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Human resource Accounting: A Survey

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HUMAN RESOURCE ACCOUNTING
A SURVEY

by Cindy Slack

Honors Thesis April, 1985

HUMAN RESOURCE ACCOUNTING

A SURVEY by Cindy Slack

Honors Thesis

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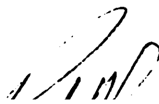
Accepted in Partial Completion
of the Requirements
for Graduation with Honors



Ron Savey, Honors Thesis Advisor
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Honors Program

PROPOSAL

The subject of my paper is Human Resource Accounting. Human Resource Accounting has received a lot of attention in the past twenty years, and is still under examination by many people. The idea behind Human Resource Accounting stems from the basic assumption that people are the most important resource of a business. I will present the arguments for and against Human Resource Accounting, and the assumptions that underlie its use. Then I will turn to an examination of some of the methods that have been suggested to measure these human resources. Many different methods have been suggested, and in a few cases, businesses have experimented with their use. The most notable of these cases is that of R. G. Barry Corporation. The results of this case show some of the problems and benefits that can be associated with Human Resource Accounting which I would like to discuss. I would then like to turn to a look at where Human Resource Accounting is today. I will try to answer questions such as: Is Human Resource Accounting still a useful tool? If so, to whom is this information useful? Management and shareholders or management only? In conclusion, I will present my views on where Human Resource Accounting is headed and what still needs to be done.

INTRODUCTION

Human Resource Accounting may sound like a totally new concept to many people, but the basic idea behind it is not a new one. As early as 1932 the importance of humans in an organization was recognized in the Accountant's Handbook, which suggested that goodwill arose from the personal qualities and skills of the owners, managers and employees.[1] This same view has been constantly reiterated in many president's letters accompanying financial statements with the cliche, "Our employees are our most important - our most valuable - asset." Yet, for all this importance attached to the human resources, it is shown nowhere in the financial statements outside the president's letter.

It was in response to the growing concern over the utilization of these human resources that human resource accounting was conceived. The American Accounting Association's Committee on Human Resource Accounting defines it as

> the process of identifying and measuring data about human resources and communicating this information to interested parties.[2]

In a later report, the committee expanded its view to state that human resource accounting should be part of the process of managing people in an organization.[3] By measuring human resources, the utilization and planning for future needs relating to these resources would be facilitated. While the importance of people in an organization is generally recognized by everyone, the debate over the merits of the use of human resource accounting is a source of disagreement.

One of the major points of debate centers around the definition of an asset. An asset is defined as something that provides probable future economic benefit, obtained or controlled by the company as the result of past transactions.[4] Those that disagree with people being classified as assets cite two reasons: 1) people cannot be legally or morally "owned" by a company, and 2) there is no definite future economic benefit, as the employee can leave at will.

First, on the issue of ownership, although it is true that a company cannot own its employees, most businesses consider their work force to have some degree of permanence. Businessmen rely on this assumption to plan for the use of man-power and training programs. Thus, although they don't own the employees, they can consider them to be on loan to them, much like leased or rented equipment is. As is done with leased equipment, management wants to utilize this resource in the most optimal fashion. Thus, they can be considered to have a custodianship over the resources to utilize them in the best way, without decreasing their value excessively. A system of human resource accounting would provide the means to monitor their use of these assets.

The second argument is there is no certainty of any future economic benefits to be derived. Two arguments that support this contention are that "everyone can be replaced", and because of the rate of rollover, conventional accounting gives the same results. What is meant by rollover is the rate of amortization and the rate of deferral coincide, cancelling one another out. The issue of the uncertainty of future economic benefits has already been answered above. Companies assume that their work-force is relatively stable,

so there is an expectation of future benefits through the services they will provide. It should be remembered that it is not the employees themselves that are the assets, but the expected future service potential through which they give other resources utility. The argument that "everyone can be replaced" is true, but human resource accounting tries to identify the costs of replacement, among other things.

As for the rollover argument, it seems to make sense theoretically, but where human resource accounting has been tried, the facts show otherwise. The Milwaukee Braves implemented a system of human resource accounting in which they planned to have the amortization of existing player investments offset by deferral of costs of new players. In practice, the policy did not work and the asset value fell.[5] For this argument to be valid, a company would have to invest in training in exactly the same amount as the asset being amortized. In the real world, this is a difficult practice to implement. There is almost always a difference, either resulting in a net increase in investments in human resources, or a net decrease. This argument is also inconsistent with basic accounting. The principle of accounting is generally the individual changes in an account, even if the impact on the financial statements is nil.

Another argument against human resource accounting is the inability to be amortized rationally once established. This argument is weak because for one thing, other assets that are amortized are done so on an arbitrary basis. For example, goodwill is thought to benefit a company throughout its life, yet the amortization period has been set arbitrarily at a maximum of 40 years. This seems to

violate the basic principle of matching expenses and revenues in the proper period, but is the normal practice anyway. This argument is also weak because there are actually fairly rational ways of determining the amortization period. Most companies have experience with past turnover rates, which are fairly good approximations of how long an employee is liable to stay. There is also the use of actuarial calculations available. This science is highly refined and already used in many other areas, such as pension plans. Although amortization periods determined under such methods as just mention may be somewhat arbitrary, all amortization calculations are arbitrary to a certain extent so this should not stand in the way of human resource accounting.

