A SURVEY INTO HUMAN RESOURCES ACCOUNTING DISCLOSURE IN THE PUBLISHED ANNUAL ACCOUNTS AND REPORTS: THE CASE OF COMPANIES QUOTED AT THE NAIROBI STOCK EXCHANGE.

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DECLARATIONS

This Project is my original work and has not been submitted for a degree in any other University.

Anne Wandia Muya

This project has been submitted for examination with my approval as University Supervisor.

Abdullatif Essajee.

DEDICATION

To my dear parents especially my mom, Mary Warigia.

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ABSTRACT

This study aimed at determining the current practice of human resources information disclosure in Kenya. To achieve this, the researcher set out to determine the human resources information items disclosed in the annual reports and accounts of Kenyan companies, the trend of this disclosure in the period 1994 to 1998, whether the disclosure differs significantly between the sectors of various companies, and finally whether this disclosure differs depending on the accounting firm auditing the company's accounts.

A sample of 49 companies listed in the Nairobi stock Exchange was selected and their annual reports and accounts analysed with a view of achieving the above objectives.

The information was presented in the form of tables, percentages and graphs in order to show the human resources items disclosed and the trend of the disclosure. To determine whether there exists a relationship between the human resources information items disclosed and the sector of the company as well as between the human resources information items disclosed and the company's auditors, chi-square tests were conducted.

The study concluded that companies in Kenya practice human resources accounting which is however limited to human resources information disclosure in the Chairman's report. The most disclosed item was appreciation for employees' contribution in the organisation. The study also established that a relationship exists between the human

resources information items disclosed and the company's sector as well as between the human resources items disclosed and the accounting firm auditing the company's accounts.

The findings should however be analysed while taking account of the limitations stated in chapter five.

CHAPTER ONE: INTRODUCTION

1.1 Background

Employees are one of the most important assets of any organization. The soul of any organisation is not physical assets but the organ that propels them. The personnel who handle the physical assets of the organisation keep the organisation alive. There can hardly be any difference of opinion about the fact that people are the most important assets of an organisation. Likert (1967) observed that every aspect of a firm's activities is determined by the competence, motivation and general effectiveness of its human organizations. Practicing managers also recognize the importance of human resources as evidenced by their constant reference to employees as their greatest asset. Chairmen or Presidents of various organizations constantly refer to employees as one of the most important assets of the organizations (Oonge ,1985).

Human resources comprise one of the most valuable assets and it is a better source of capital than non-human fixtures because:

i) It coordinates the best of machines, money and other resources to the optimum advantage of the organisation,

ii) Machines are static and cannot grow according to the time and need of their own; it is the human and his strong will which is dynamic to give a growth-oriented thinking to the organisation,

iii) Human organisation gives continuity to any organisation.

Developments in modern theory have made it apparent that there is a genuine need for reliable and complete information which can be used in improving and evaluating the management of human resources. Today, there is emphasis on more employees' participation in decision-making as opposed to earlier management approaches where subordinates were rarely involved in problem solving and work was carried out through dictatorial orders or appraisals resulting in distrust, fear and covert opposition. It usually led to loss of capable people through turnover, decrease in employee's loyalty, trust and confidence in management, increased number of grievances, more wildcat strikes, and worsened industrial relations. These developments, coupled with the fact that the traditional framework of accounting is in the process of being expanded to include a much broader set of measurements than was thought possible in the past, points to the fact that in the ensuing 21st century, accounting for human resources will receive much attention from human resource professionals, senior managers and present and potential shareholders and investors.

A direct result of the above has been the emergence of what has come to be known as Human Resources Accounting. Human Resources Accounting is a branch of accounting which advocates for the inclusion of human resources values in the financial statements. It is defined by the Report of the Committee on the Human Resource Accounting (1973)[1] as "the process of identifying and measuring data about human resources and communicating this information to interested parties". It is a recognition that people comprise capital or human assets due to the fact that they possess skills, experience and knowledge, which represent a pool of benefits to be enjoyed in the future by the firm.

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1. In 1973, the American Accounting Association's Committee on Human Resources Accounting submitted its report. The members of the Committee were Roger.H.Hermanson of the University of Maryland, R.Lee Brummet of the University of North Carolina, Nabil Elias of University of Manitoba, Eric.G.Flamholtz of Colombia University, Gary.A.Luoma of Emary University, Joshua Ronen of University of Chicago and Michael.J.Vertigan of the University of Manitoba. The Committee was charged with identifying, examining, and proposing alternative methods of Human resources Accounting.

