

Human Asset Measurement: A Comparison of the Artifact-Based Approach versus Input Methods

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While the importance of measuring the value of human assets in organizations is not in question, the acknowledged preferred method and the assurance of accurately measuring them have been topics of debate for several decades. Professionals in both the fields of Human Resource Management and Accounting have worked for years to develop a workable method of measurement that provides mutually agreeable results that ultimately promote organizational success. This article is an attempt to evaluate two current contrasting approaches of human asset valuation with one view advocating the traditional method of input valuation while the other promotes an artifact-based output approach.

INTRODUCTION

One of the major challenges facing both Human Resource and Accounting professionals for years has been the need to accurately and completely assess the true value of their human assets. Repeated efforts to develop a system of intangible asset valuation have focused on a wide variety of methods and techniques which, while slowly approaching the overall desired outcome of accurate human asset valuation, have not yet reached a point of universally acceptable protocols.

For many years organizations have strived to get better control of gauging the level of organizational performance based upon the quality of its human resources. Due to the fact that there are considerable costs to securing capable and committed employees who must be trained and organized into effective working groups to achieve organizational success requires that an accurate accounting of both the investment in human resources and their achievements be undertaken (Pyle, 1970). The issue of attempting to determine the value of human assets is a very old concept studied by both economists and sociologists alike (Cannon, 1993). The debate of the value of labor and its ownership is rooted in classical economics that has extended over the centuries from the early human struggles of slavery to the labor movement of the industrial age of the late nineteenth century. The end of the specific ownership of human assets mercifully came to an end in the United States in the mid-nineteenth century. In addition, several decades later the declaration that human labor as a property right was ended by the Clayton Act of 1914 (Kutler, 1962). While both did much to do away with the stigma of human assets as owned property, they

did not provide an answer to the issue of the value that labor provides to an organization or how to accurately evaluate it. Therefore, the need to measure the contributions of human resources as one gauge of success of organizations has persisted for many decades and thus became one of several significant business issues studied throughout the twentieth century.

EARLY HUMAN ASSET VALUATION

The Origins of Human Resource Accounting

One of the earliest attempts to address the value of human assets in the Accounting profession came in the form of applying economic reasoning to valuation issues, including those related to human resources (Scott, 1925). Scott (1925) acknowledged that while the accounting treatment of intangible assets such as what we now refer to as human resources, created some controversy the possession of a force of trained workers should be valued in some manner on an organization's balance sheet. The first significant Human Resources emphasis of identifying people as valuable resources came from organizational psychologists who tended to view the employee – management leadership interface as a way to promote a “human resource perspective” of the workforce versus the more traditional “personnel” idea of workers as passive tools of the organization (Likert, 1961). This movement no doubt led to the significant innovations seen since the 1960s in the transformation of personnel management as a caretaker function to the more strategically-based and forward looking concept of human resource management. In addition to the emerging concepts of human resources as different from personnel management, the early focus of developing of HRA came from deriving its key elements from other research areas such as the economic theory of capital, psychological theories of leadership effectiveness and the measurement of corporate goodwill (Flamholtz, 1999).

Stages of HRA Development

The key inspiration for taking the early academic debates of combining accounting practices with the valuation of human resources to an application form came when it was suggested that organizations develop financial reports for external uses (Flamholtz, Bullen and Hua, 2002). The development of these external documents was advocated as a way to show investors the extent to which human assets of an organization had increased or diminished over a relevant period of study and therefore influencing stock investment decisions (Hermanson, 1964; Likert, 1967). Interestingly, in the few subsequent years after these external investment documents were actually developed there was evidence of a correlation between a firm's investment in its human assets and its future profitability (Hendricks, 1976).

The R. G. Barry Experiment

The actual concept of Human Resource Accounting (HRA) traces its early stages of development to the research done at the University of Michigan by a research team which included Rensis Likert, R. Lee Brummet, William Pyle and Eric Flamholtz (Flamholtz, Bullen and Hua, 2002). In 1966, William Pyle along with the management of R.G. Barry undertook the effort to report the value of human assets based on the current cost basis. Starting in 1967, R. G. Barry, a leisure footwear company in Columbus, Ohio, employed HRA to report the value of its human assets as associated with its annual reports and financial documents developed for external analysis and did so for several years (Flamholtz, 1973). While various organizations and investors found HRA information to be of some use in investment decisions, organizations soon realized that further research to refine the procedures for developing and using HRA documents for financial decision-making was proving to be too costly while the benefits were uncertain or were not necessarily benefiting individual sponsoring firms (Flamholtz, Bullen and Hua, 2002). Therefore, almost as quickly as it appeared in accounting and financial documentation circles, HRA virtually disappeared from sight until the 1980s.