Yet another argument that has been put forward against human resource accounting is the deferral of employee development expenditures is a sham that results in companies being able to manipulate current earnings to reflect a higher income. The use of human resource accounting will not always reflect higher current earnings as evidenced by the case of R. G. Barry. Barry implemented a system of human resource accounting, and because of the considerable interest generated by it, they published it in pro forma form along with their regular financial statements. In the first year, they showed a net increase in investments in human resources, which reflected a higher net income. In the next year, though, they had a net decrease because of a contraction in management training and development expenditures and this translated into a lower net income. To always generate a higher current earnings figure, a company would have to constantly invest more in human resources than was being amortized or written-off.

The argument of manipulation of earnings also ignores the basic concept of accrual accounting, namely the matching of revenues and expenses in the proper period. While the expenditures for individual employees may be small, the aggregate amounts are quite large. Some of these expenditures are correctly expensed in the year incurred, such as a portion of salary costs during orientation, but some will have benefits for future years, such as basic recruitment costs. Under the current method of expensing the entire amount, net income is understated for the year the expenses are incurred. In future periods, the income will be overstated. This overstatement or excess earning capacity will eventually wind up as part of goodwill, which when purchased by an outsider, will finally get recorded.

These are only some of the arguments against human resource accounting and probably the most often cited. They present some valid concerns that need to be considered. Some of these considerations become less important when human resource accounting is looked at primarily for internal management purposes, rather than for external reporting purposes. These constraints are less rigid when the information is for internal purposes. This area will be addressed later in the paper.

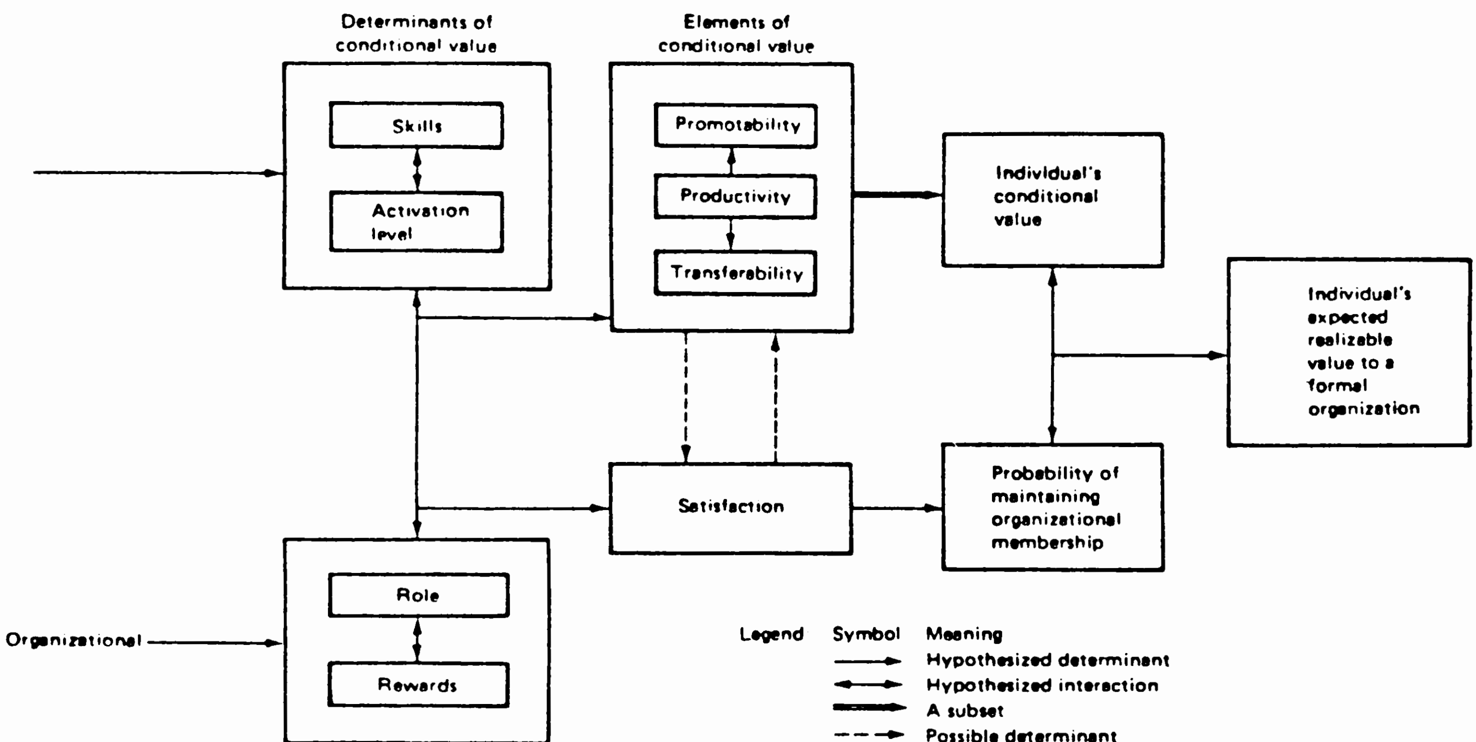
METHODS

Many methods of measuring human resources have been presented in the literature on human resource accounting. Some focus on trying to measure the cost of human resources, while others try to measure human resource value. Perhaps the best place to start is by presenting a theory of the value of people to an organization. Such a theory, by definition, would identify the variables to be used in determining a person's value to an organization. Once these variables are determined, it would facilitate the development of non-monetary surrogate measures for this value.[6]

