Values as a Vital Supplement to the Use of Financial Analysis in HRD

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The use of financial costs and benefits to analyze human resource development (HRD) programs has become common practice. Because financial analysis tools have been used extensively in evaluating HRD programs, the effects of these tools should be examined. Like other instruments, financial analysis tools can produce benefits, but they also have limitations. This article describes the benefits and problems that stem from using HRD financial analysis tools and examines the need to use values as a supplement to financial analysis.

It has become fashionable to analyze the financial costs and benefits of human resource development (HRD) programs. Phillips (1994) pointed out that few other topics generate as much interest among HRD professionals as return on the investment. Not surprisingly, many recent books and articles detail HRD financial analysis models (e.g., Head, 1985; Mosier, 1990; Swanson and Gradous, 1988). Additionally, the literature contains case studies that document the use of financial analysis within functioning organizations (e.g., Jacobs, Jones, and Neil, 1992; Prifrel, 1985; Sleezer, Cipicchio, and Pitonyak, 1992). The emphasis on HRD financial analysis has been highlighted by Carnevale and Schulz (1990), who stated that HRD professionals reluctant to account for training need to reorient their thinking to face today's business realities (p. 2).

The possible effects of using these financial analysis tools, which can produce both benefits and problems, must be examined. This article describes the benefits and problems inherent in using HRD financial analysis tools and asserts that values must be considered in addition to any usage of financial analysis. An examination of some HRD financial analysis tools and a description of how practitioners use them provide the basis for this discussion.

Financial Models for Measuring HRD Programs

Gilbert's (1978) theorems for defining, measuring, and engineering human performance are considered seminal in the HRD field. In describing his first

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theorem, Gilbert noted that "human competence is a function of worthy performance (W), which is a function of the ratio of valuable accomplishments (A) divided by costly behavior (B)" (p. 18). Worthy performance, then, is that performance "in which the value of the accomplishment exceeds the cost of the behavior" (p. 17).

HRD professionals have expanded on Gilbert's work and developed mathematically based formulas for measuring the financial aspects of their programs. Among the books on the topic are *Training Cost Analysis* (Head, 1985), *Costs, Benefits, and Productivity in Training Systems* (Kearsley, 1982), *Calculating Human Resource Costs and Benefits* (Spencer, 1986), *Measuring Return on Investment* (Phillips, 1994), and *Forecasting the Financial Benefits of Human Resource Development* (Swanson and Gradous, 1988). These books present specific formulas and forms for calculating costs, accomplishments, and worthy performance. For example, according to the FFB model, the financial benefits of a program are determined by subtracting the costs of the program from the forecasted performance value of the program.

Application of Financial Analysis Models

The literature documents many applications of financial analysis models for measuring HRD efforts. Carnevale and Schulz (1990) identified how some companies, such as Polaroid, Upjohn, Vulcan Materials, AT&T, Arthur Andersen, Aetna, and Chase Manhattan Bank, rely on financial analysis models when making corporate training decisions. Carnevale and Schulz noted that Polaroid's management has decided to undertake training only if it will affect the bottom line. Further, Polaroid evaluates training programs with the same standards and units that local managers use as performance standards.

More detailed examples of HRD financial analyses are available in a recent book by Phillips (1994), which provides eighteen cases. For each case, the author describes a specific situation, the tools and processes used, and the outcomes. Other research studies document specific processes and the results of using financial tools. Jacobs, Jones, and Neil (1992), for example, documented the financial benefits of structured on-the-job training. Sleezer, Cipicchio, and Pitonyak (1992) documented financial worth as part of a larger evaluation effort to assess the effectiveness of two HRD programs: a computer training course and a total quality flowcharting course. Swanson and Sleezer (1989) reported the process and results of calculating the financial worth of an organizational development program.

A brief examination of these cases reveals that HRD professionals currently use financial tools for both strategic and tactical decision making. In addition, they use the tools to justify programs, direct resources, and rationalize choices. Given the proliferation of the techniques and tools of financial analysis, it is important to examine some of the benefits and limitations in using financial analysis in HRD.

Benefits and Limitations in Using Financial Analysis Tools

Financial analysis tools offer many benefits. First, these tools help HRD practitioners to look at their programs through customers' eyes and to ask strategic questions—for example: What does this program really do for the customer, and at what cost? These tools do more than pose strategic questions; in many instances, they can help identify the relevant customer. These tools can also help HRD professionals answer such questions using a language that all customers understand: basic cost.

A second advantage is that these tools guide practitioners in talking with other stakeholders about their programs. Effective use of these tools requires HRD practitioners to acquire broad-based information about their program from a performance perspective. Financial analysis can then serve as an impetus for communicating with customers and other stakeholders about program expectations and for gaining consensus about potential accomplishments and costs.

