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Human Resource Accounting

by
Richard C. Fellows

B.S., University of Montana, 1969

Presented in partial fulfillment of the requirements for the degree of

Masters of Business Administration

University of Montana
1971

Approved by:



Chairman, Board of Examiners

Dean, Graduate School

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CHAPTER 1 INTRODUCTION

A statement commonly found in the president's letter accompanying many corporate annual reports is somewhat similar to the following: "Our employees are one of our most important and valuable assets." However, when one examines the financial statements, these assets cannot be found. The reader is unable to ascertain the value of this "valuable and important asset" from conventional accounting statements. Perhaps more important, the reader cannot determine whether the value of the human resources is increasing, decreasing or remaining unchanged.

These unmeasured assets are becoming increasingly more important with each passing year. The advancing technical complexity of modern business and the resulting increase in time required for personnel to gain skill and experience highlight the importance of this resource. A growing number of accountants, economists, sociologists, psychologists, and business executives are becoming concerned with the inadequacy of current management and accounting systems to account for human resources. As a result of this inadequacy, many of the decisions made by managers give only superficial consideration to the human resource factor.

The major premise of this paper is that the role of accounting should be expanded to include measurements of human resources within organizations. If this were carried out, decision-makers would be encouraged to give more consideration to both human resource investment decisions and to the human resource consequences of all their decisions. In this paper, the term "human resources" refers to an organization's personnel, from the top executive down to the hourly laborer.

The objectives of this paper are: (1) to point out the deficiencies of current accounting practice regarding human resources, thus showing the need for human resource accounting; (2) to explore and evaluate some possible methods of valuing and accounting for human resources; (3) to point out the benefits to be derived from using the various methods; and (4) to suggest a direction accountants might take in eliminating some of the deficiencies currently present.

Many writers feel that organizations incur substantial costs because of the inadequacy or lack of information concerning their human resources. One good example of this is the familiar cost reduction program. There are numerous actions management can take in reducing costs, many of which depend on the magnitude of the program. Some possible approaches to reducing costs are as follows: (1) reduction in personnel, especially in staff positions; (2) reduced budgets with accompanying closer control; (3) curtailed maintenance activities; (4) reduced research and development expenditures; and (5) introduction, extension or tightening of work standards to improve employee performance.¹

Rensis Likert of the Institute for Social Research at the University of Michigan has conducted extensive research into the effects of cost reduction programs on the human resources of a firm applying such a program. The following description of a typical cost reduction sequence relies heavily on his findings.

¹Rensis Likert, The Human Organization (New York: McGraw Hill, 1967), p. 84.

Cost reduction procedures can and often do result in rapid and measureable improvement in productivity and earnings. However, there are unfavorable consequences of the cost reduction program which remain hidden in the short run. Hostile reactions are apt to begin developing in the lower levels of management and with the non-supervisory employees. Some time later employee motivation, loyalty, attitudes and performance begin to deteriorate. Anxieties may also arise from a fear of being laid off.²

As confidence and trust in management declines, the adequacy and accuracy of communication is also reduced. This in turn influences the decision making process because the information available to management becomes less reliable. Thus, the entire organization's capacity to function effectively begins to decrease. Management is also faced with increased turnover, absenteeism, and waste; poorer labor relations; and a less satisfactory quality of product and service. When these unfavorable trends finally become evident, there are no measurements available to explain the true causes of these adverse shifts. Consequently a wrong diagnosis is often made, with corrective action being directed towards the wrong areas. Over time these trends result in decreased productivity, increased costs and consequently a decrease in earnings.³

²Ibid., p. 86.
³Ibid., p. 87.

In addition, the so-called cost reduction program has reduced the value of the human resources. This reduction has come both from personnel leaving the organization and the deterioration of employee loyalty, motivation, and attitudes. Likert has found that the hostile attitudes, uncooperative motivations and distrust of management are hard to reverse. When these feelings are deep-seated, it often requires a considerable length of time for even an extremely competent manager to bring about any significant improvement.⁴

A situation similar to the cost reduction program would involve a manager under pressure from his superior to increase the output, sales, earnings, etc. of his area of responsibility. This manager may be able to achieve higher levels of sales, output, or earnings in the short run by merely pushing his personnel a little harder. However, as was the case with the cost reduction program, employee loyalties, motivations and attitudes will likely start to deteriorate.

A third example of non-optimal executive action resulting from a lack of information concerning human resources is the conventional return-on-investment calculation.⁵ This rate of return is often relied upon by decision makers.

Consider the decision involving two proposals both of which involve a direct investment of \$400,000 in equipment and supplies. Proposal A

⁴Ibid., p. 87.

⁵James S. Hekimian and Curtis Jones, "Put People on Your Balance Sheet," Harvard Business Review, (January-February, 1967), p. 105.

requires the transfer of three technicians and six engineers to the project, while Proposal B would only require the transfer of one engineer and one technician to the project. Proposal A is expected to earn \$120,000 annually for the next five years, while Proposal B is expected to earn \$90,000 each year for the same number of years.

Also, consider the situation where an executive of a large corporation is evaluating the performance of two of his divisional managers. Division A, as a profit center, showed a 15 percent return for the most recent reporting period, while Division B reported a 10 percent return for the same period. However, Division B was established one year ago and is still training personnel, while Division A is an older division with experienced personnel.

In both of the above situations a conventional return-on-investment calculation would consider Proposal A superior to Proposal B and Division A superior to Division B. Closer scrutiny could easily reveal that Proposal B and Division B are superior after the human factor is included in the analysis. Because accountants reflect investments in human resources as current expenditures rather than capitalizing them over their useful life, an important part of the investment base is ignored. This incorrect investment base in turn yields an incorrect rate of return on investment. Assuming that decision-makers allocate funds to those projects having the highest rate of return, this situation will likely cause a non-optimal allocation of funds within the firm.

Various writers have suggested that "it is necessary to measure the value of human resources in order to encourage executives to

optimize the use of their resources, human as well as physical. Quantitative valuation of human assets would allow explicit planning of investments in people and permit meaningful choices between human investments and investments in other assets."⁶ It would even be more critical to value and account for human resources in those firms that are constrained by manpower rather than capital. In these firms human resources, not capital, would be the critical resource which must be allocated and utilized efficiently.

The conventional accounting practice of assigning all human resource costs to expenses also causes a distortion of a firm's net income, in addition to excluding human resources from the balance sheet. If a firm is investing in its human resources faster than they are being consumed, conventional accounting statements understate net income. Conversely, if human resources are being depleted more rapidly than they are being created, net income is overstated.

Even though human resources are not explicitly recognized in conventional accounting systems, examples of their implicit treatment are readily found. During recent years more and more large corporations have been acquiring small technically oriented companies - not for their physical assets, but for their skilled personnel. Business firms are acquired at sums substantially greater than the book value of their stated assets. A portion of this "excess" is usually due to the excess

⁶Eric Flamholtz, "A Model for Human Resource Valuation: A Stochastic Process with Service Rewards," The Accounting Review, (April 1971), p. 254.

of real value over book value on the physical assets but a substantial portion, often labeled as goodwill, is probably a measure of the value of a company's securities is often based more on the quality of its management and human technical know-how than on any other one factor.⁷ Finally, industries that are relatively more dependent on highly skilled personnel than on physical assets are usually characterized by a high ratio of stock price to book value.⁸

Reluctance to Measure and Account for Human Resources

Why has the accounting profession, specifically and the business community in general been reluctant to account quantitatively for human resources? There are probably numerous reasons, some of the more important of which will now be discussed.