Renewed Interest in HRA

The shift of the world's developed economies from manufacturing to service economies spurred on the renewed interest in HRA that came in several forms during the 1980s and 1990s. Since the survival, stability and growth of organizations was to be based more on human assets and their capabilities as compared to previous periods that relied more on physical assets, many organizations decided to turn to HRA as a system to monitor and measure success. Among the organizations who were willing to take another look at Human Resource Accounting was the U.S. Office of Naval Research who studied applying the concepts of HRA to the Navy, banking institutions pursuing ways to determine the true cost of replacing tellers and management trainees and several other industries attempting to account for the value of human resources in situations dealing with employee turnover and the costs and benefits associated with layoff decisions (Flamholtz and Geis, 1984; Flamholtz, 1999). Throughout this stage of renewed interest, as well as the earlier work in the field, the developments seen in HRA were truly a result of the successful collaboration between the forces behind the academic research and those charged with the practical application of HRA in corporate accounting refuting a widely held notion that research and practice tend to be unrelated (Flamholtz, Bullen and Hua, 2002). Further evidence of this realization of the successful partnership between academics and business practice came in the form of the development of the Balanced Scorecard by Robert Kaplan at Harvard and David Norton, a business consultant and the Skandia Navigator developed at Stockholm University by Jan-Erik Grojer, Ulf Johansson and Brigitta Olsson and Leif Edvinsson of the Skandia Group, an international organization that offers insurance and financial services (Bullen and Novin, 2009; Flamholtz, Bullen and Hua, 2002).

CONTEMPORARY HRA PRACTICES

The Balanced Scorecard

The Balanced Scorecard is a measurement tool that focuses on four perspectives, which include the financial perspective, customer perspective, internal business process perspective, and learning and growth perspective. While the balanced scorecard traditionally places financial aspects, such as profitability and risk at the top of the list, each perspective is important to utilize when forming a business strategy. The Balanced Scorecard enables a company to set measurements that can be used to assess company performance and future progress. Benefits of a balanced scorecard are achieved by defining the company strategy, communicating it consistently, and linking it to change (Kaplan and Norton, 2001).

Skandia Navigator

Although considered fairly similar to the Balanced Scorecard approach, the Skandia Navigator focuses on the company as a whole instead of just highlighting finances and strategy. The Skandia Navigator is used to measure the intellectual capital and knowledge assets (intangibles) within a company. The navigator is also aimed toward value creation within a company. The navigator breaks the company down in five focus-based sections; financial focus, customer focus, process focus, human focus, and renewal & development focus. Each focus, except the financial, is considered to be intangible assets. Between the Balanced Scorecard and Skandia Navigator, these are used and considered to be the contemporary practices in HRA (Edvinsson, 1997).

HRA and Human Resource Implications

Human Resource Management as we now know it traces its beginnings back to the behavioral science movement of the post-World War II era. Like their classical management counterparts before them, behaviorists were looking for better ways to manage in organizations. However, the behavioral approach stressed the need for human skills of employees rather than just technical skills and the value that these human skills added to human capital (Lussier, 2009). Pioneers in the field of behavioral management research such as Maslow, Drucker, Argyris, McGregor and Herzberg were becoming rapidly more aware that employees, especially those who were motivated and satisfied, were the real driving force to organizational success in the market. Others such as Likert (1961) and Odiorne (1963) advocated the

value of human assets (human resources) to provide organizations with growth, vitality and a competitive edge in the market place. While it did take some time to get over viewing employees as a "necessary expense," organizations have basically embraced the idea that investing in state-of-the-art staffing, training and compensation practices along with new technology is a good way to increase competitiveness (Cascio, 1991; Snell and Dean, 1996; Noe et al, 2009).

The real debate in Human Resource Management (HRM) is not the viewing of employees as valuable elements of human capital and assets, but rather the method of determining their value to the performance of the organization. While some in HRM view the value of human assets in terms of HR inputs such as recruitment, orientation, training and retention others point to approaches for the capitalization of separate HR outputs based on accounting recognition of results known as artifacts (artefacts) (Tollington and El-Tawy, 2010). The HR input orientation in HRM is reflected in a widely accepted view of employee competencies that are rare, inimitable and non-substitutable (Barney, 1991). Since the human resource function in organizations is viewed as an area devoted to identifying, developing and retaining human resources to support organizational success, it is not difficult to see why many human resource professionals are orientated to an input based approach to assessing the value of human capital although the output valuation method is gaining support and momentum as time passes.