A third advantage is that HRD financial analysis tools provide a rational way of making decisions. Numbers can be inserted in a formula, calculations are made, and answers are obtained that seem hard to dispute. Because HRD financial analysis tools rely on logical and reasoned processes that fit with most organizations' budgeting processes, these answers can be used within many departments, or firms, to justify current budget allocations or to lobby for additional resources. As Mosier (1990) pointed out, training and development is big business; therefore it should be evaluated in the same way as other large investments, in terms of costs and benefits; the same applications that are used to justify capital, land, or other resources can be used to justify training and development (p. 45). The use of financial analysis tools facilitates comparisons of HRD programs with other types of investments required for an organization's operation and growth.

Financial analysis tools can be a powerful asset for HRD professionals but only if they are used appropriately and if their limitations are understood.

One of the limitations of these tools is that they are unidimensional. They can be compared to a grocer's produce scales, which measure weight while ignoring other important produce characteristics, such as freshness, smell, and visual appeal. Similarly, financial analysis tools capture only those aspects of performance that can be translated into dollars and cents. They ignore characteristics that may be important to the organization's long-term success that cannot be translated into financial terms, such as loyalty and company image (although arguably those values may be influenced by financial ramifications).

A second limitation of HRD financial analysis tools is that they have difficulty measuring aspects of performance where the feedback between action and effect is not immediate or direct. Taylor (1994), in a review of Collins and Porras's book, *Built to Last: Successful Habits of Visionary Companies* (1994),



stated that these authors examined great companies of the industrial era for lessons on the organization of the future. According to Taylor, Collins and Porras found that the first achievement of great companies is not crafting a visionary product and then riding the product's life cycle but creating shared meaning, that is, building organizational traits. Although most would agree that HRD professionals should play a key role in this task, using only financial tools for measuring the effects of such efforts would be difficult at best.

The final limitation of HRD financial analysis is that it is only as useful as the information and values on which it is based. The analyst's values or biases affect the analysis process and the results. Gilbert (1978) stated that "great accomplishments are not worthy if the cost in human behavior is also very great. In my opinion, the Egyptian pyramids stand as silent monuments to worthless achievement, although the subculture of knowledge would have us honor them" (p. 18). Gilbert then illustrates this statement with a decision based on his personal value system and simultaneously acknowledges an alternative perspective. As this example illustrates, an actual situation can elicit multiple paradigms of worthy performance, valuable accomplishments, and costly behavior. If an analyst uses a paradigm for performance that does not fit well with the actual situation, then the resulting benefits, although written in concrete terms, could function within the organization as a vehicle for misinformation. Kauffman (1980) illustrated this point with a story of a hotshot salesperson who, heeding the directives of management to sell, almost destroyed the company's credibility by writing more orders than manufacturing could produce and thereby creating a major system failure.

Many HRD financial analysis cases reported in the literature rely on traditional paradigms of individual and organizational performance. For example, many of the cases in the Phillips (1994) book focus on improvements in the current situation.

So how useful are the current paradigms for performance? Taylor (1994) pointed out that most of the ideas about work and organization that were born in the age of the machine do not apply today in the age of the network. Moreover, understanding the promises and challenges of work in today's economy requires radically new models and metaphors that go well beyond the stale rallying cries of teamwork or empowerment (p. 66).

Some of the new models being developed rely on systems and chaos theory; they recognize the importance of trial and error, experimentation, messiness, and conflict. The current HRD financial analysis tools, however, do not recognize that behaviors viewed as costly from one perspective (e.g., a shortterm perspective) could be beneficial or even necessary from another perspective (e.g., a long-term perspective).

Values

When HRD professionals and corporate decision makers determine value to mean the bottom line, or economic value alone, they are choosing to adhere



to a philosophy defined by early classical economists and Marxist philosophy where labor, and only labor, is seen as the true origin of every value (Janowski, 1993, p. 43). More representative of contemporary times, Guy states, "Western society is so enamored of the efficiency and productivity of its space age technology that any activity that is not efficient and productive simply does not, literally, measure up, and so is of little or no value" (1991, p. 287). What then becomes of the value cost factor to individuals, or teams or corporations? How do human values and corporate values fit in the evaluation tools of predicting and measuring high performance? If personal values that carry little direct financial value are powerful enough to affect team values, and team values ultimately have the power to influence corporate values and vice versa, then it cannot be denied that the individual value of one can cripple the overall value of the larger whole.