Perhaps the most fundamental reason is that a firm's personnel are not legally owned. People are not slaves or chattel and thus should not be considered as assets. Obviously this is true concerning individual employees who can usually resign at any time. However, it is not so obvious in relation to the firm's labor force taken as a whole. Two writers maintain that as long as employees can be replaced, the labor force as a whole is always associated with the firm and thus can be

⁷R. Lee Brummet, "Accounting for Human Resources," The Journal of Accountancy, Vol. 130 (December, 1970), 63.

⁸Frederic Andrews, "Proposed Measurement of Corporate Goodwill May Curb Acquisitions," The Wall Street Journal, Vol. L (February 27, 1970), 1.

constructively regarded as being owned by it.⁹

As mentioned earlier, when a firm is purchased as a going concern there is often consideration given for its intangible assets such as customer goodwill and a high quality labor force. A firm's human resources can thus be purchased and in a sense are now "owned" by the acquiring firm.

Another writer feels that the legal ownership requirement mentioned above reflects an unjustified legalistic bias that accountants have reflected for many years. He maintains that "accountants should account for and monitor those things which are most significant in an organization without regard to their ownership status."¹⁰

A second factor that has deterred progress in human resource accounting has been the traditional accounting view of assets. Both the proprietary and entity theories of accounting insist that items must be owned to qualify as assets.¹¹ Thus under these theories human resources do not qualify as assets.

Another accounting concept of assets is one that was proposed in 1940 by two noted accountants, W. A. Paton and A. C. Littleton. They defined an asset as any factor acquired for production which has not

⁹Baruch Lev and Aba Schwartz, "On the Use of the Economic Concept of Human Capital in Financial Statements," The Accounting Review, (January, 1971), p. 109.

¹⁰Flamholtz, "A Model for Human Resource Valuation: A Stochastic Process with Service Rewards," The Accounting Review, p. 63.

¹¹Glenn A. Welsch, John A. White, and Charles T. Zlatkovich, Intermediate Accounting (Homewood, Illinois: Richard D. Irwin, Inc., 1968), p. 11.

yet reached the point in the business process where it may be appropriately treated as a "cost of sales" or as an "expense."¹² Paton and Littleton go on to say that "assets are in fact revenue charges in suspense awaiting some future matching with revenue as costs or expenses."¹³ It appears as though the crucial word in the preceding definition is "acquired." By hiring an individual, a firm acquires the right to this person's services, at least until he leaves the company. Is this what Paton and Littleton had in mind, or did they require a legal interest in the factor before it was considered acquired? It is difficult to determine from subsequent parts of their monograph which concept they had in mind. However, considering the date of their definition and the present state of human resource accounting, it appears as though a "legalistic" interpretation was made of their definition.

Economists have a somewhat different view of assets. One definition states that an asset is "any future service or series of services, in money or convertible into money, that may be reasonably expected by the proprietor (business entity)."¹⁴ This definition allows expected future labor services (human resources) to be treated as an asset because the business entity can utilize these resources to yield a

¹²W. A. Paton and A. C. Littleton, An Introduction to Corporate Accounting Standards (Evanston, Illinois: American Accounting Association, 1967), p. 25.

¹³Ibid., p. 25.

¹⁴Edward G. Nelson, "The Relation Between the Balance Sheet and the Profit-and-Loss Statement," The Accounting Review, (April, 1942), p. 136.

product or marketable service which will then bring the entity a money return.

Economists also distinguish between the agent and the asset. The agent is merely the instrument which will render a service while the asset is the future service or services. This concept is explained in the following statement by Edward Nelson. "A delivery truck, for example, is an agent. Future transportation is the asset."¹⁵

A recent accounting definition of assets, which attempts to incorporate the economic concept of assets, can be found in Accounting Research Study No. 3 published in 1962. In this study the authors state that: "Assets represent expected future economic benefits, rights to which have been acquired by the enterprise as a result of some current or past transaction."¹⁶ From this it appears the authors intend the asset to be the expected future services rather than the agent that will provide these services. However, later in their study the authors state that to qualify as assets, resources must be assignable to the entity, capable of transfer, and expressible in terms of money.¹⁷

According to the above definition, human resources still do not qualify as assets. If accountants had incorporated the concepts

¹⁵Ibid., p. 137.

¹⁶Robert T. Sprouse and Maurice Moonitz. Accounting Research Study No. 3 - A Tentative Set of Broad Accounting Principles for Business Enterprises (New York: American Institute of Certified Public Accountants, 1962), p. 8.

¹⁷Ibid., p. 19.

developed by economists into the theoretical structure of their discipline years ago, it is possible that human resource accounting might now be much more developed.

This leads directly to another factor that has restricted the development of human resource accounting; that being the necessity for an interdisciplinary approach. In the past few decades our advancing technology has brought about a great deal of individual specialization. This specialization and concentration has caused barriers to develop between disciplines and in turn these barriers have restricted progress on problems where an interdisciplinary approach is necessary.¹⁸

A fourth factor slowing the development of human resource accounting is the idea that these resources are difficult to measure objectively. On the surface this statement may seem reasonable; however, after further consideration it loses much of its validity. After reviewing much of the research that has and is being conducted in the area of human resource measurement and accounting, it appears that there is not as much "subjectivity" involved as one would initially think. With more development and refinements, measurements in this area will probably be just as objective as some accepted accounting procedures are today. Later sections of this paper should substantiate this.

¹⁸ Brummet, "Accounting for Human Resources," The Journal of Accountancy, p. 63.

The doctrine of conservatism, adhered to by accountants, is another reason human resource accounting has been slow to develop. Under this doctrine, accountants have elected to treat expenditures incurred in recruiting, hiring and training personnel as expenses rather than trying to determine what portion of these expenditures should be capitalized and what portion should be expensed. Ideally, according to the matching principle of accounting, these "personnel costs" should be treated as expenses in the periods in which the benefits result. If these benefits will be realized in a future period, they should be treated as assets.

CHAPTER 2
METHODS OF VALUING AND ACCOUNTING FOR HUMAN RESOURCES

Numerous methods are available to measure and account for a firm's human resources. The various methods will now be individually described and analyzed.

Capitalization of Salary Method

This method, proposed by James Hekimian and Curtis Jones, determines the value of a firm's human resources by capitalizing the salaries of its personnel using some pre-determined rate of return.¹⁹ It implicitly considers salaries as a charge (expense) for using human resources over a specified period of time. Conceptually it is similar to interest paid for the use of borrowed money.

To give an example, let us assume a given firm employs ten individuals earning the following annual salaries: Six make \$6,000; two make \$9,000; one makes \$11,000; and one makes \$15,000. Also assume that this particular firm uses a 10 percent rate of return in arriving at a value for its human resources. Now according to the salary capitalization method, this firm would value its human resources at \$800,000 (total annual salaries of \$80,000 X $\frac{100\%}{10\%}$) for the year being considered. An entry debiting human resources and crediting some special equity account could then be made to record the calculated value. Changes in value from one year to the next would merely adjust these two accounts by equal amounts.

¹⁹Hekimian and Jones, "Put People on Your Balance Sheet,"

Various factors limit the usefulness of this method. The first involves the looseness of the connection between an employee's salary and his value to the firm. Individuals receiving similar salaries seldom contribute equal value to a firm. Age, seniority, bargaining skills, and value to other employers may be given more consideration in setting salaries than an employee's real contribution to the firm.

A second limiting factor concerns the rate of interest to be used in capitalizing salaries. What rate of return should be used? As yet there have not been any suitable standard rates of return established for human resources.

Another deficiency of this approach to valuing human resources is that it fails to measure a very important part of the value of a human organization. Ignored under this approach is the value of effective working relationships, favorable employee morale, loyalty, motivation and attitudes. Changes in these factors are not reflected. The only changes recognized by the salary capitalization method are those due to salary changes.