Regardless of the method of asset valuation, Human Resources is acknowledged as a strategic partner in helping organizations achieve a competitive advantage. Therefore, HRM should not necessarily be totally defined by merely the functions it performs but more by what it can provide to organizations in terms of well trained and empowered workforce as measured by what are referred to as human capital deliverables which are employee behaviors that result in positive business outcomes (Ulrich, 1998). Human assets and human capital deliverables have been viewed as intangibles by accountants much in the way that things such brand equity, intellectual property and patent rights create value to organizations (Pfeffer, 2007). The continued shift to a service and knowledge based economy make the market valuation of human capital as intangibles more important and critical to the success of the organization because of the increasing proportion of intangible assets contributing to a firm's market value (Boynton, 2003). Therefore, since HRM is a key ingredient in developing human assets that create human capital deliverables, its role has taken on a new meaning (Beatty, et al, 2003).

Input versus Output Oriented Human Asset Valuation

The Input or Cost Approach can be regarded as assessing the costs associated with recruiting, training and hiring/firing of employees for the company. People are looked at as resources and when they leave the company, the cost recorded is a cost to replace them similar to the method in which inventory items are recorded (Puttu, 2009). The benefits to this approach are that assigning actual costs to employees makes it much easier to record the costs on a financial statement. Not only do salaries show how well the company is doing in regards to the HR aspect, they can present training costs and recruiting expenses as well. This data can be compared historically and within the industry for a comparison between competitors. This is a low-cost alternative for HRA in the respect that assigning value to items is a practice carried out every day in almost all companies. The drawback to the Input approach is that every employee does not add the same amount of value through their work and cannot be equally represented by training because some people learn faster than others. This can be problematic within a company when employees are not trained correctly and the "turnover rate" increases. In addition, the accurate accounting of the costs of typical human resource functions associated with employees such as recruiting, selection, placement, orientation and training are sometimes difficult to determine if the issue of historical versus replacement cost is taken into account as to reporting human asset value (Flamholtz, 1999).

Output Approach – Artifact Oriented Valuation

The basic premise of the Artifact Approach is that it is more important to value what is created by employees and the financial significance of their outputs rather than to be concerned with the investments made in the development of the employees as valuable organizational contributors (Tollington and El-Tawy, 2010). Therefore the Output or Artifact Approach measures the overall worth of each individual by

the advantages and accomplishments they bring to the company in terms of intellectual creativity related to activities such as leadership and communication skills as well as employee commitment (Carson et al, 2004). In addition, while artifacts by nature are considered intangible, the argument can be made that their value can be measured in the same way that goodwill is typically accounted for as an asset (Napier and Power, 1992). While a company may spend the same amount recruiting and training each employee, no two employees will bring the same value to the company. Individual work ethics and experiences will create unique products that provide the company with distinct benefits. The benefit to utilizing the output method of human resource accounting is that a company can select the most valuable prospective employees for the job, in order to create a significant competitive advantage (Puttu, 2009). Although the value created by the output method cannot be argued, drawbacks to the method include difficulty measuring prospective employee value and additional time required for hiring (Puttu, 2009).

CONCLUSIONS

Regardless of the method of human capital valuation, the biggest challenge in applying HRA has been determining the monetary value of human assets related to the areas of human resource costs and investment and the worth of employees (Flamholtz, 1999). The input methods of HRA are based on the costing of elements such as the recruiting, selection, orientation and training of employees. Economists often discuss cost in terms of a market value of the relevant resources necessary to achieve a benefit or produce a good or service, or in this case human capital deliverables (Schiller, 2011; Ulrich, 1998). Therefore, it is fundamentally clear that the valuation of human capital based on this method acknowledges the sacrifice and effort put forth to acquire and develop human resources as key ingredients to the success of the organization. Accountants then are charged with the task of recording these various human resource endeavors into categories dealing with historical or original costs and replacement costs, which can further be classified as direct or indirect costs depending on the specific human resources function applied to human capital.

While the cost approach has proven to be a somewhat successful approach in human asset valuation it has its share of unresolved issues. Despite the fact that Accounting professionals have tried to satisfy the demands of those in Human Resources and upper management who want clearly established links between the value provided by human assets and organizational success, there are still nagging concerns such as the difficulty seen in allowing human capital investment to be valued as an asset because of the uncertainty of future value, an overly conservative view of accounting for assets and the potential ethical issues of putting a monetary value on people as commodities (Stovall, 2001). By way of overall comparison, the certainty of the initial cost of human assets seems to outweigh the uncertainty of future value created that may be difficult to measure and uneven among the outputs of the employees. The input method requires less time and uses consistent resources. For the business organizations that are not concerned with turnover rates or actual employee value, there is no reason to spend the effort searching for the best employees. For business organizations that are willing to apply the initial time and effort in valuing prospective employee output, the output method helps the organization find the most qualified individuals. After the initial phase, the benefits become significantly advantageous to the organization. While the developers of artifact approach offer some potentially compelling arguments on its behalf, much more research, time and experience are needed to push it into the mainstream of human asset valuation.

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