Hekimian and Jones (1967) urged firms to "put people on the balance sheet" since people are valuable resources and corporate financial reports are deficient if they do not reflect the human assets in their statements. Similarly, the Report of the Committee on the Human Resources Accounting is part of the overall movement questioning the ability of the conventional accounting practice to meet the needs of the user groups. The Report states that the accepted practice of regarding all expenditures on human capital formation as an immediate charge on income is inconsistent with the treatment accorded to comparable outlays of physical capital. This is further confirmed by Friedman and Lev (1974) who observed that current accounting practices, based on expensing all outlays concerning the firm's human resources, do not provide the information required for decision making and efficiency evaluation.

As noted by Elias (1972), the income statement is understated in the period in which a successful personnel training or development program takes place, whereas further improvements in earnings resulting from such programs are reflected in the future income statements as cost free.

The argument for capitalizing Human Resources is further strengthened by the new standard for intangible assets, FRS 10 (1997), issued in 1998 in UK , calling for UK companies to capitalize their intangible assets from end of 1998, as long as these assets have readily ascertainable market value(Oppenheim,1998).

According to Helmkamp and others (1986), assets are the cash and non-cash resources owned by a business and possessing economic value. An asset is therefore a pool of future benefits. Human resources, being the most crucial factor in the operations of organizations and with the overall goals of productivity and survival depending on the organization's success in its use of people (Wallace et al, 1982) should thus be seen as constituting one of the most important assets of the organization. This view is also taken by Oonge (1985), who points out that the conventional statements fail to show the full picture of the organization's position and hence the management may ignore the effect of their decisions on human beings as they base their decisions on only the quantified variables.

In Kenya, however, Human Resources Accounting is still in its infancy. Indeed, a look at the financial statements of companies quoted in the N.S.E. shows that no company has gone to the extent of capitalizing its human resources. However, many companies are now engaging in voluntary disclosure of human resources information under the Chairman's report, a method of Human Resources Accounting which is referred to as statistically based method. This method of Human Resources Accounting is recognized in the Report of the Committee on the Human Resources Accounting as one of the methods of accounting for human resources. Though descriptive in nature, it is still an important development in the field of Human Resources Accounting.

1.2 Statement of the problem

The fact that companies are engaging in voluntary disclosure of human resources information is a clear indication that companies are now recognizing and acknowledging that there has been an omission of a very important asset in the financial statements. They are also recognizing that addition of this information in the published accounts will make their financial statements more useful to the users. This is an important step in the development of human resources accounting as it clearly indicates that in future there may be a need for a regulatory framework on the inclusion of human resources values in the financial statements. There is thus a need to determine what human resources information companies in Kenya are disclosing and the trend of this disclosure and whether this disclosure differs from sector to sector. This will shed more light on the current practice of accounting for human resources in the annual reports and accounts of Kenyan companies as well as pointing the way forward in the development of this important branch of accounting.

A development of this nature should be spearheaded by among others, the accounting firms. This is in view of the fact that they offer advisory services to companies on preparation of financial statements as well as playing an important role in the standard setting process. They guide the adoption of accounting practices which are deemed to enhance the completeness of the financial statements with an aim of ensuring that the financial statements give a true and fair state of affairs. These firms should therefore be in the forefront of advocating for the inclusion of human resources information and values in the financial statements given that human resources are the lifeline of these firms as depicted by the mission statement of KPMG which states that their aim is "....to turn knowledge into value for the benefit of our clients, community and society." It would thus be paradoxical that accounting firms whose major investment is human resources and who are charged with the responsibility of attesting the financial statements are not playing any role in ensuring that the financial statements are more useful to the users.

There is thus a need to determine whether there is a relationship between the human resources items disclosed and the accounting firm that audits the companies' financial statements in order to determine whether the accounting firms play any role in advising their clients on human resources information disclosure.

1.2.1 Research Questions

The study is geared towards answering the following questions:

1. What human resources information items are disclosed in the published annual reports and accounts of Kenyan companies?
2. What is the trend towards human resources information disclosure in the annual reports and accounts of Kenyan companies?
3. Do companies in different sectors differ significantly in the human resources items they disclose?
4. Do companies audited by different auditing firms differ significantly in the human resources information items they disclose?

The only research in Kenya in this area that the researcher is aware of was conducted by Oonge in 1985. He set out to determine whether inclusion of human resources values in the balance sheet affected the investment decision and concluded that there was a case of human resources accounting in Kenya since inclusion of these values affected the investment decision. His study was however a laboratory experiment using students as surrogate users and did not study the prevailing practice of human resources accounting in the published accounts of Kenyan companies.