Using the example given earlier, let us assume that the subsequent year's total salary commitment is \$85,000, an increase of \$5,000. Using the same capitalization rate, the value of the human resources would increase to \$850,000 ($\$85,000 \times \frac{100\%}{10\%}$), an increase of \$50,000. This \$50,000 increase could easily be due to a new wage agreement or periodic salary increase rather than the employees being worth more to the firm. The actual value of the human resources may have in fact declined but this method would not reflect such a change.

The salary capitalization approach is oriented completely to the balance sheet. Changes in the value of the human organization are never reflected on the income statement.

The only advantage this method exhibits is its simplicity. To arrive at the value of the firm's human resources, it is only a matter of determining the firm's total salary commitments and then multiplying this by the proper rate of return. However, this simplicity is far overshadowed by the limitations already discussed.

Acquisition Cost Method

Another method available to value and account for human resources is to determine the cost of acquiring these resources. R. Lee Brummet, Eric Flamholtz and William Pyle, all of the University of Michigan, have spent a considerable amount of time developing this method. The acquisition cost approach requires; first, that human resource costs be identified and separated from other costs of the firm. Those costs identified as human resource costs are then separated into asset and expense components.

Some outlays for human resources may be easily identified, as would be the case with travel costs incurred in recruiting and training employees. Tuition, fees, books, etc. for external training programs would also fall in this category. Various costs of internal training programs could also be identified without much difficulty.

Not all costs incurred in acquiring, training and developing employees are as easily determined as those just discussed. There are

numerous situations where cost allocations would be required. If a person is being paid while he is undergoing external training, his salary during this period should be capitalized. If the new employee is being trained internally and the individual administering the instruction is not carrying out his normal duties, both of their salaries should be capitalized. The situations described are just two examples of the allocation procedures that would be necessary in using the acquisition cost method.

Another group of human resource investments include the additional costs required during the period when the members of a firm are establishing effective working relationships with each other. Rensis Likert has labeled these cooperative working relationships the "synergistic" component. Likert maintains that it requires an appreciable period of time and involves substantial costs to build these effective relationships.²⁰

The difficulty of identifying investments in the synergistic component are varied, as was the case in identifying training costs. An example of an easily distinguishable investment in the synergistic component would be the cost of a program where a firm's managers (executives) are brought together and exposed to each other in an atmosphere conducive to establishing effective working relationships.²¹

²⁰Likert, The Human Organization, p. 147.

²¹Related to me by Richard K. Smith, Associate Professor of Accounting and Finance, University of Montana, Missoula, Montana.

Ideally, the salaries of the executives, while participating in these meetings, should also be considered a part of the cost of this program. More difficult allocations are involved when a new employee is on the job familiarizing himself with other personnel within the firm which his position requires he deal with. When he is in the earlier stages of learning, a portion of his salary should be capitalized as an investment in the synergistic component. As he becomes more effective in his dealings with other personnel, a lesser amount of his salary would be capitalized. Sophisticated measurement techniques will be required to determine salary allocations as well as other types of investments in the synergistic component.

When the "capitalized costs" have been determined, they are then classified into functional categories such as recruiting, hiring, training, development and familiarization. The next step is to allocate the amounts in the functional asset accounts to individual asset accounts for each employee. The synergistic costs are not allocated to individuals because they cannot be segregated by employee.

Now that an account structure has been established for capitalizing outlays for human resources, methods for recording the expiration of these assets must be developed. Amortization should be based on the life expectancy of the investment. Each outlay should be amortized over the period during which benefit is being derived from that investment. This is the same procedure that is now used in accounting for physical assets.

Investments in recruiting, hiring, orientation and general train-

ing provide benefits to the firm during the total time the individual remains with the firm. Thus a reasonable amortization period for these costs would be the individuals "expected life" with the firm. William Pyle, Director of Human Resource Accounting Research at the University of Michigan has developed a method of estimating the expected service life of an employee. The first step is to determine the employee's "maximum tenure" with the organization. This is equal to the employee's past tenure plus his maximum remaining tenure based upon the firm's mandatory retirement age. Since it is unlikely that every person will remain with the firm until age 65 an "expected tenure" figure is calculated. This latter figure is based on an assessment of the probability that a given individual will remain until age 65.²²

Theoretically, recruiting, hiring, orientation and general training costs are similar to the costs of organizing a corporation. Since organization costs are capitalized and amortized, this should reinforce the suggested method of accounting for these acquisition costs.

Investments in special skill training which are expected to have a limited life should be amortized over their expected useful life. One writer gives the example of training a computer programmer to use the FORTRAN language.²³ Because of the rapid technological changes in the computer field, this skill may be obsolete in a few years and

²²William C. Pyle, "Human Resource Accounting," Financial Analysts Journal, Vol. 26 (September-October, 1970), 78.

²³Brummet, "Accounting for Human Resources," The Journal of Accountancy, 64.

thus have no value to the firm. The firm should then amortize these training costs over the expected useful life of the FORTRAN programming skill.

Write-offs of human resources are necessary in various situations. Terminations due to resignation, firing, or death would all require adjusting entries. When a person's services are no longer available to the firm, the investment that firm had in the individual should be written off as an extraordinary loss. The individual's "personalized asset account" should also be closed out at that time. Adjustments would also be in order for serious health deteriorations. If an employee is hampered in performing his assigned duties he is not worth as much to the business. An estimate would have to be made as to the employee's degree of usefulness. After this is determined, a part of his "personalized asset account" would be written off as a loss. Adjustments would also be necessary for unforeseen skill obsolescence. Using the FORTRAN example mentioned earlier, let us assume a company invested \$1,000 in training a computer programmer in FORTRAN. A few months later the company invests in a new computer system that utilizes a COBOL compiler. The \$1,000 investment in FORTRAN training is no longer a direct benefit to the company. As such, this investment should be written off as a loss.

Recording expirations of investments in the "synergistic" component present more difficult problems. Under some circumstances these investments might yield continuing benefits and as such would be free from amortization. A possible example of this would be an investment

in revamping the organizational structure of a company. If the new structure, by its very nature, facilitates communication, coordination and cooperation the cost of incorporating it would probably provide lasting benefits. Under other circumstances investments in the synergistic component might expire thereby necessitating adjustment. The example given earlier, regarding the familiarization program, can be used to illustrate this type of adjustment. If one or more of the executives, which participated in the familiarization meetings, were to subsequently leave the firm, any salaries previously capitalized should be written off as a termination' expense (loss). Another possible example would be an investment in a manual describing recommended procedures for routing various intra-company correspondence. If new procedures are developed, thereby making the manual obsolete, its cost should be written off. The examples just given, insufficient as they may be, are an attempt to add more relevance to the general concepts described by various writers.

Ordinary human resource expenses (those investments being amortized over a specified useful life) should be treated as an operating expense. These expenses should be broken down further into manufacturing, selling, administrative, etc. according to which human resource investments are being amortized. Unforeseen expirations of a firm's investment in its human resources, such as skill obsolescence, termination and death, should not be treated as an ordinary expense but as a properly identified extraordinary loss.

A general model of the flow of data through an acquisition cost

accounting system is shown in Figure 1. This model graphically illustrates what has been described in the previous paragraphs.