Eric Flamholtz suggested such a theoretical model for the value of an individual to an organization (see diagram). He focused on the individual, because it is easier to aggregate individuals than it is to disaggregate groups. Flamholtz sees the individual's value to a firm as being multidimensional, comprised of two interacting variables: 1) the individual's "conditional value", and 2) the probability the individual will maintain membership in the organization. The conditional value is the present worth of future potential services that could be derived from the individual. The probability of maintaining membership is the compliment of the turnover rate. The product of these two variables is the "expected realizable value", or the present worth of the services expected to be actually derived from the individual during membership.[7]

The individual's conditional value is multidimensional and comprised of three main factors: productivity, promotability, and transferability. All three relate to the services the individual is expected to render the company. The determinants of these factors

MODEL OF THE DETERMINANTS OF AN INDIVIDUAL'S VALUE TO A FORMAL ORGANIZATION



SOURCE Eric Flamholtz, "Toward a Theory of Human Resource Value in Formal Organizations," *The Accounting Review*, October 1972, p 668 Reprinted by permission of *The Accounting Review*

and a person's conditional value are both individual and organizational. The individual determinants are skills and activation level. The skills of concern are technical, administrative, and human interaction skills. These skills are relatively stable and inherent to each individual, but can be changed somewhat through training. The activation level is the neuropsychological counterpart of the idea of motivation. The activation level is not constant, but varies with changes in the work environment. These two elements interact to determine an individual's potential for rendering services to the organization.[8]

The organizational determinants of conditional value are role and rewards. The organizational role an individual occupies influences the extent to which one has the opportunity to render services. The role an individual fills may not require all of the individual's available skills. The rewards expected to be derived may take two forms: instrumental system rewards and instrumental individual rewards. Instrumental system rewards accrue by virtue of membership in the organization alone. These are the fringe benefits that go along with membership and may contribute to holding members within the organization, but do not necessarily increase productivity. Instrumental individual rewards are given for individual effort and are intended to motivate an individual to optimal performance.[9]

In considering the possibility of a person staying with the company, other factors besides turnover and the determinants of conditional value must be considered. Research has shown that there is an inverse relationship between the likelihood of a person exiting and satisfaction.[10] It has also been suggested that the interaction

between the individual and the organizational determinants of conditional value produce this satisfaction.

This model as presented by Flamholtz provides a framework for understanding the factors that influence an individual's value to an organization. This framework provides a foundation for developing monetary and non-monetary measures of a person's value. Now let's look at some of the methods proposed for actually measuring human resources.

The simplest method for measuring human resources would be to use original cost. This would include such costs as recruiting costs, training costs, formal training costs and any other cost associated with acquiring and getting an employee into a position. These costs would then be capitalized and amortized over some period, probably expected service life, instead of expensing them immediately. The advantage of this method is that it is consistent with current accounting practice because it is based on transactions, making the measurements more objective. It is also a fairly simple method to apply. The major disadvantages of this method are seen to be the difficulty in determining the proper amortization period and that the information it provides may not be very meaningful. The determination of the amortization period has been shown to be less of a problem than initially thought, because of the use of actuaries. Some costs will need to be segregated and amortized over shorter periods, but this does not pose a major problem. While the accumulation of such costs would show the investment made in the past for human resources, it does not show the value or utility that an individual could contribute in the future. It also does not reflect what the cost of replacing an individual would be.

The use of replacement cost would somewhat alleviate this problem. This method values assets at their current cost of replacement, rather than original cost. Eric Flamholtz distinguishes two types of replacement cost. Positional replacement costs refer to the costs incurred to replace someone with a substitute capable of performing to the same degree in the same position. Personal replacement costs refer to the costs of replacing a person with a functionally equivalent substitute, rather than the best available substitute.[11]

There is an additional dimension to consider in replacement cost. Much of the recruiting and training is done on a speculative basis. Initially, a company may hire and train a number of new employees at the same job level. As the process goes on, some will leave at the company's request or of their own volition. In the end, the company may end up with a few good employees. If one of these employees leaves, the process may have to begin all over again to find a suitable replacement. With this added dimension of cost associated with both successful and unsuccessful job recruitment and training cost, the replacement cost of an individual can become quite high.

Although this method would be an improvement over original cost in that it would provide more meaningful information and still be somewhat easy to implement, there are also problems. The major problem with this method is it adds subjectivity to the measurement. In determining replacement cost, there must be an estimation of what it would cost in the market to find a suitable replacement. This in itself would preclude the presentation of human resource accounting information on published financial statements. The situation could

also arise where there is no suitable replacement available or management would be unwilling to replace the asset at its current cost. This method does not provide a means to account for such situations.

Another method suggested by Hekimian and Jones is opportunity cost.[12] This refers to the value of an asset when there is an alternative use for it that is foregone. Hekimian and Jones suggest a system of competitive bidding. Under this system, managers would be encouraged to bid for the employees they want. The manager who is successful in acquiring the employee would include his bid in his investment base. The benefit to the winning bidder is supposed to be the increased profit he can earn with the services of the employee. The major advantage to this method seen by Hekimian and Jones is the bid price would reflect the "market" value of the employee. The major problem with this method is it would only be applicable to those employees that are considered a scarce resource. This method could not be used for employees that are readily available inside or outside of the company, which would result in the majority of human resources being unaccounted for. This method also places different divisions within the same company in direct competition with each other. This could cause dysfunction within the company as each division manager places the division's needs above those of the company as a whole.

While these methods relate to the cost of human resources and could provide reasonable surrogate measures for human resource value, a few have tackled the difficult problem of formulating methods for measuring value.