1.3 Objectives of the study

The study aims at determining the state of human resources accounting in Kenya. The researcher's specific objectives are:

a) To determine the trend of the development of voluntary human resources disclosure and the specific items of human resources information disclosed with a view of determining the state of human resources accounting in Kenya.

b) To determine if there is a significant relationship between the human resources items disclosed and the sector of the company.

c) To determine if there is a significant relationship between the human resource items disclosed and the accounting firm that audits the company's published accounts.

1.4 Importance of the study

The study will prove to be useful to the following groups:

a) **The accounting profession**

Citing Robert K. Mautx, Hermanson (1964) urges the accounting profession to from time to time do a serious introspection and question what they are doing in order to ascertain whether they have a weakness that needs to be remedied. In view of this, this study will prove very important to the accounting profession in general and the standard setting bodies in particular, as it will show the current trend of human resources accounting in Kenya and point to the future direction of this branch of accounting in Kenya.

b. **Academicians and Scholars**

There has been a lot of controversy in the field of human resources accounting. This research will be useful to academicians especially in Kenya, given that even with the recognition of human beings as resources, very little research in this field has been done in Kenya. The study will provide an insight into the state of Human Resource Accounting in Kenya and a fertile ground for further research in this field.

c. **Managers**

Managers manage people in organizations. From this study, they will be able to determine the current Kenyan practice of accounting for human resources in the annual accounts.

d. **Investors**

It has been shown that human resources information when included in the balance sheet affects the investors decisions (Oonge, 1985). This study will show to what extent in Kenya, this information is made available in the annual accounts.

CHAPTER TWO: LITERATURE REVIEW

2.1 Background

This chapter lays the foundation for the present study by reviewing related literature in the area of human resources accounting. To begin with, a conceptual framework is developed whereby the main concepts of the study are defined and clarified. Next, the historical development of Human Resources Accounting is reviewed in light of the empirical researches and its practical applications. Finally, the need for Human Resources Accounting is looked into in detail followed by the valuation methods which have been suggested in order to value human resources.

2.2 The Conceptual framework

2.2.1 Assets

Oonge (1985) defines assets as future service potential of a factor of production or rights to future benefits.

Hermanson (1964) takes a synthesis of different views on assets and concludes that, assets are "scarce resources (defined as services but grouped by and referred to as agents), operating within the entity, capable of being transferred by forces in the economy, and expressible in terms of money; which have been acquired as a result of some current or past transaction, and which have the apparent ability to render economic benefits".

Generally, assets have been recognized as a pool of future benefits. They are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.

According to Hermanson (1964), human assets are 'operational assets' as opposed to 'owned assets'. Owned assets include all scarce resources, legally or constructively owned by the entity, that have a separate determinable market value. Operational assets consist of all scarce resources operating in the entity that are not owned, for example, a highly trained sales force.

Thus, human resources form a major part of the firm's assets since they represent a pool of future economic benefits such as skills and knowledge, which are to be enjoyed by the firm.

2.2.2 Accounting

Accounting has been defined in various ways by different groups. These definitions portray the changing role of accounting due to the economic and social developments over the past centuries.

For example, the American Institute of Certified Public Accountants (AICPA) in the Accounting Terminology Bulletin No.1, defined accounting as "....an art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the results thereof".

The American Accounting Association (AAA) later defined it as the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information.

The Accounting Principles Board (APB) considered accounting a service entity aimed at providing quantitative information about economic entities to enable the users make economic decisions.

Accounting is now regarded as a service activity, a descriptive or analytical discipline and an information system. It provides useful information to people to help them make rational investment, credit and similar decisions.

In conclusion therefore, it can be said that the primary role of accounting is to provide an effective measurement and reporting system for decision making, a role which requires accurate, complete and reliable information.

2.2.3 Human resources

Carrell et al (1995) note that the term human resources is hard to define with clarity. They however look at it in terms of employees who they define as "...investments that will, if effectively managed and developed, provide long-term benefits to the organization in the form of greater productivity".

Harbison (1973) defines human resources as the energies, skills, talent and knowledge of people, which are, or which potentially can or should be applied to the production of goods or the rendering of useful services.

Thus human resources refer to the employees of the company who possess knowledge and skills which represent future benefits to the organization.