In 1966, the R. G. Barry Corporation, a leisure footwear manufacturer based in Columbus, Ohio, in conjunction with the University of Michigan began developing a human resource accounting system. By January, 1968 an acquisition cost accounting system had been established for the firm's 95 managers. In June 1969, the system was extended to include 424 factory and clerical employees working at one of the company's plants. The company's 1969 annual report contained a pro forma balance sheet and income statement reflecting human assets and changes in those assets during the period.²⁴ At the end of the first quarter of 1970, R. G. Barry Corporation reported net investments in personnel amounting to \$1,766,100.²⁵

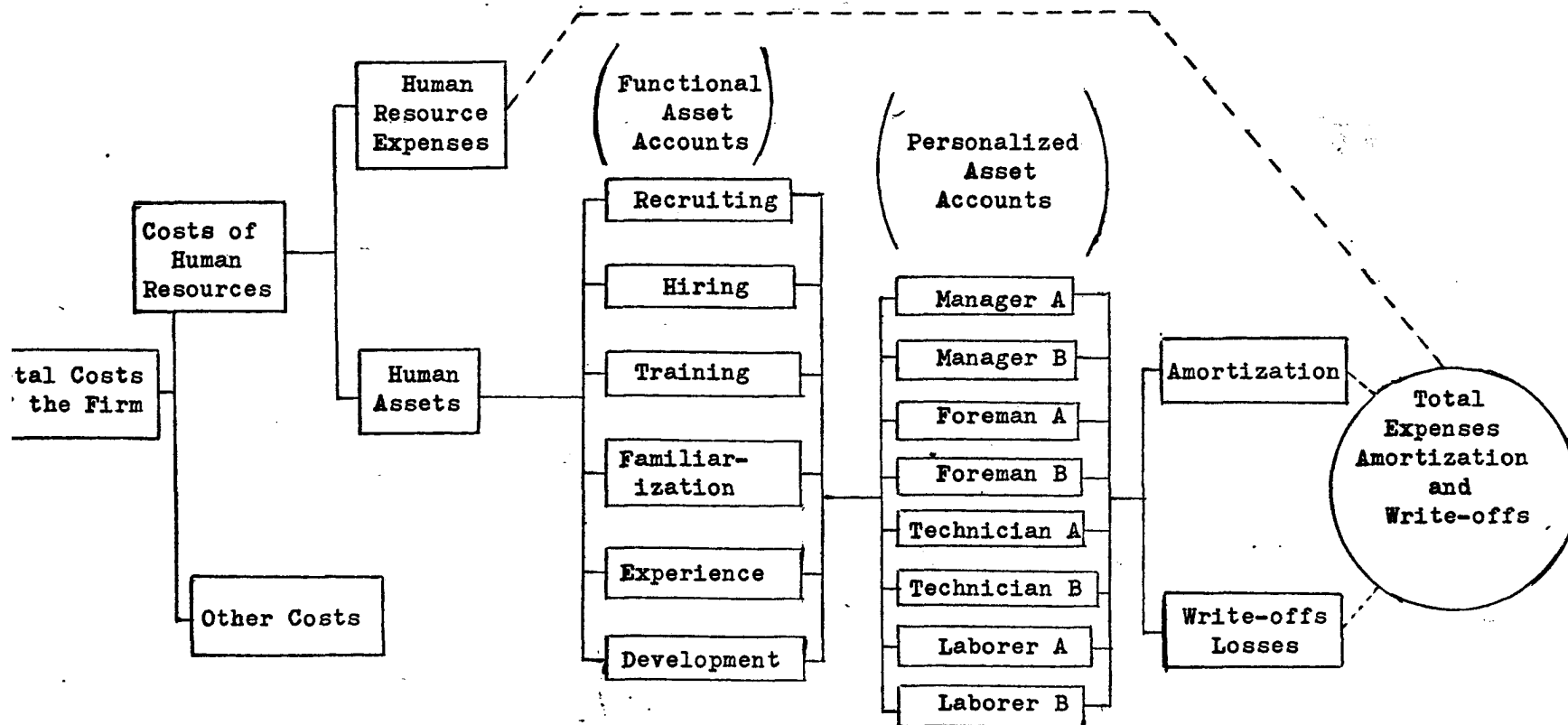
Management of the company is presently using the new accounting system for human resource planning and reporting purposes. Figure II illustrates a capital budget used by the corporation for its human resources. The company has found that, on an individual basis, it costs approximately \$3,000 to replace a first line supervisor, \$15,000 for a middle manager and somewhat in excess of \$30,000 to hire and develop a top level executive.²⁶

²⁴Pyle, "Human Resource Accounting," Financial Analysts Journal, 73.

²⁵Ibid., p. 70.

²⁶Ibid., p. 71.

Figure I
General Model of Human Resource Accounting System for Investments in Personnel



Source: R. Lee Brummet, Eric G. Flamholtz, and William C. Pyle, "Human Resource Measurement - A Challenge for Accountants," The Accounting Review, April 1968, p. 217.

Figure II
R. G. Barry Corporation's Human Resource Budget
for Quarter Ending June 30, 1970

Qual # People	Dollars		Beginning Balance <u>\$1,325,000</u>	Year-To-Date Dollars		12 Month Plan
	Plan	Actual		Plan	Actual	
			<u>New Investments</u>			
			Management Personnel			
3	\$ 25,000	\$ 19,500	Additions	\$ 40,000	\$ 30,000	\$110,000
7	42,000	51,000	Replacement	84,000	90,000	168,000
8	11,500	10,000	Development	20,000	17,800	60,000
3	21,000	14,000	Transfer In	42,000	35,000	84,000
<u>11</u>	<u>120,000</u>	<u>130,600</u>	Hourly Personnel	<u>250,000</u>	<u>264,500</u>	<u>510,000</u>
	<u>\$219,500</u>	<u>\$225,100</u>	Total	<u>\$436,000</u>	<u>\$437,300</u>	<u>\$932,000</u>
			<u>Write-Offs</u>			
			Management Personnel			
	\$ 17,250	\$ 19,100	Amortization	\$ 34,500	\$ 36,000	\$138,000
			Turnover Losses			
3	10,000	11,000	Voluntary	20,000	24,000	80,000
1	7,500	4,800	Involuntary	15,000	11,400	60,000
-	1,700	800	Skill Obsolescence	2,500	1,100	5,000
3	21,000	14,000	Transfer Out	42,000	35,000	84,000
<u>1</u>	<u>120,000</u>	<u>117,400</u>	Hourly Personnel	<u>230,000</u>	<u>251,600</u>	<u>480,000</u>
	<u>\$177,450</u>	<u>\$167,100</u>	Total	<u>\$344,000</u>	<u>\$359,100</u>	<u>\$847,000</u>
			Ending Balance <u>\$1,383,000</u>			

Source: William C. Pyle, "Human Resource Accounting," Financial Analysts Journal, Vol. 26, No. 5, September-October 1970, 72.

Probably the main advantage of the acquisition cost method is that it is compatible with the conventional accounting treatment of assets. This method records the human resources as they are acquired and developed rather than attempting to value them at some later date.

There are many benefits to be derived from using the acquisition cost method. One of these concerns the budgeting of funds. When certain personnel costs are explicitly recognized as long-lived assets, rather than current operating expenses, it should make it easier for a manager to secure funds for acquiring and developing human resources.

The acquisition cost method also gives more relevant and useful information on personnel turnover. The system utilized by the R. G. Barry Corporation allows turnover information to be presented both as a rate and in terms of its monetary impact (see Figure II). The conventional practice of reporting turnover only as a rate conceals its true significance. Employee terminations represent a greater loss if they occur among personnel in which the company has invested either more heavily or more recently.

Useful information concerning employee turnover is also illustrated in the following example. A company, in choosing among alternative locations for a new plant where present employees will be requested to relocate, polls its employees to determine their attitudes toward the alternative locations being considered. The company then attempts to determine the expected turnover associated with each location. From this an expected cost of turnover is calculated. This expected cost of turnover could be a critical factor in the selection of the plant

location.²⁷

Manpower planning is also greatly improved by adopting this human resource accounting method. Once the acquisition cost method has been established the firm's managers have available standard costs for recruiting, hiring and developing individuals. Information is also available to determine whether the company should acquire trained personnel externally or develop them internally. As mentioned earlier, the R. G. Barry Corporation has found it costs them approximately \$15,000 to hire and develop a middle manager. If a person with sufficient managerial experience in the footwear industry is available for employment, R. G. Barry might find it costs less than \$15,000 to hire and orientate him rather than moving a present employee up and developing him internally. The same may be true for hiring a college graduate and training him on the job.