Eric Flamholtz has presented a monetary method for measuring human resource value. Conceptually, what it involves is an individual moving through "service states", or organizational roles, during a time interval that can be probablistically determined.[13] In simple terms, what is done here is to look at the total period an individual is expected to remain with the firm, identify the service states he is expected to occupy during this time, and the probabilities of the individual occupying each of these service states. The service states are multiplied by their respective probabilities and the sum of these is the total expected service life. This is one of the factors needed to measure the value of an individual to an organization.

The other necessary factor is to determine a monetary representation of the expected benefits to be derived from the individual during this time. One way of doing this is the price-quantity method.[14] This method requires the identification of a "service criterion", or measure of an individual's service. The service criterion functions as a measure of an individual's expected services at different periods in time. The market value or price of the services must also be determined. Both of these may be difficult to determine. Another possible approach is the income method. An individual's future services may already be stated in monetary terms in the form of forecast future earnings. This could also be done for a resource mix by allocating a portion of forecast earnings to each individual, based on relative contribution. In addition to determining the monetary value of these services, the present value of money must be considered, which requires the selection of an appropriate discount rate.

Flamholtz acknowledges many of the problems in implementing his model. He did not even try to suggest an appropriate discount rate, because of the inherent problems in trying to do this. He recognized that, given the developmental stage of present human resource accounting, surrogate measures such as those discussed earlier are needed. Along with those monetary surrogate measures, other non-monetary ones have been suggested.

One such method was proposed by Rensis Likert. His model also focuses on trying to measure human resource value instead of cost. Likert sees the human organization as having two broad dimensions, causal and intervening variables, which affect the financial and performance data or the end-result variables.

> Causal Variables - are independent variables that can be directly or purposely altered or changed by the organization and its management and that, in turn, determine the course of developments within an organization and the results achieved by that organization. These include structure of the organization, management's leadership strategies, skills, behavior, policies, and decisions.
>
> Intervening Variables - reflect the internal state, health, and performance capabilities of the organization. For example, the loyalties, attitudes, motivations, satisfaction, performance goals, and perceptions of all members and their collective capability for communication, decision making, and effective action.
>
> End-Result Variables - are the dependent variables that reflect the results achieved by the organization, such as productivity, costs, scrap loss, growth, share of the market, and earnings.[15]

Measurements of the causal and intervening variables should be obtained for the company as a whole, and by units. Once these measures have been taken over a sufficient period of time for relatively stable relationships to develop, these variables can then be related to the earnings record. Using statistical methods, mathematical

relationships can then be derived to estimate earnings capabilities for any unit based on causal and intervening scores. These estimates reveal the earning power of the human organization at the time the causal and intervening variables were measured.

This may not seem to be particularly relevant for measuring human resource value, but the implications have a great deal of relevance. Research has shown that there are time lags of two to three years before the improper management of human resources is reflected in conventional financial statements. On the other hand, social-psychological measures, such as used in Likert's model, indicate such mismanagement at a much earlier time.[16] With key causal variables, it is possible to predict trends in productivity and cost performance, Likert claims. Using this method, they can monitor their use of human resources and also calculate the total present worth of the company's human organization.

THE CASE OF R. G. BARRY CORPORATION

R. G. Barry is a small manufacturing company employing approximately 2,000 people. They manufacture slippers, bathrobes, pillows and the now-popular Cabbage Patch Kids and Care Bears for department stores, specialty shops, supermarkets, discount stores, and chain stores throughout the United States. They were a small family-owned business until 1962 when they went public. They were also going through a period of internal growth, as well as growth through acquisition. This tremendous change in the company also required a change in management style from a small, autocratic, paternalistic style to a professional style of participative management.

The apparel industry is characterized by low capital investments in physical plant and equipment and high labor intensiveness. From the beginning, R. G. Barry placed a lot of emphasis on the value of people in their organization, but with the tremendous growth they were experiencing, they saw an even greater need to manage this resource more effectively. For this reason, R. G. Barry got involved in the development and use of three human resource informational tools: Team survey and feedback program, man-power planning and development programs, and human resource accounting. Although all tools are important, the focus here will be on human resource accounting.

In 1966, R. G. Barry's president, Gordon Zacks, and their Vice-President of Personnel, Robert Woodruff, approached Rensis Likert at Michigan University's Institute for Social Research. Together they formed a team to define the problem in more detail

and to develop more precise concepts to guide further efforts. The basic objectives were:

> 1. To provide Barry managers with specific feedback information on their performance in managing the organizational assets entrusted to them, so they can make proper adjustments in their pattern of operations to correct adverse trends or further improve the condition of these assets.
>
> 2. To provide Barry managers with additional information pertaining to human resources to assist in their decision making.
>
> 3. To provide the organization with a more accurate accounting of its return on total assets employed, rather than just the physical assets, and to enable management to analyze how changes in the status of the assets employed affect the achievement of corporate objectives.[17]

In deciding how to measure the investments in human resources, they considered three alternatives. The first was outlay costs, or the costs the company actually incurred in obtaining, maintaining, and developing these assets. The second was replacement cost, which is the cost of replacing an employee with an equivalent substitute. The last was economic value, which would be the present worth of future services to be derived. Initially, outlay cost was selected, since it would be the simplest to implement and most consistent with current accounting practices. They also made provisions to utilize replacement costs.