2.2.4 Human Resources Accounting

The Report of the Committee on Human Resource Accounting (1973) defines Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested parties".

Flamholtz (1973) defined it as "accounting for people as organization resources".

Human Resource Accounting therefore is a challenge to managers to appreciate people as valuable organizational resources. Its main focus is on the measurement of human resources and communicating this information to interested parties in view of the fact that capital and natural resources are passive factors of production while human beings are active agents. Thus Human Resources Accounting comprises of valuation of human resources, recording the valuation in books of accounts and presenting this value in the financial statements for communication to the users.

2.3 Historical Development of Human Resource Accounting

From its history, the importance and the need for human resources is evident.

Human Resources Accounting originated from the recognition in the 1960s of the need for human asset measurement for decision-making in the context of the management philosophy of maximizing business income. The concept is borrowed from other social sciences that depicted the importance of human resources to the organisation, notably the social relation movement. Previously, accounting was seen as a means of controlling wealth and in no way concerned with human welfare. With the development of management accounting and the need to ensure efficient utilization of all resources, the accounting process became aware of people. After the Second World War, there was an expansion of the social sciences and emphasis on human welfare, a transition that saw accounting recognized as a managerial tool, rather than merely a wealth maximization tool only. There was therefore a recognition of the need for information relevant to the social management of organizations, and the need for measuring the human resource contributions (Glautier and Underdown, 1976).

One of the earliest advocates for Human Resource Accounting (H.R.A) were Likert and Seashore (1963) who called for presentation of information on the employees for internal purposes. They observed that the present accounting methods are aimed at cost reduction and do not take into account the long-run motivation of the employees. Though they hide the human resources cost, these methods end up being costly and wasteful as employees become dissatisfied and may even leave the organization. They argued that if the accounting system provided measurements of the firm's human resources and their changes over time, the net income might be adjusted to reflect changes in the value of human resources in order to avoid reporting of profits derived from the liquidation of human resources.

Hermanson (1964), in his Occasional Paper No.14 titled "Accounting for human assets" advocated for accounting for human assets, noting that human resource is an operational asset which is most frequently excluded from statements of financial condition. He tried to investigate the implications and possible advantages of assigning asset status to human resources in accounting statements. According to him, accounting and management are drawn closer together by including human resources in the statements, therefore making the accounting representation of the firm conform more closely to the management concept.

He further argued that labour is denied asset status because it cannot be owned, hence it is the most neglected of all the resources within a firm, whereas it would most likely constitute the major portion of all resources operating within the firm. Accordingly, human resources should be valued and like any other company's asset incorporated in the financial statements.

He suggested that two methods could be used to value operational assets namely, Unpurchased Goodwill Method and Adjusted Present Value Method. These methods are based on the economic concepts of value. The Unpurchased Goodwill method assumes that if a business shows a return that is different from the normal rate, it may fairly be presumed that some resources must be existing that have not been taken into account in preparing the balance sheet. These unrecorded resources represent the human assets. This assumption is however not realistic since goodwill can be attributed to other factors such as the firm's location, its reputation and history. Furthermore, no recognition is given to the human resources needed to generate normal earnings.

The Adjusted Present Value method was based on the assumption that a relationship exists between a person's salary and his value to the organization. This model used compensation as a surrogate measure of a person's value to the firm where compensation means the present value of the future stream of wages or salaries to persons employed in a firm. The discounted future wage stream was adjusted by an efficiency ratio which is the weighted ratio of the return on investments of the given firm to all the firms in the economy for a specified period, usually the current year and the preceding four years. This efficiency ratio has however been criticized as being subjective as the weighting scheme used in computing the ratio has no empirical justification. The use of the 5 years period is also purely arbitrary.

The first major attempt at employee valuation was made by the R.G. Barry Corporation of Columbus, Ohio. R.G. Barry's 1967 annual report described the inauguration of human resources accounting procedures as a first step in the development of sophisticated measurement and accounting procedures that would enable the company to report accurate estimates of the worth of the organization's human assets. Barry accumulated costs in individual subsidiary accounts for each manager under five categories namely recruiting, acquisition, formal training and familiarization, informal training and familiarization, experience and development. The accumulated costs were amortized over the expected working lives of individuals (or sometimes shorter periods), and unamortized costs were written off (Woodruff, 1970).

In 1966, Brummet, Flamholtz, and Pyle, began a research on Human Resources Accounting in Michigan. This was designed to develop concepts, models and techniques of measuring and accounting for cost and value of human assets and developing possible applications for such measurements. This research led to a variety of theoretical concepts, models and applications of these approaches in actual organizations (Brummet, Flamholtz, Pyle, 1968).

