**Finding 1:** Return on investment (ROI) of human capital, or return on human capital, is a measure that reflects the relationship between the capital invested in employees and organizational effectiveness. Literature indicates that companies primarily use variations of two methods to calculate ROI of human capital. One method creates a model to compare training costs to benefits and ROI, and the other uses figures from the income statement to create a ratio between profits and capital invested in employees (i.e., pay and benefits).

**The Goal and Purpose of Human Capital ROI**—In today’s business climate, “knowledge workers”—a phrase coined by Peter Drucker over 50 years ago that describes the class of employees known presently as professionals—and their exchange and production of knowledge are the most valuable asset for the majority of organizations. The models to determine the ROI of human capital measure the relationship between profits and the capital (i.e., pay and benefits or training) invested in employees.\(^1\)

**Two Models for Calculating ROI on Human Capital**—Literature highlights two basic models for calculating return on investment. Companies may use simplified or varied versions of these methods to calculate return on human capital. These methods are described below.\(^4,5,6,7\)

- **Saratoga Institute Analysis**—Jac Fitz-enz, founder of the Saratoga Institute, developed an analytical technique to measure the value of human capital, including the ROI of human capital. Fitz-enz’s ROI measure uses components of the income statement and establishes a ratio of dollars spent on pay and benefits to an adjusted profit figure, as illustrated below:

  \[
  \text{ROI} = \frac{\text{Revenues} - \left[ \text{Operating Expense} - \left( \text{Regular Compensation Cost} + \text{Benefit Cost EPTNW} \right) \right]}{\left( \text{Regular Compensation Costs} + \text{Benefit Costs EPTNW} \right) - \left( \text{Regular Compensation Cost} + \text{Benefit Cost EPTNW} \right)}
  \]

  \*EPTNW = excluding pay for time not worked

- **ROI Human Capital Model**—Edward Gordon, president of Imperial Consulting, developed the ROI Human Capital Model. The fairly sophisticated model, available as a software application, requires that companies pre-determine training goals and implement operating information before moving through the nine-step process to determine ROI. The focus of this model essentially creates a cost-benefit analysis of training by comparing training costs to ROI. The figure below outlines the nine-step process:

  **Figure 1: Nine-Step Process of the ROI Human Capital Model**

  | Step 1 | Calculate all direct costs associated with training costs. |
  | Step 2 | Calculate productivity lost while the trainee is in the training program. |
  | Step 3 | Calculate the total training program cost. |
  | Step 4 | Estimate expected hourly productivity benefit per trainee. |
  | Step 5 | Calculate actual quality benefit from training. |
  | Step 6 | Estimate length (time) of training effect using the standard discount rate formula (depreciation). |
  | Step 7 | Calculate the profit per trainee. |
  | Step 8 | Calculate the total training program benefits. |
  | Step 9 | Calculate ROI. |

A study by Deloitte & Touche finds that effective human capital practices can represent up to 43% greater market value between similar companies.\(^8\) Measuring ROI on human capital can assist HR executives to identify the areas that will allow a company to maximize the value of capital invested in employees.

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*For organizations—including knowledge-based organizations—intangible assets are often far greater than tangible assets. The bottom line: This is the knowledge era, and knowledge comes from humans—not machines or financial or natural resources.*\(^9\)

—Jack Phillips, Ph.D.

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Catalog Number: CLC14Q09HF
Finding 1: (Continued)

- **ROI Models of Varying Sophistication**—Organizations may use a less sophisticated version to calculate ROI on human capital, including the techniques described below:9,10

  - **Simplified Version of Jac Fitz-enz’s Technique**—The following ROI calculations use a simplified version of Jac Fitz-enz’s technique for calculating ROI of human capital described above:

    \[
    \text{Sales} - \text{All Operating Expenses}^* - \text{Payroll and Benefits} = \text{“Non-Employee” Operating Expenses}
    \]

    \[
    \text{Sales} - \text{“Non-Employee” Operating Expenses} = \text{“People Profit”}
    \]

    \[
    \frac{\text{Average Return on} \quad \text{“People Profit”}}{\text{Each Individual} \quad \# \text{ of Employees}^*} = \text{“People Profit”}^*\text{ preferably full-time equivalents}
    \]

  - **Calculating ROI Using Benefits and Costs**—This method of calculating ROI (as a percentage) reflects the correlation between net HR program benefits to HR program costs:

    \[
    \text{ROI} (%) = \frac{\text{Net HR Program Benefits}^* - \text{program costs}}{\text{program costs}} \times 100
    \]

  - **Common Mistakes to Avoid when Calculating ROI**—In order to accurately calculate ROI, companies should avoid the following errors:12

    - Attempting to achieve false precision
    - Attempting to measure the value of training that is not tied to a business result
    - Failing to discount the flow of future benefits
    - Failing to gain agreement up front on what metrics will be used to measure success and what standard of evidence will be used to determine whether success has been achieved
    - Focusing on the wrong metric
    - Overstating benefits
    - Understating costs

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William Schiemann, an expert in human capital and strategic measurement, suggests a five-step process for leaders to follow in building the equity of a company’s employees. Measuring and analyzing ROI of human capital, which falls under step 5, represents only one component of this process:11

1. Know the potential of the individuals within your organization and create a “people equity profile” to maximize the return on investment in people

2. Identify the drivers of people equity

3. Develop situational solutions

4. Use alignment, capabilities, and engagement (ACE) as a developmental tool

5. Track and measure the impact of initiatives on ACE—and business results

Note of caution: When analyzing data, companies should convert all data to monetary values, if possible. Companies should attempt to accurately convert hard data, such as output, quality, and time, as well as soft data—although often difficult to quantify—such as improved public image, increased job satisfaction, increased organizational commitment, reduced stress, and improved teamwork. However, if companies cannot convert soft data without being too subjective or inaccurate, the results will not be credible.