In 1968, when the system went "on line", it was limited to top management of the two most important divisions. Yearly, they expanded it to include all management and 1,500 office and factory workers. Seven functional accounts were established to accumulate costs for managers with three of these seven utilized for office and factory workers. The seven accounts were:

1. Recruiting Costs
   These are costs associated with finding and selecting a person for a job. They can be external or internal and include both successful and unsuccessful costs. These are costs such as search fees, advertising, personnel department time, etc.

2. Acquisition Costs
   These are costs of bringing the successful job candidate into the position. They include moving expenses, temporary living expenses, physical examination expenses, etc.

3. Orientation
   These are costs of formal orientation programs, such as vestibule training.

4. Training Costs
   These are costs associated with adapting the new employee's skills to the specific requirements of the job. These are normally salary allocations.

5. Familiarization Costs
   These are costs of integrating the new person into the organization, and consist of such things as learning corporate policies, objectives, etc. These are also salary allocations.

6. Informal Development Costs
   These are costs of on-the-job training after the initial familiarization period, and are expected to benefit future periods.

7. Formal Development Costs
   These are costs incurred in increasing a person's capabilities beyond specific job skills. These are such things as seminars and university courses.[18]

These accumulated costs were then capitalized and amortized over an appropriate period. Such things as recruiting and acquisition costs would be amortized over the expected service life, which was determined with the aid of actuarial tables. Other costs, such as on-the-job training, would be amortized over a shorter fixed period. Another factor that was monitored, but not put in numerical terms, was the health of an individual. This was monitored because if an individual suffered a major health problem, his term of continued membership would likely decrease and a partial write-off may have to be made.

R. G. Barry pursued the use of human resource accounting for a number of years, and even presented it in pro forma format in published financial statements because of the interest it was generating. Then, in 1975, Barry discontinued the active system for human resource accounting. Following is a presentation of the reasons given by Barry for discontinuing its use and their evaluation of its usefulness.

R. G. Barry discontinued its use of human resource accounting because the costs of developing a fully operable human resource accounting system were too high for a company of their size.[19] They did not have the resources to develop applications for human resource accounting, or to automate the system. They also had problems developing acceptable standards for some of the functional categories. Another important factor was the problem of gaining acceptance and credibility of the system among the total management of the organization. In the initial stages of the system, they spent a lot of time trying to get everyone to understand that they were only accounting for investments in people, not their "value".

Even with these problems, R. G. Barry feels there a number of benefits that they derived from its use. One benefit that Barry saw as important was by actively pursuing a system of human resource accounting, it reinforced their basic philosophy with regard to people in their organization. This showed their employees in action that their words were not hollow statements. Another important benefit was by using this system and quantifying their human resources, it highlighted their importance to all management. It

provided a heightened awareness among managers and enabled them to more effectively plan for replacements and minimize turnover as much as possible. It also was of benefit to the organization as a whole, by allowing them to determine a more economically realistic picture of net income and return on investment.

There were also a number of benefits that Barry foresaw for the use of human resource accounting information, but were unable to realize. One such benefit was seen to be the usefulness of this information in both short-term and long-term borrowing. An integral part of current loan approvement processes was for representatives from the lending institutions to visit the facilities and talk to the people. With a human resource accounting system, the company could aid in this process by providing such information. Human resource accounting information could also be useful in evaluating prospective acquisitions. Appraisals of the human assets of the company being acquired are already important considerations in acquisition decisions and having such a tool available could make the evaluation easier. Capital improvement decisions would also lend themselves readily to the use of human resource accounting information in the decision process.

So, even though R. G. Barry chose to drop their use of human resource accounting, their experience with it shows that it can be beneficial. They believe it can be a useful tool for management and once the problems associated with developing an operational system are tackled by companies with the resources to devote to solving these problems, human resource accounting will become a workable tool.

Following are the pro forma financial statements developed by R. G. Barry. On the balance sheet in the assets section is the total investment made in human resources, less amortization. On the liability and equity side, there are two additional accounts. One is a deferred federal income tax resulting from appropriations for human resources, and the other is an appropriation of retained earnings for human resources. On the income statement, the net change in human resources is reflected. A net increase means more was invested than amortized or written-off and a decrease means the opposite.

1969 - system covered all management
- provisions for long-service managers included

1970 - office and factory workers added to system, but not yet reflected in statements
- amortization and write-offs exceed investment due to curtailment of management training programs

1971 - office and factory workers reflected in statements

"THE TOTAL CONCEPT"

R. G. Barry Corporation and Subsidiaries
Pro-Forma
(Financial and Human Resource Accounting)

Balance Sheet

	1969 Financial and Human Resource	1969 Financial Only
Assets		
Total Current Assets	$10,003,628	$10,003,628
Net Property, Plant and Equipment	1,770,717	1,770,717
Excess of Purchase Price of Subsidiaries over Net Assets Acquired	1,188,704	1,188,704
Net Investments in Human Resources	986,094	—
Other Assets	106,783	106,783
	$14,055,926	$13,069,832
Liabilities and Stockholders' Equity		
Total Current Liabilities	$ 5,715,708	$ 5,715,708
Long Term Debt, Excluding Current Installments	1,935,500	1,935,500
Deferred Compensation	62,380	62,380
Deferred Federal Income Taxes as a Result of Appropriation for Human Resources	493,047	—
Stockholders' Equity:		
Capital Stock	879,116	879,116
Additional Capital in Excess of Par Value	1,736,253	1,736,253
Retained Earnings:		
Financial	2,740,875	2,740,875
Appropriation for Human Resources	493,047	—
Total Stockholders' Equity	5,849,291	5,356,244
	$14,055,926	$13,069,832