The acquisition cost method is also beneficial in that it should substantially improve measurements of short-run profit contribution. Managers are often encouraged to perform in terms of costs, revenues or profits without regard to the changing condition of the firm's human resources. By recording changes in the human resource investment, management performance can be more completely evaluated.

Return on investment measures can also be greatly improved by including a measure of the change in the human resource component in

²⁷R. Lee Brummet, Eric G. Flamholtz, and William C. Pyle, "Human Resource Measurement - A Challenge for Accountants," The Accounting Review, (April 1968), p. 220.

the rate of return calculation. The amount of human resources being used would also be considered as part of the investment base. Expected performance measures based on the amount of assets employed should also include human resources as a part of the asset base. R. Lee Brummet has speculated that the practice of intra-company pirating of personnel might be substantially reduced by including human resource values in the calculation.²⁸

After discussing numerous benefits of the acquisition cost method, it might appear as though this approach is without its deficiencies; however, this is not the case. As mentioned earlier, investments in and adjustments to the "synergistic" component are difficult to quantify and measure. This area is of extreme importance to the acquisition cost method and as such should not be "shoved aside" and ignored because of the difficulties encountered in its use.

The acquisition cost approach is also limited in that it does not adequately reflect changes in the underlying value of the human resources. The changing motivations, attitudes, and loyalties of personnel may be more significant than measures of costs alone.

This method also relies heavily on the assumption that cost is equal to value. It is quite possible that the only time a meaningful relationship exists between an individual's value and the costs of acquiring him is at the time of acquisition. The costs of recruiting, hiring, training and familiarizing an individual change considerably

²⁸ Brummet, "Accounting for Human Resources," The Journal of Accountancy, 64.

over time. Changes in price levels could be reflected by applying a price index, such as the GNP Implicit Price Deflator, to the costs generated by the acquisition cost system. In making this adjustment, the firm would be following recent suggestions of the American Institute of Certified Public Accountants concerning the preparation of supplementary statements.²⁹

Replacement Cost Method 2

Another method of valuing human resources is to estimate the cost to a firm of replacing its existing human resources with others of equivalent talent and experience. Brummet, Flamholtz and Pyle state that this approach "should indicate what it would cost the firm to recruit, hire, train and develop people to the existing personnel's present level of technical proficiency and familiarity with the organization and its operations."³⁰

In order to determine the replacement cost, as defined by these three writers, it would be necessary to utilize the cost standards generated by an acquisition cost accounting system. Thus, the replacement cost method is essentially the same as the acquisition cost method except for the fact that current costs are used in valuing all the human resources regardless of when they were acquired.

²⁹American Institute of Certified Public Accountants, Financial Statements Restated for General Price-Level Changes, APB Statement No. 3 of Accounting Principles Board (New York: AICPA, 1971), p. 1903.

³⁰Brummet, Flamholtz, and Pyle, "Human Resource Measurement - A Challenge for Accountants," The Accounting Review, p. 222.

Hekimian and Jones feel that there should be another adjustment under this approach, which is not employed under the acquisition cost method. They feel that much of the recruiting and training is done on a speculative basis. They give an example where a firm hires and begins training thirty engineers. As the training proceeds some of the trainees are weeded out and some leave the program by choice. Eventually the firm ends up with four good engineers, one of whom becomes an outstanding designer. These writers feel that if this firm eventually has to replace this designer, they would have to begin again with another group of thirty engineers. Therefore, they feel a major portion of the costs of hiring the thirty men should be included in the replacement cost of the one outstanding designer.³¹

This adjustment is consistent with the replacement cost concept but it fails to recognize differences in an individual's capabilities, motivations, attitudes, etc. Perhaps the next time the company began training thirty engineers they might end up with five or possibly no outstanding designers, depending on the capabilities of those people being trained. Also, the next time there may be either a larger or smaller than average number of trainees who drop out of the program. If some consistent averages could be established, this adjustment has definite merit.

³¹Hekimian and Jones, "Put People on Your Balance Sheet," Harvard Business Review, p. 107..

The main advantage of the replacement cost approach to valuing and accounting for human resources is that it adjusts the human value to price trends in the economy. It thereby provides a more realistic value of the human resources in times of inflation.

This method, as was the case with the acquisition cost method, provides a means to value the human resources of a firm to be acquired. The acquiring firm, by reviewing the training and experience of the personnel employed by the firm to be acquired, can estimate what it would cost currently to replace them. Consequently, an explicit value can be attached to the human resources of the firm to be acquired.

The replacement cost approach is limited in that it is not consistent with current accounting procedures. The value of human assets under this approach would not be comparable with other assets in the firm.

However, this limitation should not preclude the use of this approach to substantiate information obtained by other methods. This is especially true concerning the acquisition cost method. Acquisition cost standards could be updated to reflect changes in price levels, changes in the condition of the job market and changes in investment requirements for post-employment training and experience. If the firm is already adjusting its acquisition costs to reflect changes in price levels, just the two latter changes would be reflected in the difference between acquisition costs and replacement costs.

Competitive Bidding Method

This approach to valuing human resources utilizes the economic

concept of opportunity cost. Hekimian and Jones propose that the value of an asset is determined by its opportunity cost, which is its maximum value in an alternative use. According to their proposal, the maximum value is established by competitive bidding within the firm. Investment center managers bid for any scarce employee they want. The manager who is successful in acquiring the services of a given employee includes the bid price in his investment base. The benefit to the winning manager is the increased profit he can earn with the services of that "scarce employee."³²

A human asset will have value only when it is a scarce resource. A human resource is scarce only when its employment in one division denies this kind of talent to another division. According to this premise, employees of the type that can be hired readily from the outside should not be regarded as a scarce resource.³³

In using this approach each division manager would have to balance his considerations of bidding low (to reduce the amount of increased profit his division would have to earn) against bidding high (to increase chances of acquiring the scarce employee).³⁴

The competitive bidding method is based on the following assumptions: (1) the company has two or more investment centers; (2) the managers of at least two of these investment centers want the same scarce employee

³²Hekimian and Jones, "Put People on Your Balance Sheet," Harvard Business Review, p. 108.

³³Ibid., p. 108.

³⁴Ibid., p. 108.

or group of employees; (3) the competing managers are highly motivated and recognize that one of the most significant criteria of their performance is their return on investment; (4) the top management of the firm has established expected rates of return on investment; and (5) physical assets in the return-on-investment calculations are valued at their current economic value.³⁵

Because of the restrictions imposed by these assumptions, it appears that many firms would either not be able or not be willing to use this approach. However, those firms that did use the competitive bidding method would find that it provides: (1) an optimal allocation of "scarce" personnel within the firm, and (2) a quantitative base for planning and developing human resources in the firm.

Even though this method is based on sound economic concepts, it has its shortcomings. First, it does not value the type of employees that can be hired readily from the outside. These employees are not included in the asset base of an investment center. Second, this approach also ignores the value of ordinary personnel that are not in great demand. This makes it appear that management is not expecting or planning for growth or improvement in the value of certain employees. Finally, the competitive bidding method would lead to increased shifting of personnel within the firm. This would probably tend to disrupt

³⁵Ibid., p. 109.

many of the effective working relationships established within the firm and perhaps even give the employees a feeling of insecurity.

The deficiencies imposed by both the assumptions necessary under this method and the definition of human resources appear to outweigh the benefits that could be derived from using it.