As Molière notes in *Les Précieuses Ridicules*, "Things are worth what you make them worth" (Rawson and Miner, 1988, p. 389). This idea could certainly speak to such issues as homelessness or even the intrinsic beauty of a troll doll. How can we not consider the power of these value systems? Karp and Abramms (1992) stated, "In organizations, clear values drive mission statements, strategic plans, and effective, result-orientated behavior" (p. 38). Values are not simply superficial addendums that identify human differences; they provide a framework from which all processes and fact patterns can be constructed. When an organization is found operating in chaos, quite possibly the value system of the organization is colliding with the values of groups and individuals who comprise it. Deal and Kennedy (1982) stated that "values are the bedrock of any corporate culture" (p. 21). Caffarella and O'Donnell (1987) write, "These values constitute a philosophical position on what the organization thinks is important. In a way, the values can be considered the organizational personality, and this can set one institution apart from another" (p. 4).

Abbarno (1993) illustrated the importance of values when considering the role of an individual and the moral character that is acted out by individuals in their life roles. He noted that "your identity as a moral character permeates your conduct and establishes expectations among members of the community" (p. 311). Clearly values embrace a cost that must be analyzed when evaluating performance. "Ethical people can be brought down by serving in a bad organization," cautions Brown (1987), "just as people with questionable ethical integrity can be uplifted, or at least held in check, by serving in a good one" (p. 68).

The use of HRD financial analysis tools in organizations reflects certain values—a strength but also a limitation. One way of seeing things is simultaneously a way of not seeing other things. To minimize this limitation of HRD financial analysis, it is important to consider values and to ask the following questions:

- 1. Whose values are reflected in the analysis?
- 2. Are the values reflected in the analysis representative of individuals, a group, or the dominant culture?



- 3. How do the calculations and results change if the values of other individuals or groups are used?
- 4. Are there values unexamined so far that play an essential part in the financial analysis being conducted?

A study by Cox (1991) that focused on measuring aspects of successful teamwork found that, "most important of all, the teams that are truly valueadded to their organizations are those committed to a set of core values that ensure quality performance" (p. 21). If a commitment to core values is important to performance, how can it be evaluated? Who determines those core values? How can organization members be encouraged to buy in to them? And exactly how much are core values worth in financial terms?

The Disney organization is frequently identified as a successful organization that relies on training for sharing and reinforcing its culture. The theme park's employees learn that they are on stage for a performance while at work and are taught the importance of maintaining their persona. Because the effects of these training efforts pervade the organization, financial analysis tools alone cannot be used to separate the economic worth of the training. Values are important but difficult to quantify. Professionals in HRD cannot disregard data because they have been unable to develop tools to measure or control for them. At a minimum, the four questions listed above must be considered in addition to the financial analysis.

Conclusion

The financial analysis that is conducted in an organization reflects the values of the person doing the analysis and his or her understanding of essential individual and organizational performance. These financial analysis tools provide many benefits, and HRD professionals can use these tools to make decisions, consider programs from their customers' perspectives, and justify budget requests. Using the financial language of business is key for HRD professionals who want to be considered as peers in their clients' organizations.

Nevertheless, there are limitations to using HRD financial analysis tools. Among them, it is often difficult to measure values within an organization; yet as HRD professionals, we must find ways to measure all important data, not just the data that are easy to quantify. A lack of clear understanding exists within the HRD profession in understanding the components of organizational performance and how these components interact to influence process and outcome. Senge (1990) and others have pointed out that the perception that the world is created of separate, unrelated forces is an illusion. Yet the HRD financial analysis tools available today measure a single benefit (money) of a single force (an HRD program). The use of values can broaden the base of the evaluation from a unidimensional financial analysis to include other factors brought forth by the consideration of values.

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Developers of these tools might consider how to project a better intellectual grasp of the interactions that influence worthy individual and organizational performance by creating more sensitive measurement tools. These tools need to indicate the relationship that organizational and employee values may be playing in the analysis. One method might be to state the philosophy or the values to be considered when interpreting the instrument. Another would be to highlight or shade areas on the instrument that are value ladened with organizational and employee values and hold a possible potential for variance-for example, service to customers, treatment and consideration of employees' inputs, attitudes toward change, and long-term organizational goals. A service organization that has built its success on personal attention to its clients might score low in Gilbert's scale of efficiency, when in fact this would be a positive cost benefit to the company. Therefore, when tools are created by HRD professionals trained in teamwork, shared visioning, Total Quality Management, and other philosophies, it becomes understandable that everyone engages his or her own values in the work product, whether that individual is the author of the instrument, the HRD practitioner, or the organization itself. This point was evidenced in the example of Gilbert and the pyramid.

