%</b>     | <b>4,535</b>   | <b>95.5%</b>     | <b>3.2%</b>   |
| - Management & Senior Leadership | 610          | 13.1%            | 615            | 12.9%            | 0.8%          |
| - Professional Staff             | 1,310        | 28.2%            | 1,405          | 29.6%            | 7.3%          |
| - Sales Staff                    | 730          | 15.7%            | 805            | 16.9%            | 10.3%         |
| - Specialists and Technicians    | 515          | 11.1%            | 530            | 11.2%            | 2.9%          |
| - Skilled Trade Staff            | 115          | 2.5%             | 105            | 2.2%             | -8.7%         |
| - Operations Staff               | 210          | 4.5%             | 210            | 4.4%             | 0.0%          |
| - Service Staff                  | 550          | 11.8%            | 560            | 11.8%            | 1.8%          |
| - Administrative Support Staff   | 250          | 5.4%             | 220            | 4.6%             | -12.0%        |
| - Laborers and Helpers           | 105          | 2.3%             | 85             | 1.8%             | -19.0%        |
| <b>Contingent Staff</b>          | <b>250</b>   | <b>5.4%</b>      | <b>215</b>     | <b>4.5%</b>      | <b>-14.0%</b> |
| <b>Total Workforce</b>           | <b>4,645</b> | <b>100.0%</b>    | <b>4,750</b>   | <b>100.0%</b>    | <b>2.3%</b>   |

The following charts show a breakdown of BroadTek’s workforce by headcount and costs, as well as core/non-core job roles and low value add/high value add job roles. Figure 6: 2009 BroadTek Job Analysis depicts the overall composition of the organization into four key groups: jobs that are core but low value add, jobs that are core and high value add, jobs that are non-core and low value add and jobs that are non-core but high value add. Interestingly, if decisions regarding strategic investments in the workforce or targeted restructuring were to be made only considering the headcount costs, sub optimal outcomes might result. When implementing workforce interventions and making strategic investments in the workforce, it is crucial to quantify workforce productivity across job roles, track workforce costs and identify critical segments of the workforce.

Figure 6: 2009 BroadTek Job Analysis

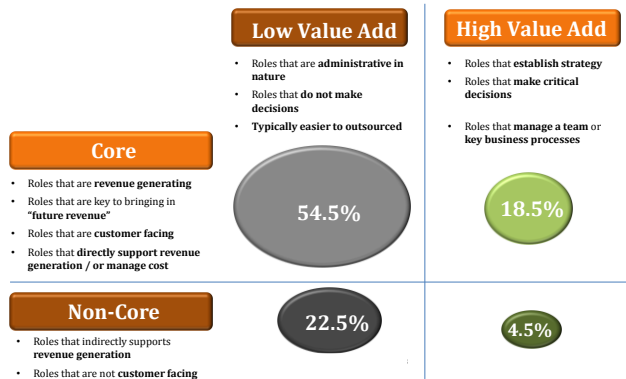
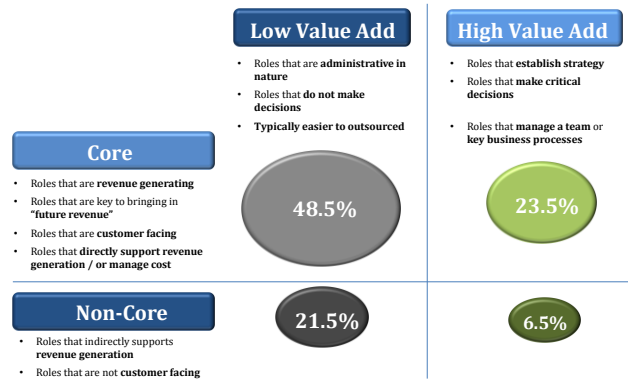


Figure 7: 2010 BroadTek Job Analysis



Core Workforce is defined as job roles central to the operation and function of the business regardless of job title, department or functional specialty. High value-add job roles are determined by an HCMI job role questionnaire and Workforce Image Map (WIM™) analysis.

Figure 7: 2010 BroadTek Job Analysis shows the same distribution by the four key groups: core low value add, core high value add, non-core low value add and non-core high value add. Although BroadTek was improving workforce productivity, Human Capital ROI and Return on Human Capital Investment faster than their competitors, in analyzing their workforce job roles it was discovered that in 2009, only 18.5 percent of their workforce were in core, high value add roles. However, BroadTek had made strides in re-allocating the workforce, controlling costs and hiring in some areas while investing in others. This meant that by 2010, BroadTek had increased its' percentage of workforce in core high value add roles as well as non-core high value add roles while controlling or reducing core low value add and non-core low value add roles.

Supporting analysis using the Human Capital Financial Statements (HCF\$™) was a key component for BroadTek in building the business case to make strategic investments in human capital, launching an organization wide workforce planning initiative, and providing strategic business insight to senior management and the Board of Directors. Armed with actionable information with which to truly manage their workforce, BroadTek is now on the leading edge of companies with respect to human capital analysis and planning, and is increasingly able to leverage human capital as their greatest asset and source of competitive advantage.

## Conclusion

Human capital and talent management are key differentiators of success, sources of competitive advantage, as well as a significant business cost. Future intellectual capital value creation depends on a thorough understanding of the workforce and ability to make strategic, data-driven workforce investment decisions. Therefore, the introduction of a standardized and transparent methodology for reporting of human capital adds value for all businesses, public and private, as a critical element of organization 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.

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## Acknowledgements:

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

HCMI (Human Capital Management Institute) is a workforce analytics software and services firm that provides organizations with powerful software, actionable intelligence and deep analytics expertise to deliver better business results through smarter workforce spending. Since our founding in 2008, HCMI continues to lead in human capital analytics capabilities with our SOLVE™ workforce intelligence platform, unique Human Capital Financial Statements HCF\$™ and the world's largest workforce productivity benchmark database. Our mission is to enable organizations to leverage their workforce as a source of transformational value creation.