Adjusted Present Value Method

The adjusted present value method is based on the view that differences in earnings between firms within the economy are the result of differences in their human resources. This method, proposed by Roger Hermanson of the University of Maryland, attempts to ascertain the economic value of a firm's human resources.

The adjusted present value approach involves three major steps. First, the future wage payments of a given firm for the next five years are estimated. The estimate for each of the five years is then discounted at the most recent year's rate of return on stated assets for the economy taken as a whole. This calculation yields the present value of the firm's next five years of wage payments. The next step is to calculate the firm's efficiency ratio. This ratio is a measure of the firm's rate of return compared to the average rate of return for all firms in the economy. The formula for calculating a firm's efficiency ratio is based on earnings performance over the past five years. This formula weights the latest years more heavily in order to emphasize the recent performance of the firm. The final step multiplies the present value of the future wage payments (calculated

in step 1) by the firm's efficiency ratio (calculated in the previous step) and yields the present value of the future economic services of the firm's human resources.³⁶

Hermanson illustrates his proposal with the following example.³⁷ This example assumes that: (1) reasonably accurate estimates of payments expected to be made to human resources within the firm can be computed; and (2) the economy rate of return on stated assets for the most recent year is 6 percent.

Figure III
Computation of the Present Value of a Future
Stream of Payments to Human Resources

Year	Stream of Dollar Amount	Present Value of \$1 Paid At the End of the Year at 6%	Present Value of the Future Payment Discounted at 6% (Col. 2 X Col. 3)
1	\$100,000	.943	\$ 94,300
2	120,000	.890	106,800
3	135,000	.840	113,400
4	140,000	.792	110,880
5	150,000	.747	112,050
	<u>\$645,000</u>		<u>\$537,430</u>

The next step is to compute the firm's efficiency ratio. This ratio is given by the following formula:

$$\text{Efficiency Ratio} = \frac{5 \frac{R_F}{R_E} + 4 \frac{R_{F1}}{R_{E1}} + 3 \frac{R_{F2}}{R_{E2}} + 2 \frac{R_{F3}}{R_{E3}} + \frac{R_{F4}}{R_{E4}}}{15}$$

³⁶Roger H. Hermanson, Accounting for Human Assets (East Lansing, Michigan: Bureau of Business and Economic Research, Michigan State University, 1964), p. 15-17.

³⁷Ibid., p. 16.

Where:

R_{F_0} = The rate of return on stated assets for the firm for the current year.

R_{E_0} = The average rate of return on stated assets for all firms in the economy for the current year.

R_{F_4} = The rate of return on stated assets for the firm for the fourth year previous.

R_{E_4} = The average rate of return on stated assets for all firms in the economy for the fourth year previous.

If a given firm earned exactly the rate of return that the average of all the firms in the economy earned each year, the formula would yield an efficiency ratio of 1. On the other hand, if the human resources were more efficient than the average, the firm's efficiency ratio would be greater than 1. Conversely, if they were less than normally efficient, the firm would have an efficiency ratio of less than 1.

The final step in this example is to multiply the present value of future human resource payments (\$537,430) by the efficiency ratio. Let us assume this ratio is 1.4. From these two figures a value of \$752,402 is assigned to the firm's human resources. Hermanson recommends that this information be recorded as follows:³⁸

Human Resources	752,402	
Future Wages Payable		537,430
Excess Worth Created by Relatively Efficient Human Resources		214,972

³⁸ Ibid., p. 17.

If the efficiency ratio had been .75 instead of 1.4, the value of the human resources would have been computed as follows: $.75 \times \$537,430 = \$403,073$. The recommended entry would have been:

Human Resources	403,073	
Retained Earnings Appropriated for Future Resource Inefficiency	134,357	
Future Wages Payable		537,430

Hermanson's debit to the retained earnings appropriation account in the preceding entry is confusing. What type of account is it? It seems that Hermanson is attempting to appropriate retained earnings in anticipation of future losses (opportunity losses because of having less efficient human resources than the economy average). If this is the case, the entry given above is not correct or complete. The correct entry would include a debit to unappropriated retained earnings and a credit to the appropriations account as stated above. The text of Hermanson's proposal fails to explain the rationale behind his proposed entry.

Changes in the value of human resources from year to year, as calculated by this method, would adjust the amounts in these three accounts. The future wages payable would be included under liabilities, with human resources being listed under assets. The excess worth account (or the appropriations account) would be presented in the retained earnings section of the balance sheet for statement purposes, but would not necessarily affect the legality of dividends.

Hermanson, in proposing the adjusted present value method, may have overlooked or ignored some important factors. First, in calculat-

ing a firm's efficiency ratio, a comparison is made between the rates of return on stated assets for that firm and the rate of return for the whole economy. It would seem that a more relevant comparison could be made between the firm's rate of return and the rate of return for the industry in which this firm transacts business. This firm may be in an industry that, for various reasons, is more profitable than other industries. Second, Hermanson ignores the contribution of unstated and unmeasured assets other than human resources. Unstated customer goodwill may explain a portion of the firm's "excess profitability." In addition, the firm may have exceptional connections with creditors, investors and suppliers which also contribute to its above average profitability. Finally, Hermanson considers wage payments for only five years into the future. This may merely be an academic question, but it seems that with the advent of long range planning many firms, at least the larger ones, should be able to project wage commitments farther than five years into the future.

It appears that the crucial shortcoming of this method is that it does not supply a firm's management timely information concerning its human resources. By the time changes have occurred in the earnings rate of a company, thereby causing a change in the value of its human resources, it may be too late for the firm's management to effectively deal with the situation. Because of the limitations mentioned, this method appears to have little merit in measuring and accounting for human resources.

Goodwill Methods

One goodwill method proposed by Brummet, Flamholtz, and Pyle translates a company's earnings in excess of the industry average into goodwill. This goodwill is then allocated to human resources in terms of the ratio of human assets to total assets.³⁹ This method assumes the asset ratio to be given and does not explain how the value of the human resources is initially determined.

An even more direct approach, suggested by these same authors, is to estimate the contribution of human resources to the total economic value of the firm. This involves forecasting future earnings, discounting them to determine the firm's present value, and finally allocating a portion to human resources based on the relative contribution of these resources. The authors point out that this approach is used to value sales forces in the insurance industry at the time of acquisition or sale of firms.⁴⁰ This approach also assumes the ratio of human to nonhuman resources is given and does not disclose how this ratio is to be initially determined.

A more involved goodwill method has been proposed by Hermanson. He labels his approach "the unpurchased goodwill method." This method capitalizes earnings in excess of the economy average and allocates them to the organization's human resources.⁴¹ Hermanson has decided

³⁹ Brummet, Flamholtz and Pyle, "Human Resource Measurement," The Accounting Review, p. 222.

⁴⁰ Ibid., p. 222.

⁴¹ Hermanson, Accounting for Human Assets, p. 10.

to use only the most recent years earnings figures in his computations. He feels that the best available evidence of the present existence of unrecorded resources is the fact that a given firm earned a higher than normal rate of income for the most recent year.⁴² He goes on to say: "if the results of several years were included in the computation, there is a possibility that unowned resources affecting income results of several prior years would be included although no longer of any economic consequence to the firm."⁴³

Hermanson illustrates the mechanics of the unpurchased goodwill method in the following example.⁴⁴ For the sake of simplicity, Hermanson has assumed that there are only four firms in the total business sector of the economy of a given nation.

Figure IV
Assets, Income, and Rate of Return for
Four Hypothetical Corporations

	Firm				Total
	W	X	Y	Z	
Average Value of Owned Assets	\$100,000	\$50,000	\$200,000	\$150,000	\$500,000
Net Income	15,000	5,000	25,000	5,000	50,000
Rate of Return on Average Owned Assets	15%	10%	12.5%	3.3%	10%

From Figure IV it can be seen that the human resources working with the owned assets in Firms W and Y were more efficient than average. The

⁴²Ibid., p. 8.

