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Accounting for Human Capital

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Advisor

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CHAPTER I

IMPORTANCE OF ACCOUNTING FOR HUMAN RESOURCES

It is obvious that people acquire useful skills and knowledge even if it is not as obvious that these skills and knowledge are a form of capital and that this capital is largely a product of deliberate investment. Human capital has grown in Western societies at a much faster rate than nonhuman capital and may well be the most distinctive feature of the economic system. It has been noted that increases in national output have been large compared with the increase of land, man-hours, and physical reproducible capital. Investment in human capital may well be the major explanation for this difference.

Human capabilities have been recognized for a long time as an important resource of a nation and of a business enterprise. Management has long been aware of the importance of its people to the growth and profitable operation of the enterprise. Most corporations make reference to the value of employees by comment in their annual reports, often referring to their employees as valuable assets. In view of the accepted recognition of the value of human resources, it is difficult to understand why today's accounting methods and information systems still virtually ignore the human resource dimensions.

There is a dichotomy in accounting between human and nonhuman capital of an enterprise. Nonhuman capital is recognized as an asset of the firm. This nonhuman capital is then recorded on the books of the firm and is reported on, in the firm's financial statements. Human capital has been virtually ignored by the Accountant except as an alement of purchased goodwill. Why has there been such a neglect in accounting for human resources?

There are several reasons why outlays made as investments in human resources have been traditionally treated by accountants as expenses rather than capitalized as assets. It is partly because people do not clearly fit the definition of assets as being "things of value owned." Our culture has constraints on willingness to imply ownership or to place a monetary value on people. You do not buy and sell people as is possible with inanimate objects. It has been difficult to distinguish between the future benefits and the portion consumed currently of the outlays for recruiting, hiring, training and developing human resources. Human resources are subject to only limited control by management and therefore, connote a lacking in tangible substance. Accounting, in the past, has shown a hesitancy to treat intangibles as assets.

Another constraint may be the lack of visible, physical change in human assets from additional investments of training and development. Even though the physical changes in the personnel from further training may not be apparent, an investment has been made with the anticipation of a payoff, just as in the case with a machine. Unless there is evidence that the additional training was a mistake, these costs should be capitalized and their expiration matched against the benefits received from the additional investment.

Whatever the constraints may be, there are frequent examples of the implicit treatment of human resources as business assets. You frequently find large corporations purchasing small, technically oriented companies. They make these purchases not because of the value of their nonhuman assets, but to obtain their skilled scientists, engineers, and management personnel. You see business organizations spending massive sums of money to train and retrain their key personnel. You see financial analysts pointing out that the valuation of a company's securities is often based more on the quality of its management than on any other factor.

The increasingly technical complexity of modern business and the length of time required for business personnel to gain the needed skill, experience, and judgement, appears to be a continuance of the trend toward making brainpower the most critical scarce resource. Most business organizations recognize the significance of the limited availability of personnel with key skills and plan carefully for the acquisition, use and maintenance of these personnel. But these management decisions are most often made intuitively rather than being based on information generated by the firm's accounting and information system.

Existing accounting and information systems treat human resources as an item of expanse. This can be verified by the fact that the only reference to people on the typical profit-and-loss statement or balance sheet is under the heading of "Wages and Salaries". Both the entity and proprietary theories of accounting insist that items must be owned to qualify as assets. Labor, as an economic factor of production, is not considered an asset.[1]

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[1]Renis Likert, The Human Organization, (New York: Mc-Graw-Hill Book Company, 1967), p. 148.

This requirement of physical ownership results in the expensing of outlays that should be treated as assets. The expensing of such expenditures causes a key part of a firm's investment base to be ignored and therefore yields an incorrect rate of return on investment. This causes less than optimal allocation of resources in an economy which operates under the general assumption that funds within an economy seek the highest rates of return.