*net benefits = program benefits – program costs
Finding 2: The ROI of human capital places a quantitative value on an intangible asset (human capital). This metric also measures and communicates to senior management the effectiveness of human capital and impact of investments in human capital within an organization.

- **History of ROI**—ROI was developed in 1920s as a tool to place a value on the payoff of stock investments. It has become a tool used to measure a wide range of investments, including human capital investment. ROI of human capital provides a measure grounded in quantitative data that reflects the return on investing in human capital.13

- **Value of Measuring ROI of Human Capital within an Organization**—ROI of human capital can communicate how HR affects an organization. The comparison between the ROI of human capital before an investment (e.g., training, reaching developmental goals) in employees and after the investment reflect the financial benefit or cost of such a program.15

- **Strategic Impact of Employees**—Measuring ROI of human capital can assist HR in communicating and validating the value of HR programs. For example, this metric can demonstrate to senior executives the value of a specific HR process, such as training, by providing quantitative data that addresses the following questions:16
  - How is training affecting employee and organizational productivity?
  - How is training tied to our business strategies, and how is that link helping achieve the organization’s goals?
  - How do learning and performance initiatives improve our bottom line?

Finding 3: Companies measuring ROI of human capital may use a dashboard, accessible to senior executives, to centralize data and statistics. On a broader level, changes in annual ROI of human capital and financial measures across a wide cross section of companies reflect upswings or downswings in the economy.

- **Human Capital Approaches to Measuring Human Capital**—Companies may use human capital dashboards to consolidate metrics measured across the company and make this data available to key employees, or these metrics may be calculated as a component of a specific human capital management strategy. The following organizations calculate ROI on human capital as part of an overall human capital management strategy, as detailed below:17,18,19
  - CISCO Systems uses its HR dashboard to measure ROI of human capital, along with other metrics including headcount, diversity, turnover, employee satisfaction, and revenue per employee, to centralize this data and make it readily available to requestors.
  - VACO Company (pseudonym), a professional services company, also uses a human capital ROI scorecard. In 2001, the CEO requested people metrics from HR to enable him to monitor the financial impact of managers’ and leaders’ performance. VACO developed a dashboard highlighting financial and “people” performance across business units, and the CEO uses this tool to gain knowledge necessary to make resource allocation and talent development decisions.
  - Dow Chemical sought to create an approach to measure the value created by people and to give management a method to maximize the ROI. The organization planned to measure expected human capital return and actual capital return to link corporate and HR strategies, human capital investment and deployment, and future profitability.

- **Saratoga Institute Benchmarking**—The Saratoga Institute Workforce Diagnostic System Report Executive Summary presents financial results alongside employee productivity to reveal organization and operations trends and highlights. Between 2001 and 2003, Saratoga Institute has observed a 13% increase in the Human Capital ROI calculated using its Workforce Diagnostic System. The Revenue Factor, Income Factor, and Human Capital ROI, along with other metrics, contribute to the diagnosis that improvements of these measures illustrate a recovery in the U.S. economy.

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Finding 4: Measuring and analyzing ROI of human capital can improve bottom line performance, quantitatively pinpoint which programs need improvement, reflect HR’s strategic contribution to overall organizational effectiveness, and influence senior executives’ program investment decisions.

- **HR Program Selection Influence**—A 2003 report by the Conference Board indicates that ROI analysis can support HR program investment decisions. The report references work conducted by Jack and Patricia Phillips that builds upon Donald Kirkpatrick’s framework for evaluating which programs to allocate funding, as described below:*21 22

- **Cross-HR Process Applicability**—ROI process models can specify how data should be collected, processed, analyzed, and reported for a range of HR processes. The Phillips initially developed an ROI process model to analyze the ROI of training investments, but they have also applied this process to other human capital programs, including career development, diversity, executive education, global leadership, retention, safety and health programs, and wellness/fitness.*24

- **Focus on Areas of Improvement for HR Programs**—William Schiemann, CEO of Metrus Group, a human resources consulting organization, emphasizes the importance of investing in and measuring human capital. Tracking and measuring the affect of these investments allows HR executives to strategically accomplish the following:*25
  - Target underperforming dimensions (e.g., alignment, capabilities, engagement)
  - Measure the affect of investments on those dimensions
  - Adjust initiatives to increase their value

- **Potential to Improve Bottom-Line Results**—Eighty-six percent of 102 Fortune 500 and Europe 500 participants in the 2002 Conference Board study *Value at Work: The Risks and Opportunities of Human Capital Measurement and Reporting* responded that the main motivation for human capital measurement is to improve bottom line performance.*26

- **Value of HR Programs Demonstrated and Communicated**—An ROI analysis can assist HR in communicating the value of specific programs or projects. Literature and research reinforce that employee knowledge, often hard to quantify, is crucial to superior company performance. Measuring ROI within an organization can help demonstrate how specific HR investments affect overall organizational performance.*27

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“While there are other intangible assets, human capital is the only intangible asset that can be influenced, but never completely controlled, invested in wisely, or wasted thoughtlessly, and still have tremendous value.”*22

—Leslie A. Weatherly
SPHR, HR Content Expert
Society for Human Resource Management

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MEASURING RETURN ON HUMAN CAPITAL

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