⁴³Ibid., p. 8.

⁴⁴Ibid., p. 9-10.

human resources in Firm X were only average in efficiency while those of Firm Z were less efficient than the average. Figure V shows how the value of the human resources are computed.

Figure V
Computation of the Value of the Human Resources
for Firms W, X, Y and Z

	Firm			
	W	X	Y	Z
Average Value of Owned Assets	\$100,000	\$50,000	\$200,000	\$150,000
Normal Net Income (at 10%)	10,000	5,000	20,000	15,000
Actual Net Income	15,000	5,000	25,000	5,000
Divergence from Normal	5,000	-0-	5,000	(10,000)
Human Resources (Capitalized at 10%)	50,000	-0-	50,000	
Negative Human Resources (Capitalized at 10%)				100,000

Hermanson has proposed the following journal entries to record the negative and positive values of the human resources on the books of the various firms.⁴⁵

Firms W and Y

Human Resources	50,000
Equity Increase-Superior Earning Power on Owned Assets	50,000

Firm X

no entry

Firm Z

Equity Decrease - Inferior Earning Power on owned Assets	100,000
Negative Human Resources	100,000

⁴⁵Ibid., p. 11.

At the end of each accounting period a new computation is made to determine the value of the human resources, so that the value recorded the previous year can be updated.

The unpurchased goodwill method assumes that human resources add value to the firm only when earnings exceed the economy average. This is a questionable assumption, since a firm's human resources have some value even if it is earning at or below the economy average rate of return on stated assets. Reg Gynther of the University of Queensland presents an argument in favor of this in a recent article; he states that an excess earnings approach results in the under-valuation of the asset concerned.⁴⁶

There are other weaknesses inherent in the unpurchased goodwill approach. It does not recognize differences in the size, quality, and efficiency of stated assets. It also ignores, as did Hermanson's adjusted present value method, the contribution of unstated and unmeasured assets other than human resources. All of these factors could produce differences in earnings which would not be caused directly by a firm's human resources.

Another weakness of this method is the difficulty in determining the economy rate of return. A thorough reporting system would be required to determine this average. An industry average would provide a more relevant comparison and would probably be much easier to determine.

⁴⁶Reg S. Gynther, "Some Conceptualizing on Goodwill," The Accounting Review (April, 1969), p. 248.

The unpurchased goodwill method is desirable in that it uses only past, objectively determined net income figures in its calculations. However, because of the various weaknesses discussed, this method appears to be inadequate in measuring and accounting for human resources.

Individuals Earning Profile Method (3)

The earnings profile method, proposed by Baruch Lev and Aba Schwartz, assumes that the value of an employee is equal to the present value of his remaining future earnings from employment. Since the future earnings of an individual employee are impossible to determine exactly, Lev and Schwartz have come up with a way of estimating these future earnings. Their method uses current data on earnings distributions classified by age, education, skill, etc. to estimate future earnings. Take, for example, the problem of estimating the future earnings series of an industrial engineer, 25 years old. Current data are available on average earnings of industrial engineers 25 years old, 26 years old, and so on up to retirement age. This method estimates next year's earnings of the 25 year old engineer on the basis of current earnings of an equivalent engineer 26 years of age. The estimate of earnings two years hence will be based on current average earnings of 27 year old engineers and so on through retirement age.⁴⁷

⁴⁷Baruch Lev and Aba Schwartz, "On the Use of the Economic Concept of Human Capital in Financial Statements," The Accounting Review (January, 1971), p. 105.

The determination of the total value of a firm's human resources is simply an extension of the earnings profile of an individual employee. The firm's personnel are divided into homogeneous groups of employees such as unskilled employees, semi-skilled, skilled engineers of different kinds, salesmen, managerial staff, etc. Average earnings profiles, based on census data, are then constructed for each group and the present value of human resources calculated. These present values are then adjusted, using mortality tables, for the possibility of death occurring prior to retirement age. The sum of all the present values yields the human resources value associated with the firm.⁴⁸

Various factors limit the usefulness of this method. The first involves the strength of the relationship between an employee's salary and his value to the firm. As mentioned earlier in discussing the capitalization of salary method, many other factors affect the salary of a given employee besides his real contribution to the firm. The earnings profile method also ignores the underlying value of human resources. Changing motivations, attitudes, and loyalties of employees are important factors ignored by this method. Finally, how does a firm that employs persons of higher or lower quality than average and accordingly pays different wages and salaries than those indicated by the census-based data, value its human resources? Lev and Schwartz

⁴⁸ Ibid., p. 107.

state that if the firm is large enough, it will be possible to determine earnings profiles based on the firm's own wage scale.⁴⁹

The only unique benefit this method offers is that it provides information about changes in the age distribution of a firm's personnel. Suppose, for example, that a firm neither hired or laid off any employees during a given year. The value of the firm's human resources at the end of this year would then be smaller than that of the previous year (assuming no changes in earnings profiles). A simple age distribution of employees would probably be possible from conventional personnel records; therefore, this approach does not exhibit any particular advantages as a human resource accounting method.

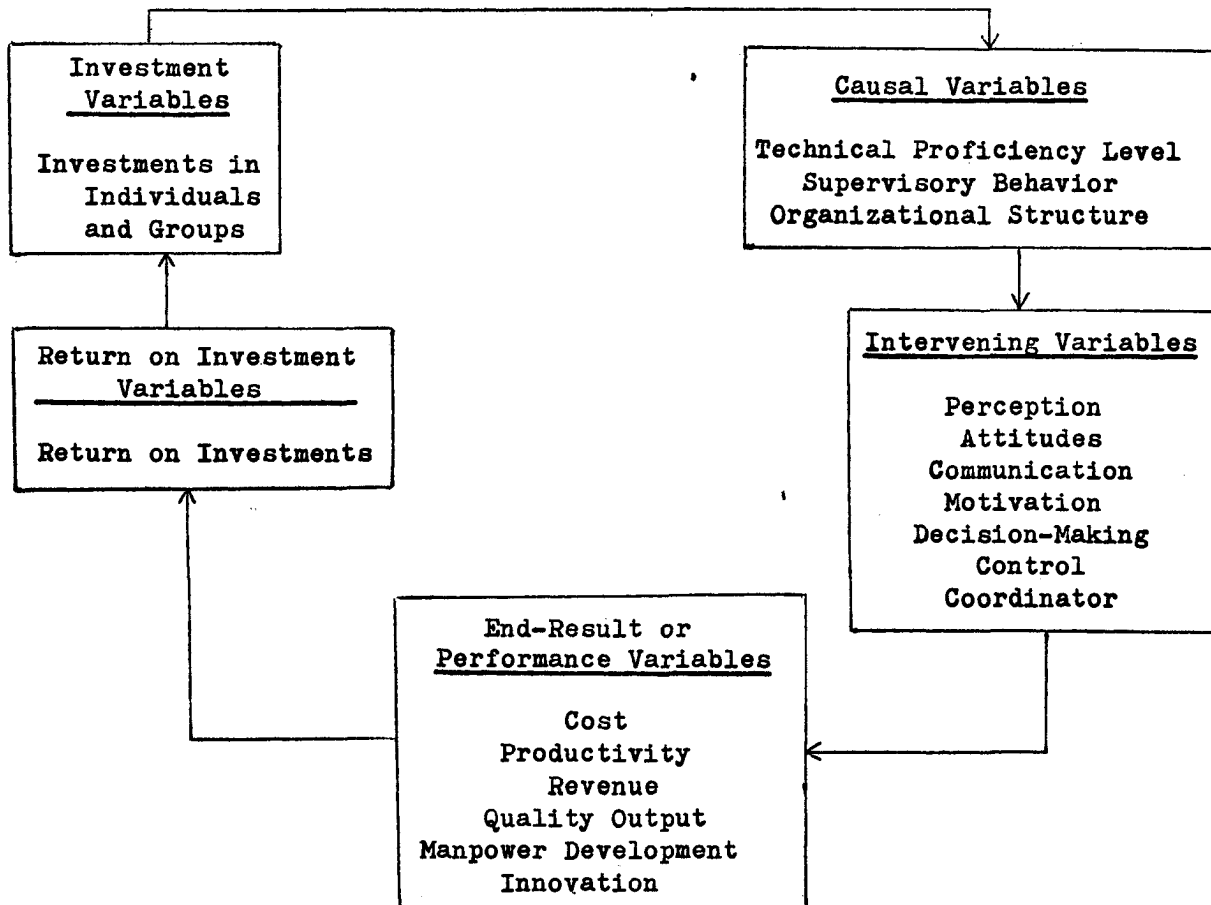
Behavioral Variables Method (Performance Measures)