Managers operating under the present accepted methods of accounting for human resources, do not have adequate tools for evaluating changes in the human assets of their organization. They cannot measure the effectiveness of their investments, so they cannot make optimal allocation of their human resources. They must make important decisions with regard to their human resources without adequate information and analytical tools with which to evaluate their decisions. They must make important arbitrary decisions on recruiting and hiring new employees, training, evaluating, promoting, transferring, discharging and replacing employees without adequate information. These management decisions can have a profound and long lasting affect on employee morale, attitude and therefore, productiveness.

It is accepted practice in the management of nonhuman resources to estimate the acquisition costs and to weigh the relative values of alternative investments that could be made to achieve the objectives of a firm. This level of analysis has not been extended to the area of management decisions on alternative choices in human resource management.

Return on investment measures could be improved by including measures of change of human resource condition in the calculations.

Performance measures that are based on the assets employed should include the value of the human assets employed, if the measure is to be an accurate assessment of performance.

Management currently has no method for determining the return that the human assets are contributing to earnings. They have no means to measure if the firm is allocating its human resources in the most profitable way. In fact, management does not even have the means of measuring its investment in human resources, or of determining if their value is increasing, decreasing, or remaining unchanged. This should make apparent, the need for human resource accounting.

CHAPTER II

IMPLEMENTATION OF HUMAN RESOURCE ACCOUNTING

What then, is Human Resource Accounting? "Human resource accounting is the process of identifying, measuring, and communicating information about human resources to facilitate effective management within an organization. In a particular organization, it involves measurements of the acquisition cost, replacement cost, and economic value of human resources, and their changes through time."[2]

The concepts of human resource accounting are an extension of the accounting principles of matching revenues and costs and of organizing data in financial terms as relevant financial information. The basic difference would be the requirement that human resources be viewed as assets or investments of the firm. The methods used in measuring costs would be similar to the methods used in measuring costs of other assets. The measurement of the condition of human assets and their value would require the use of the measurement tools of the behavioral sciences.

Human resources fall into two broad categories--the internal group and the external group. The external group would include the customers, suppliers and distributors, and the stockholders of the firm. The internal resources would be the employees of the firm.

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[2] R.L. Brummet, W.C. Pyle and E.G. Flamholtz, "Accounting for Human Resources," in Canadian Chartered Accountant, ed. by Gertrude Mulcahy, F.C.A. (June, 1968), pp. 424-427.

The firm makes investments in each of these groups with the hope of getting future benefits in return. Present research has been concentrated on establishing a foundation for a human resource accounting system for the internal human resource group, but in time may be expanded to the external group.

The first phase of research in human resource accounting has been on the development of a human resource accounting system. This brings forth the need for generalizations or theory on identifying and tracing of human resource costs. There must be guidelines to follow in accounting for these costs as assets or expenses and a set of accounts for classifying these costs. There must be statements for reporting changes in these assets and methods developed for analysis and interpretation of these same statements.

There must be development of generalizations about the way that information provided by such a human resource accounting system, can be used effectively by management. There must also be some generalizations made about the impact of such a system on the behavior of the people being accounted for by the system.

The accounting system of an organization must provide information in a meaningful form, if managers are to be able to utilize the information effectively. This requires expressions of the information on human resources in dollar terms, the same terms that non-human resources are expressed in.

There have been several methods or procedures suggested for determining explicit values for human resources within a firm.

One method suggested by Hekimian and Jones[3] was to capitalize

[3]James S. Hekimian and Curtis H. Jones, "Put People on Your Balance Sheet," Harvard Business Review, (January-February, 1967), p. 107.

a man's salary to find his value. The lack of a direct relationship between salary and an employee's value to the firm limits the usefulness of this approach. There are problems in choosing the discount rate, the time period the present value represents and the salary to be used.

Another suggested method is to determine the acquisition costs of the human resources. This would require collecting or imputing the costs involved in recruiting, hiring, training and developing the employee. This approach is comparable to the standard accounting treatment of other assets.[4] The problem with this approach is that a man's value can change. If the person is considered an asset, should his cost be allocated to future periods through a method of depreciation accounting?