Statement of Income

	1969 Financial and Human Resource	1969 Financial Only
Net sales	$25,310,588	$25,310,588
Cost of sales	16,275,876	16,275,876
Gross profit	9,034,712	9,034,712
Selling, general and administrative expenses	6,737,313	6,737,313
Operating income	2,297,399	2,297,399
Other deductions, net	953,177	953,177
Income before Federal income taxes	1,344,222	1,344,222
Human Resource expenses applicable to future periods	173,569	—
Adjusted income before Federal income taxes	1,517,791	1,344,222
Federal income taxes	730,785	644,000
Net income	$ 787,006	$ 700,222

The information presented on this page is provided only to illustrate the informational value of human resource accounting for more effective internal management of the business. The figures included regarding investments and amortization of human resources are unaudited and you are cautioned for purposes of evaluating the performance of this company to refer to the conventional certified accounting data further on in this report.

"THE TOTAL CONCEPT"

R. G. Barry Corporation and Subsidiaries
Pro-Forma
(Conventional and Human Resource Accounting)

Balance Sheet

Assets	1970 Conventional and Human Resource	1970 Conventional Only
Total Current Assets	$10,944,693	$10,944,693
Net Property, Plant and Equipment	1,682,357	1,682,357
Excess of Purchase Price of Subsidiaries over Net Assets Acquired	1,188,704	1,188,704
Net Investments in Human Resources	942,194	—
Other Assets	166,417	166,417
	$14,924,365	$13,982,171

Liabilities and Stockholders' Equity	1970 Conventional and Human Resource	1970 Conventional Only
Total Current Liabilities	$ 3,651,573	$ 3,651,573
Long Term Debt, Excluding Current Installments	2,179,000	2,179,000
Deferred Compensation	77,491	77,491
Deferred Federal Income Taxes Based Upon Full Tax Deduction for Human Resource Costs	471,097	—
Stockholders' Equity:		
Capital Stock	1,087,211	1,087,211
Additional Capital in Excess of Par Value	3,951,843	3,951,843
Retained Earnings:		
Financial	3,035,053	3,035,053
Human Resources	471,097	—
Total Stockholders' Equity	8,545,204	8,074,107
	$14,924,365	$13,982,171

Statement of Income

	1970 Conventional and Human Resource	1970 Conventional Only
Net Sales	$28,164,181	$28,164,181
Cost of Sales	18,252,181	18,252,181
Gross Profit	9,912,000	9,912,000
Selling, General and Administrative Expenses	7,546,118	7,546,118
Operating Income	2,365,882	2,365,882
Other Deductions, Net	250,412	250,412
Income Before Federal Income Taxes	2,115,470	2,115,470
Net Increase (Decrease) in Human Resource Investment	(43,900)	—
Adjusted Income Before Federal Income Taxes	2,071,570	2,115,470
Federal Income Taxes	1,008,050	1,030,000
Net Income	$ 1,063,520	$ 1,085,470

The information presented on this page is provided only to illustrate the informational value of human resource accounting for more effective internal management of the business. The figures included regarding investments and amortization of human resources are unaudited and you are cautioned for purposes of evaluating the performance of this company to refer to the conventional certified accounting data further on in this report.

"THE TOTAL CONCEPT"

R. G. Barry Corporation and Subsidiaries
Pro-Forma
(Conventional and Human Resource Accounting)

Balance Sheet

Assets	1971 Conventional and Human Resource	1971 Conventional Only
Total Current Assets	$12,810.346	$12.810,346
Net Property, Plant and Equipment	3,343,379	3,343,379
Excess of Purchase Price over Net Assets Acquired	1,291,079	1,291,079
Net Investments in Human Resources	1,561,264	—
Other Assets	209,419	209.419
	$19,215,487	$17,654.223

Liabilities and Stockholders' Equity		
Total Current Liabilities	3,060,576	3,060,576
Long Term Debt, Excluding Current Installments	5,095,000	5,095,000
Deferred Compensation	95,252	95,252
Deferred Federal Income Taxes Based Upon Full Tax Deduction for Human Resource Costs	780,632	—
Stockholders' Equity:		
Capital Stock	1,209,301	1,209,301
Additional Capital in Excess of Par Value	5,645,224	5,645.224
Retained Earnings:		
Financial	2,548,870	2.548,870
Human Resources	780,632	—
Total Stockholders' Equity	10,184,027	9,403,395
	$19,215,487	$17,654,223

Statement of Income

Net Sales	$34,123,202	$34,123.202
Cost of Sales	21,918,942	21,918,942
Gross Profit	12,204,260	12,204,260
Selling, General and Administrative Expenses	9,417,933	9,417,933
Operating Income	2,786,327	2,786,327
Other Deductions, Net	383,174	383,174
Income Before Federal Income Taxes	2,403,153	2,403.153
Net Increase in Human Resource Investment	137,700	—
Adjusted Income Before Federal Income Taxes	2,540.853	2,403,153
Federal Income Taxes	1,197.850	1,129.000
Net Income	1,343,003	1,274,153

The information presented on this page is provided only to illustrate the informational value of human resource accounting for more effective internal management of the business. The figures included regarding investments and amortization of human resources are unaudited and you are cautioned for purposes of evaluating the performance of this company to refer to the conventional certified accounting data further on in this report.