Even when financial calculations are accurate, they are limited by the scope and values of the analyst who created the instrument, the practitioner who chooses the instrument, and the decision makers within organizations who evaluate the outcomes of these instruments. Some organizations are looking for long-term market shares, while others seek an immediate market share. These interests could significantly affect the methods the organization employs and therefore need to be considered in the development of financial analysis tools. Not all companies encourage teamwork, training, or even customer service. Some companies employ aggressive telemarketing techniques that function with financial success in total isolation. It would not be appropriate to include the values of teamwork when this value does not exist in the mission of this type of organization. These examples make it easy to see why costbenefit analysis could be significantly strengthened by the inclusion of values.

Practitioners need to be aware of the values of the organization when selecting cost-benefit analysis tools and choose one that meshes with the philosophy of the organization. If customer service is valuable to an organization, it is appropriate to use a financial analysis tool that positively values the time spent on providing that service. It is also important that practitioners remove their biases as well; otherwise the results may be skewed.

Organizations need to be aware of their institutional value biases when appraising the results from these tools. The selection of tools needs to be judged against the vision statements of the organization to ensure that what is measured is what the organization truly values and is in alignment with the goals and objectives of its mission.

Financial analysis tools provide HRD professionals with a new view of HRD's contribution to individual and organizational performance. Without the



addition of value in that analysis, however, the analysis is incomplete. Consider an analogy from the development of astronomical tools. When Galileo first constructed the lens telescope for astronomical purposes in 1609, this powerful tool revealed new views of the sky. He used the telescope to discover the four brightest moons of Jupiter, lunar mountains, sunspots, and the starry nature of the Milky Way. In 1979, the substantial advancements in astronomical tools allowed a closer and more detailed look at Jupiter's atmosphere with *Voyager I.* We obtained a better picture of reality and learned of additional satellites and moons. Now imagine the future possibilities of using both financial analysis tools and values in the analysis of HRD programs: enlarged possibilities and capabilities.

References

Abbarno, J. M. (1993). Role responsibility and values. Journal of Value Inquiry, 27, 305–316.

- Brown, A. (1987). Is ethics good business? Personal Administrator, 32, 67-70.
- Caffarella, R. S., & O'Donnell, J. M. (1987). The culture of adult education institutions. Life-Long Learning: An Omnibus of Practice and Research, 11, 4–6.
- Carnevale, A., & Schulz, E. (1990). Economic accountability for training: Demand and responses. Training and Development Journal, Supplement, 44 (7), S2–S4.
- Cox, A. (1991). The homework behind teamwork. Industry Week, 240, 21-22
- Deal, T. E., & Kennedy, A. A. (1982). Corporate cultures. Reading, MA: Addison-Wesley.

Gilbert, T. F. (1978). Human competence: Engineering worthy performance. New York: McGraw-Hill.

Guy, A. (1991). The role of Aristotle's praxis today. Journal of Value Inquiry, 25, 287-289.

Head, G. E. (1985). Training cost analysis. Washington, DC: Marlin Press.

- Jacobs, R. L., Jones, M. J., & Neil, S. (1992). A case study in forecasting the financial benefits of nonstructured and structured on-the-job training. *Human Resource Development Quarterly*, 3 (2), 133–140.
- Janowski, W. K. (1993). Discoveries as the origin of modern economic values. *Journal of Value Inquiry*, 27, 43–48.

Karp, H. B., & Abramms, B. (1992, Aug.). Doing the right thing. Training and Development, p. 41.

Kauffman, D. (1980). Systems 1: An introduction to systems thinking. Minneapolis: S. A. Carlton.

Kearsley, X. (1982). Costs, benefits, and productivity in training systems. Reading, MA: Addison-Wesley.

Mosier, N. R. (1990). Financial analysis: The methods and their application to employee training. Human Resource Development Quarterly, 1 (1), 45–63.

Phillips, J. J. (1994). Measuring return on investment. Alexandria, VA: American Society for Training and Development.

Prifrel, R. (1985). Forecasting the financial benefits of quality-based electronics manufacturing training. Unpublished master's thesis. University of Minnesota. St. Paul.

- Rawson, H., & Miner, M. (Eds.). (1988). The new international dictionary of quotations. New York: Signet.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.
- Sleezer, C. M., Cipicchio, D., & Pitonyak, D. (1992). Customizing and implementing training evaluation. Performance Improvement Quarterly, 5 (4), 56–75.

Spencer, L. M. (1986). Calculating human resource costs and benefits. New York: Wiley.

Swanson, R. A., & Gradous, D. B. (1988). Forecasting the financial benefits of human resource development. San Francisco: Jossey-Bass.

Swanson, R. A., & Sleczer, C. M. (1989). Determining the financial benefits of an organizational development program. Performance Improvement Quarterly, 2 (1), 55–65.

Taylor, W. C. (1994). Control in an age of chaos [Review of the book Built to last: Successful habits of visionary companies]. Harvard Business Review, 72 (6), 64–76.

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