Rensis Likert has proposed a human resource accounting system where periodic measurements are obtained for the firm's key causal and intervening variables. Likert feels that statistical analysis of variations in leadership styles, technical proficiency levels, supervisory levels, and organizational structure (causal variables), and the resulting changes in subordinate attitudes, motivations, and behavior (intervening variables) can establish a meaningful relationship among these variables. If meaningful relationships can be established between the causal and intervening variables and changes

⁴⁹ Ibid., p. 107.

in these produce changes in end-result variables such as productivity, costs, revenues, manpower development, and innovation, then trends in earnings can be predicted. These estimates of probable subsequent productivity, costs and earnings provide the basis for attaching to any profit center, division, or total corporation a statement of the present value of its human resources.⁵⁰ A simplified illustration of Likert's variables and their interrelationships are shown in Figure VI.

Figure VI



Source: R. Lee Brummet, Eric G. Flamholtz and William C. Pyle, "Human Resource Measurement - A Challenge for Accountants," The Accounting Review, (April, 1968), p. 223.

Once stable relationships have been established between the causal, intervening and end-result variables, the periodic estimates of the firm's human resource value would be recorded in an asset and corresponding equity account. These two accounts would be adjusted routinely to reflect changes disclosed by periodic measurements of the causal, intervening, and end-result variables.

This proposed method has a distinct advantage in that it directs management's attention to the key human variables of an organization. Likert's method would show trends in such vital elements as employee loyalty and motivation in addition to revealing whether the value of a firm's human resources is increasing, decreasing or remaining unchanged.

Likert is unclear in illustrating how his proposed method would segregate the effects of non-human assets on future productivity, as well as costs and revenues from the effects of human resources on these same measures. He states that estimates of these measures provide a basis to attach a human resource value but does not give any explanation of how it is to be done.

This method is limited in that a good deal of data and time would be required before the relationships are sufficiently established to compute a value for a firm's human resources. If a firm can afford the time and money to develop such a system, it would definitely improve the firm's management of its human resources. However, many smaller firms would probably be precluded from using such a human resource accounting system.

CHAPTER 3
CONCLUSION

The foregoing discussion pointed out both the feasibility and the merit of measuring and accounting for the value of a firm's human resources. It seems that a gradual shift is taking place towards a more quantitative recognition of human resources. Recently tax courts set a legal precedent in deciding that in certain defense contracts, return on investment could take into account, in the investment base, the prior expense of gathering together certain kinds of engineering talent.⁵¹ Also, various utilities have been considering the possibility of including human resources in their rate base.⁵² Finally, the Internal Revenue Service has recently permitted a doctor to use his life expectancy as the period for amortizing a hospital practicing fee. The IRS ruled the fee a capital outlay, rather than an immediately-deductible business expense, because the doctor purchased an intangible asset with a useful life of more than one year.⁵³

Even though human resources are being emphasized more, there are still many questions which remain to be considered. First, which method should be used in measuring and accounting for a firm's human resources? One method cannot generally be considered superior because what is best for one business is not necessarily the best for another

⁵¹Michael H. Gilbert, "The Asset Value of the Human Organization," Management Accounting, (July, 1970), p. 27.

⁵²Ibid., p. 27.

⁵³"Tax Report," The Wall Street Journal, (April 22, 1970) p. 1.

business. Differences in the size or type of firm may require the use of different methods. However, it does appear that if a firm is large enough to warrant a detailed human resource accounting system the acquisition cost approach is the most desirable. There are various reasons for choosing the acquisition cost approach as the most desirable. The more important ones being: (1) this approach is compatible with the conventional accounting treatment of assets (recording them as they are acquired and developed rather than attempting to value them as some later date); (2) this approach, as far as I can determine, is the most developed of any discussed; and (3) this approach would probably provide management with more timely, relevant, and useful information than any of the other methods presented. By incorporating replacement costs into the acquisition cost system, current information is provided to the firm's management. If the acquisition cost method were used without recognizing changes in price levels, changes in the condition of the job market and changes in investment requirements for post-employment training and experience, the information generated by it would become outdated and lose its usefulness.

It would also be highly desirable for a larger company to institute a behavioral variables accounting system because of its measurement of the company's key human variables. However, it should be noted that this approach is still in the early stages of development and will require much more work before it can be used extensively.

Now, what about the firms that are so small that the approaches recommended are not feasible? Rather than to completely ignore human resource accounting, the firm should avail itself of some of the simpler approaches, such as the capitalization of salary or the earnings profile method. The human resource information obtained, although inadequate relative to the information derived from the more comprehensive approaches, should be of benefit to the smaller firm.

It seems apparent that human resource information cannot be developed according to specific uniform rules. This information will have to be determined on a company-by-company basis according to the guidelines of the particular approach being used.

Another important question to consider is the internal use versus the external use of human resource information. The potential for human resource accounting is considerable for both external and internal uses. Useful information can be generated for stockholders and statement readers in general, in addition to that used for management purposes. However, the restrictions encountered in public reporting due to the need for comparability, consistency, objectivity, and conservatism present obstacles to the development of human resource accounting.

A similar situation exists with the direct costing of inventories. Direct costing provides management with meaningful and useful data which allows for better planning and control than is possible using conventional costing approaches (full costing or absorption costing). Few objections are raised concerning the use of direct costing for internal reporting

purposes but for external reporting, this approach is not acceptable.⁵¹ Similarly, the restrictions imposed by external reporting should not deter the development of human resource information urgently needed by decision makers. Human resource accounting should be developed first, for management needs and second for public reporting.

Human resource information generated by the acquisition cost method could, without much difficulty, be included in a company's financial statements. This method is compatible with the conventional accounting treatment of assets even though not in line with generally accepted principles of accounting. If various firms begin reporting human resource information as a supplement to their financial statements, the practice could become acceptable after a period of time. How long this acceptance would take is another question. Many firms might be hesitant to start accounting for their human resources. The firms initially recording human resources would merely increase their asset base, thereby causing a decrease in their rate of return on investment (assets employed) relative to those firms not recognizing human resources as assets. This problem would be another argument against external reporting, at least in the earlier stages of the development of human resource accounting.

As human resource accounting becomes more refined and external

⁵¹ Wilbert E. Karrenbrock and Harry Simons, Intermediate Accounting (Cincinnati, Ohio: South-Western Publishing Company, 1964), p. 221.

reporting is accepted more and more, the need will arise to determine the reliability of the human resource information being presented.

An audit of this information would have to be based on the company's own human resource accounting procedures until human resource accounting systems and procedures in general become sufficiently developed to provide the basis for an audit. As stated earlier, the needs of management should take preference over any external reporting requirements regardless of the approach used.

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