Renis Likert proposes a method of measuring start-up costs by using original costs of hiring and training personnel but also taking into consideration, the synergistic component of costs and time needed for members of a firm to establish effective cooperative working relationships.[5] It would be difficult to measure this investment in time needed to develop these relationships.

Another method suggested by Hikimian and Jones is to value human assets at their replacement costs. This would be the estimated costs to a firm to replace people with others that have equal talent and experience. This method would provide a more realistic value in

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[4]R. Lee Brummet et. al., "Human Resource Management--A Challenge for Accountants," The Accounting Review, (April, 1968), p. 219.

[5]Renis Likert, Op. cit., p. 147.

inflationary periods as the asset value would be adjusted upward with price trends.[6] This is inconsistent with the current methods of valuing other assets and would hinder comparability with valuation of nonhuman assets.

A competitive bidding method using the economic concept of opportunity cost was also suggested by Hekimian and Jones whereby the value of an asset would be determined by the opportunity cost of the asset which is its maximum value in an alternative use. The value would be established by the competitive bidding of two or more investment center managers bidding for the same scarce employees. A human asset would have value only when it is a scarce resource such as when its employment in one center would deny its use in the other center. The highest bidder would get the asset and would include the bid price in its investment base. Even if it is based on the well accepted law of supply and demand, it has a great weakness in that employees of the type that can be easily hired from outside the firm, would not be considered scarce, so they would not have an asset value. This could also lead to shifting of employees within the firm to the point that work would be disrupted and employee security and morale could be destroyed.

Another approach suggested by Likert is to calculate the economic value of human assets. The basis of this concept is that differences in present and future earnings of two similar firms in the same business are due to differences in their human organization.[7]

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[6] Hekimian and Jones, Op. cit., pp. 107-110.

[7] Renis Likert, Op. cit., p. 148.

A general approach to estimating the contribution human resources make to the total economic value of the firm is to forecast future earnings and then discount them to find their present value. A portion of this present value could then be allocated to the human resources based on their contributions.[8]

The goodwill method is another economic valuation method. This involves translating a company's earnings in excess of the industry average into goodwill and then allocating this goodwill to human resources in terms of the ratio of human assets to total assets of the firm. The problem is how to initially value the human assets in the firm to derive the asset ratio. The goodwill method is more feasible if the earnings in excess of the industry average are capitalized and then allocated to the human resources, but the problem is to determine what capitalization rate to use. Another weakness of the goodwill method is that it assumes that human assets add value to the firm only when firm earnings exceed the industry average.[9]

These are some of the methods suggested by early researchers in accounting for human resources. Each method has its own advantages and each its own shortcomings. They all attempt to establish a verifiable economic value for human resources within an organization and to account for the changes over time in the value of these resources. Each method has the goal of providing management with information in a form that can be understood and used to obtain more effective

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[8]R. Lee Brummet et.al., Op. cit., p. 220.

[9]R. L. Brummet, et.al., Op. cit., p. 219.

utilization of the firm's resources.

Human asset accounting is a feasible and useful concept. There is some evidence to support the view that the accounting profession is moving toward the acceptance of a basis for recording assets at their true value. The shift may be very gradual but it appears that eventually, a system of accounting for human resources may become a part of accounting practice throughout industry. This can be supported by the increased interest in the research being done in the area of human resource accounting.

These researchers present strong arguments for giving asset status to human resources and listing these assets at dollar values in the financial statements of a firm. The use of a human resource accounting system could provide more accurate information on human resources and would aid management in decision making and aid in obtaining a more optimal allocation of these resources. Such a system would aid in asset management including the concept of stewardship.[10] The manager has the responsibility to see that assets placed under his control are used effectively and to maintain and, where possible, to enhance the value of these assets.

When an account structure for capitalizing human resource outlays has been established, thought must turn to developing a system for recording the expiration of these asset values. Such a system must provide for recording writeoffs where needed because of termination and other occurrances that represent losses of human resources.

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[10] Hekimian and Jones, Op. cit., p. 111.