"THE TOTAL CONCEPT"

R. G. Barry Corporation and Subsidiaries
Pro-Forma
(Conventional and Human Resource Accounting)

Balance Sheet

Assets	1972 Conventional and Human Resource	1972 Conventional Only
Total Current Assets	$16,408,620	$16,408,620
Net Property, Plant and Equipment	3,371,943	3,371,943
Excess of Purchase Price over Net Assets Acquired	1,288,454	1,288,454
Deferred Financing Costs	183,152	183,152
Net Investments in Human Resources	1,779,950	—
Other Assets	232,264	232,264
	$23,264,383	$21,484,433
Liabilities and Stockholders' Equity		
Total Current Liabilities	3,218,204	3,218,204
Long Term Debt, Excluding Current Installments	7,285,000	7,285,000
Deferred Compensation	116,533	116,533
Deferred Federal Income Tax Based Upon Full Tax Deduction for Human Resource Costs	889,975	—
Stockholders' Equity:		
Capital Stock	1,818,780	1,818,780
Additional Capital in Excess of Par Value	5,047,480	5,047,480
Retained Earnings:		
Financial	3,998,436	3,998,436
Human Resources	889,975	—
	$23,264,383	$21,484,433

Statement of Income

	1972 Conventional and Human Resource	1972 Conventional Only
Net Sales	$39,162,301	$39,162,301
Cost of Sales	25,667,737	25,667,737
Gross Profit	13,494,564	13,494,564
Selling, General and Administrative Expenses	10,190,773	10,190,773
Operating Income	3,303,791	3,303,791
Interest Expense	549,225	549,225
Income Before Federal Income Taxes	2,754,566	2,754,566
Net Increase in Human Resource Investment	218,686	—
Adjusted Income Before Federal Income Taxes	2,973,252	2,754,566
Federal Income Taxes	1,414,343	1,305,000
Net Income	$ 1,558,909	$ 1,449,566

"THE TOTAL CONCEPT"

R. G. Barry Corporation and Subsidiaries
Pro-Forma
(Conventional and Human Resource Accounting)

Balance Sheet

Assets	1973 Conventional and Human Resource	1973 Conventional Only
Total Current Assets	$18,311,713	$18,311,713
Net Property, Plant and Equipment	3,500,227	3,500,227
Excess of Purchase Price over Net Assets Acquired	1,285,829	1,285,829
Deferred Financing Costs	173,278	173,278
Net Investments in Human Resources	1,964,243	—
Prepaid Income Taxes and Other Assets	213,500	213,500
	$25,448,790	$23,484,547
Liabilities and Stockholders' Equity		
Total Current Liabilities	3,909,083	3,909,083
Long Term Debt, Excluding Current Installments	6,970,000	6,970,000
Deferred Compensation	143,150	143,150
Deferred Income Tax Based Upon Full Tax Deduction for Human Resource Costs	982,122	—
Stockholders' Equity:		
Capital Stock	1,902,347	1,902,347
Additional Capital in Excess of Par Value	5,676,549	5,676,549
Retained Earnings:		
Financial	4,883,418	4,883,418
Human Resources	982,121	—
	$25,448,790	$23,484,547

Statement of Income

Net Sales	$43,161,564	$43,161,564
Cost of Sales	28,621,050	28,621,050
Gross Profit	14,540,514	14,540,514
Selling, General and Administrative Expenses	10,783,922	10,783,922
Operating Income	3,756,592	3,756,592
Interest Expense	598,846	598,846
Income Before Income Taxes	3,157,746	3,157,746
Net Increase in Human Resource Investment	184,293	—
Adjusted Income Before Income Taxes	3,342,039	3,157,746
Income Taxes	1,615,147	1,523,000
Net Income	$ 1,726,892	$ 1,634,745

SUMMARY

Now a look at where human resource accounting stands today. Although there has been a lot of literature and attention, there has been little actual research in the area of human resource accounting. The question that still has not been answered is whether or not human resource accounting can be a useful tool and to whom can this information be useful.

For human resource accounting to be a useful tool, it needs to be determined if the information provided by such a system makes a difference in decision making of management or investors. In the case of R. G. Barry Corporation, they claim that it did affect their decisions with regard to their human resources. The management of R. G. Barry felt that the information provided from their system made a difference, because it quantifies this information and puts it on a somewhat equal footing as conventional financial information. The benefits of their system were never emperically shown, but only reflect the perceptions of management.

There have been a few scientific experiments conducted on the impact of this information on decisions by both management and investors. Lawrence Tomassini conducted an experiment on the effect of human resource cost estimates on managerial decision preferences in a personnel lay-off context. The subjects used in this experiment were upper division and graduate accounting students who had very limited exposure to human resource accounting beforehand. Tomassini used two groups; an experimental group, which was given conventional accounting information and quantified human resource information, and a control group, which received only conventional accounting information. His conclusion was human resource accounting cost

estimates caused different managerial preferences in this personnel lay-off decision context.[20] The results of this experiment, along with the subjective statements of R. G. Barry management, seem to indicate that human resource accounting information does impact decisions.

Elias conducted an experiment on the effects of human asset information on the investment decision.[21] Participants in the experiment included chartered financial analysts, certified public accountants, and three student groups of different levels. They were presented with information for two companies in the same industry of comparable size, and asked to choose the better investment. They were provided with information in the conventional form, in human resource accounting form, and combined form. The conclusion reached by Elias in this experiment was that the human asset information did not affect the decisions made. This same result was found by Shinkir, Sperry and Strawer in a survey conducted of major certified public accounting firms and 200 of the largest industrial organizations.[22] Still, others have found the opposite effect to be true. As with the impact on managerial decisions, more research needs to be conducted to prove the effects on decision making.