The first experimentation in an actual organization with the measurement of the value of human resources was done by Flamholtz as the basis for his doctoral dissertation. In his dissertation, Flamholtz developed a theoretical model for the measurement of an individuals value to an organization (Flamholtz, 1971). He suggested a human resource valuation method which would incorporate the movement of an individual from one position or service state to another. The model was based on the presumption that a person's value to an organization depends on the positions occupied by him in the organization. The movement of people from one organizational role to another is a stochastic process with rewards. The model suggested a five- step approach for assessing the value of an individual to an organization:

i) Forecast the period a person will remain in the organization (his expected service life).

ii) Identify the service states that he might occupy, including the time at which he will quit the organization.

iii) Estimate the value derived by the organization when a person occupies a particular position (service state) for a specified time period.

iv) Estimate the probability of occupying each possible mutually exclusive state at specified future times.

v) Discount, at a specified predetermined rate, the expected service rewards to their present value.

He gave the expected value E(S) of human capital of an individual as follows;

$$E(S) = \sum_{t=1}^{n} S_i \quad P(S_i)$$

Where, S_i represents the quantity of services to be derived in state i and $P(S_i)$ is the probability that those services will be derived. He recommended the method as most suitable for service organizations like CPA's where the quantity of services can be estimated more easily as the product of expected compensation (measured in terms of salaries).The model however suffers from many difficulties in its application such as obtaining valid data regarding the value of a service state, a person's expected tenure and probabilities of occupying various service states at specified times. It is also very expensive to predict career movements or exit probabilities on an individual basis. In a later study, Flamholtz (1972) noted that measures of change in the value of an organization's human assets can be useful in monitoring the degree to which human resources have been effectively managed, thus stressing on the importance of Human Resources Accounting. In this field study, he aimed at testing the validity of aspects or the determinants of a person's value to a formal organization (causal variables) and to discover any variables not presently contained in the model representing an individual's selfworth which is shown in the appendix 4. The site of the study was a major international firm of Certified Public Accountants in the USA. The site was selected because it had the desired degree of human-capital intensiveness, it had the feasibility of measuring the economic value of people and had a formal system for evaluating personnel performance and potential. Hypothesis on the determinants of personnel value were developed and tested (Table 1 of appendix 5). Two members of the firm's personnel department and thirty- nine members of the audit staff representing 20% of the audit staff were chosen to constitute the sample. The two personnel managers were each asked to rank thirty-nine accountants according to three hypothesized dimensions of the value to the firm, namely, expected positional value, expected conditional value, and expected realizable value (Table 2 of appendix 5). The study concluded that all of the hypothesized variables except organizational rewards were used by the subjects in assessing the value of people to the organization. New determinants such as attitudes, abilities, and the individual's manager were identified. Flamholtz gave a revised model of the determinants of an individual's value to a formal organization as shown in appendix 4. He concluded that there was a need for a paradigm for human resource management and valuation and suggested that the revised model could provide a theoretical foundation for measuring the value of an organization's human resources since an individual's value is not merely a function of personal attributes but a product of a set of interacting economic, social and psychological variables. The major merit of the model was that it linked the competence and activation levels of the employees with the reward systems that affects productivity and work satisfaction. However it concentrated only on the non-monetary determinants of a person's value.

Elias (1972) tested whether different group of users with different levels of sophistication and orientations in accounting would make their investment decision differently with the addition of human resource information. He defined human assets as aggregates of service potentials available for, or beneficial to, expected operations from its internal members. The sample consisted of six occupational groups in the U.S.A; Chartered Financial Analysts, a random sample of financial analysts other than CFA's, Certified Public Accountants, students in an intermediate accounting course, a senior class in an advanced accounting course, and a senior finance course. Financial statements of two hypothetical companies, ABC and XYZ, were provided to participants; one set using the conventional accounting of ignoring human assets, and the other set incorporating the human assets of the two companies. Human assets were taken to be the unexpired portion of the costs of recruiting, hiring, training, familiarization, and development of the personnel of the company. Finally, the conventional and the human assets statements were simultaneously provided in a third treatment (combined treatment). XYZ was assumed to be developing its human resources while ABC was liquidating part of its human resources. In the conventional set ABC reflected higher net profits than XYZ while in the human assets incorporating statements the reverse was true. A questionnaire was mailed to the participants in which they were asked to select one of the two companies as the better investment. In the combined treatment, subjects had a choice as to which set of financial statements to utilize. By comparing the combined and the conventional statements, the differences in the decision outcomes would thus primarily reflect the degree of utilization of human and accounting statements. The participants were asked to perform the decision with the consideration that each had a 10% of his net annual income for the purpose so as to avoid the trappings of specifying a given sum of money whose value may mean differently among the participants. Elias showed that the company choice depended on the experimental treatments implying that human assets information affects investment decisions. The results showed that the decision differences among occupational groups and accounting orientation were not statistically different. No significant relationships could be ascertained between the company choice and background variables such as familiarity with human asset accounting, age, general business experience, educational level and recency of education.