Periodic amortization should be computed and based on the useful life expectancy of the investment. The system of depreciations accounting for human resources should follow the accepted accounting principle of matching revenues and expenses. Where there is the absence of a direct means of associating cause and effect, the costs should be associated as expenses of a specific accounting period on the basis of an attempt to allocate costs in a systematic and rational manner among the periods in which benefits are provided.

Once the system of accounting for human resources is set up, and put into use, the information generated by the system must be arranged in an understandable manner. This could entail the creation of new reports and statements or incorporation of the data into the present financial statements of the firm.

At the present state of development in accounting for human resources, it would appear to be preferable to incorporate the information on human resources in the present financial statements only if the statements are limited to internal use. The potential value of human resource accounting as a means of generating data for external users of the financial statements is significant, but the state of the art has not progressed that far. Public reporting requires a high degree of comparability and objectivity of reports among the separate firms of a particular industry. As stated before, the state of the art of human resource accounting has not advanced to that degree of reliability at this time. This should not prevent firms from establishing a human resource accounting system as the potential value of information generated by such a system has great value for internal use.

CHAPTER III

ACTUAL EXPERIENCE IN OPERATION OF A HUMAN RESOURCE ACCOUNTING SYSTEM

What is believed to be the first human resource accounting system in use, was put into operation on January 1, 1968 by the R. G. Barry Corporation. Their objective was to develop a usable system that would give them better information on the condition of the human resources and which could be integrated with conventional accounting information. This objective led them to the outlay cost approach measuring investments on human resources. They recognized that the firm makes investments in organizational human resources other than individuals such as investments in group processes, team development and human resources outside the company. This was felt to be too broad an area to begin with, so they chose to concentrate on the outlay cost approach on ninety-five managers within the firm.[11]

They first had to identify human resource acquisition costs in order to separate them from other costs of the firm. This required formulation of rules and procedures to distinguish between the asset and expense components of human resource costs. They set up seven functional capital accounts and established an account for each manager on a replacement cost basis.

The seven functional asset accounts were for recruiting outlay costs, acquisition costs, formal training and familiarization

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[11] R. L. Wondruff, Jr., "Human Resource Accounting," Canadian Chartered Accountant, September, 1970, pp. 156-161.

costs, investment building experience costs, and development costs. What would be included under each classification would vary from firm to firm as would the need for such a broad classification of functions. A simplified model of the human resource accounting system developed at the R.G. Barry Corporation is included as Exhibit I in Appendix I of this paper.[12]

The Barry Corporation began a systematic collection of data on investments in managerial human resources. Outlays that were classed as investments in human resources had to meet the conventional test for capitalization. To be capitalized, the expenditure made must be expected to provide a return over a period greater than the current accounting period. These investments included direct out-of-pocket expenditures for items such as recruiting and acquisition and secondly, allocations of salary for periods when the company is unable to benefit fully from an employee's efforts as during periods of training and development.

The account balances on human resources are amortized annually. This is based on the expected working life of the employee or on a fixed shorter period for accounts such as training and development costs. If an employee departs from the company a total write-off is made and partial write-offs are made where necessitated by obsolescence of the investment.

The Barry Corporation developed a pro forma balance sheet and income statement. These are included in the Appendix as Exhibit II

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[12] R. L. Brummet, W. C. Pyle and E. G. Flamholtz, Op. cit., p. 427.