One of the problems with doing research on the effects of human resource accounting information is the need for an actual operating system of human resource accounting. Without this, it is difficult to conduct field experiments that can be duplicated elsewhere. At the same time, field experiments are needed to justify human resource accounting. This requires companies, like R. G. Barry, that are willing to take the risk and expend the resources required to develop such systems.

Another aspect that goes along with the question of whether or not it makes a difference is, if it does make a difference, is it beneficial or harmful? This question must be looked at from both the perspective of the organization and the individuals being accounted for under such a system. This question still remains to be dealt with in field studies, but there is one problem that has already been confronted by some who have tried to implement human resource accounting systems.

The idea that a company is trying to place a "value" on employees is threatening to many people. People fear this value measurement would be an estimate of what their personal worth is. This really results from a misunderstanding of what human resource accounting is trying to do. At present, most of the systems being implemented are based on cost measures and do not try to reflect an employee's economic value to the company. These methods are being used because they are relatively simple, and because an operational method of valuing human resources has not yet been developed. This concern will have to be addressed in future studies to determine its impact.

CONCLUSION

So human resource accounting is basically still in the developmental stage, with a lot of work to be done yet to get an operational system developed and to develop applications. There have been a number of future applications and impacts that have been suggested in the literature. The general areas foreseen to be impacted by human resource accounting are personnel management, management accounting, corporate financial accounting, social accounting, and human resource management theory.[23]

Personnel management will be influenced because it will permit personnel decisions to be based on a cost-value calculus. It will permit personnel planning to be based on systematic, quantitative methods. It could also change the extent of influence the personnel department has in an organization. Human resource accounting will enable the personnel department to actually measure the output or value that personnel expenditures contribute to the organization as a whole.

Managerial accounting will be affected because human resource accounting will enlarge the boundaries of this area. New systems of accounting will have to be developed to implement the use of human resource accounting information, which are not provided for under conventional accounting.

Corporate financial reporting could be affected in the future by the inclusion of human resource accounting information in published statements. Some people foresee a time when human resource accounting will be part of generally accepted accounting principles.

The area of social accounting could be impacted by human resource accounting as organizations become more concerned with demonstrating their social responsibility toward employees and society. With human resource accounting, they will be able to report on their custodianship of society's human assets entrusted to them.

Ultimately, perhaps the greatest impact of human resource accounting will be on the management of people. Because of the attention-directing effect of measuring human assets, management will become more aware of the need and opportunity to appreciate the value of human resources.

With the current state of development in human resource accounting, the most beneficial way to use it is for internal management purposes. If this course is pursued, the constraints imposed by conventional accounting do not have to be adhered to so strictly. Also, by developing and operationalizing an internal system of human resource accounting, the road to general understanding and acceptance of the system will begin to be laid. It is only through this understanding and acceptance that human resource accounting may become part of what is considered conventional accounting.

There is both great potential and a great deal of work still to be done in the area of human resource accounting. As more of the world economy expands into service organizations, the need for some system of this type will become more and more apparent. For those companies currently considering developing a human resource accounting system, there are four factors to be considered:

1. The type of organization
   - the degree of labor intensiveness of the company

2. The size and structure of the organization
   - management's philosophy toward employees is important here

3. The existing human resource capability
   - any information already available on the human resources of the organization

4. The potential for developing a system of human resource accounting in the organization[24]

FOOTNOTES

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3. "Report of the Committee on Human Resource Accounting," *The Accounting Review*, Supplement to 1974, p. 115.

4. Lewis D. McCullers and Richard G. Schroeder, *Accounting Theory: Text and Readings*, (New York), p. 161.

5. Marvin Weiss, Ph.D., "Where Human Resource Accounting Stands Today," *Administrative Management*, November 1972, p. 46.

6. Eric Flamholtz, "Toward a Theory of Human Resource Value in Formal Organizations," *The Accounting Review*, October 1972, p. 667.

7. *Ibid.*, p. 669.

8. *Ibid.*, p. 669.

9. *Ibid.*, p. 671.

10. *Ibid.*, p. 673.

11. Rose DiCarlo, "Human Resource Accounting: A Synthesis," *Cost and Management*, vol. 58, July-August 1983, p. 58.

12. James S. Hekimian and Curtis H. Stone, "Put People on Your Balance Sheet," *Harvard Business Review*, January-February 1967, p. 108.

13. Eric Flamholtz, "A Model for Human Resource Valuation: A Stochastic Process with Service Rewards," *The Accounting Review*, April 1971, p. 256.

14. *Ibid.*, p. 260.

15. Rensis Likert and William C. Pyle, "Human Resource Accounting," *Financial Analysts Journal*, January-February 1971, pp. 78-79.

16. *Ibid.*, p. 79.

17. "Human Resource Information Tools: R. G. Barry Corporation," R. G. Barry Corp., (Ohio), December 1973, p. 8.

18. *Ibid.*, pp. 10-12.

19. "Training Talks to the Top," <u>Training</u>, October 1977, p. 24.

20. Lawrence A. Tomassini, "Assessing the Impact of Human Resource Accounting: An Experimental Study of Managerial Decision Preferences," <u>The Accounting Review</u>, October 1977, p. 907.

21. Eric Flamholtz, <u>Human Resource Accounting</u>, (California), 1974, p. 340.

22. "Report of the Committee on Human Resource Accounting," <u>The Accounting Review</u>, Supplement to 1974, p. 118.

23. Flamholtz 1974, p. 354.

24. <u>Ibid.</u>, p. 275.

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