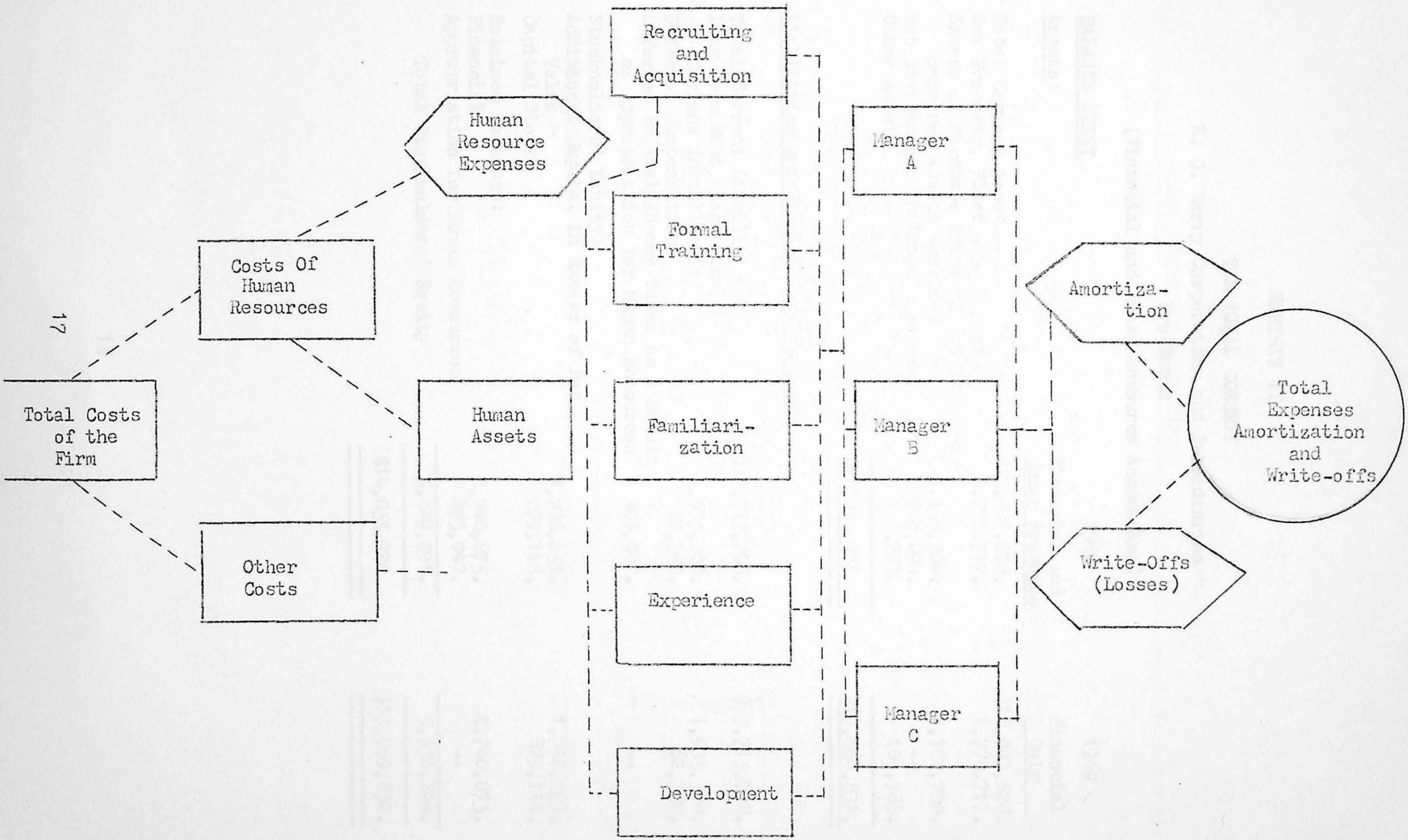
and III and reflect the impact of human resource accounting information on the other financial information in the reports. These reports are included without comment and the only purpose being to show one possible format for reports that include human resource accounting information.

In 1970, the Barry Corporation developed a 'Human Resource Capital Budget' by converting to dollar terms the personnel action and development plans for each unit of the company. This will be used by their managers to compare actual performance with planned performance.

Although the Barry human resource accounting system is still in the development stage, it has been shown to provide valuable information for planning and evaluating their performance in managing their human resources. The system needs improvement and this will be accomplished in due time. They believe that conventional accounting practice will in time come to recognize human resource accounting in financial reporting.

EXHIBIT I

SIMPLIFIED MODEL OF HUMAN RESOURCE ACCOUNTING SYSTEM



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