Jaggi and Lau (1974) developed a human resource valuation model to compute the internal and external values of a firm's human resources. They advocated for a group approach in which a Markovian process was used to represent the career movements of the employees within the firm and the chances of them leaving the firm before retirement or death. They suggested the use of human resources economic valuation model based on a discrete state discrete-time Markov process, with the states corresponding to the various service states of the employees of a firm. The probabilities of career movements and exit from the firm would be estimated on the basis of historical data of career movements available in the firm. They came up with a model of the economic contribution of an employee's service to the firm at any year.

$$(TV) = (N) \sum_{n=1}^{a} r^{n} \, (T)^{n}(V)$$

where;

(TV) = column vector indicating the current value of all current employees in each rank

(N) = column vector indicating the number of employees currently in each rank

(n) = Time period

r = Discount rate

$(T)^n$ = Rank transitional matrix indicating the probability that an employee will be in each rank within the organisation or terminated in the next period given his current rank.

(V) = column indicating the economic value of an employee of rank 'I' during each period.

Friedman and Lev (1974) developed a valuation model which incorporated both actual and market values in the measurement process. The proposed method was a surrogate measure for the firm's investment in human resources in which a transition matrix providing the probabilities of movement from one state to another was first developed. The prediction of the various positions to be occupied in future by current employees was thus obtained. The internal value of the firm's human resources was then obtained by discounting the value of the expected wage bills to be paid to current employees during their expected service life. The external value of the firm's human resources was also obtained by discounting the average going wage rates in the relevant labour markets. The internal and external human resources values were thus computed as:

$$Vo(I) = \sum_{t=1}^{n} \frac{e_t^1 \times W(I)}{(1+r)^t}$$

$$Vo(E) = \sum_{t=1}^{n} \frac{e_t^1 \times W(E)}{(1+r)^t}$$

Where:

Vo(I) is the internal value;

Vo(E) is the external value;

$^{e}t^{1}$ is the manpower distribution vector denoting the distribution of current employees by the k + 1 position at the end of year t;

W(I) is the firm's wage rate vector

W(E) is the average market rate vector.

The two researchers further noted that expensing the whole of human resources investment led to understatement and overstatement of periodic earnings in some periods, understatement of the firm's assets, and inability of the management and investors to evaluate the efficiency of the human resource programs and policies due to lack of data. The proposed surrogate measure would solve these problems.

However, some researchers questioned the capitalizing of human resources assets and urged for the case of unrecorded human assets (Dittman, Juris and Revsine, 1976). Dittman, Juris, and Revsine noted that efforts to incorporate human assets in external accounting reports may be unwarranted since the two conditions necessary to treat human resources as an asset namely, specific training and immobility of labour are absent. Human assets when they exist are transitory and are beyond management control. They concluded that manpower information systems should be for legal compliance and manpower planning decisions rather than for external reporting.

But in a survey on big auditing firms to determine whether there was any specific training to warrant an argument on the existence of unrecorded human resources, their case was weakened by the fact that the results showed that the training partners considered some courses as completely specific to the organization (Oonge, 1985).

Oonge (1985) carried out a research on the case of human resource accounting in Kenya. The study was intended to find out whether providing human resource accounting information in financial statements would change investment decisions, whether there was a relationship between the rate of return on total assets calculated under conventional financial statements with that calculated from statements incorporating human assets, whether there was a relationship between the rate of return on investment calculated from the adjusted statements with ratios such as skill intensity and finally whether inclusion of human resources in financial statements would alter the rankings of companies in terms of the rate of return on total assets. This was a laboratory experiment in which students were used as surrogates. The following hypothesis were developed and tested viz:

H1: Human Resource Accounting data affects investment decisions.

H2: Background variables such as age, number of accounting courses done and length of working experience are associated with investment decision.

H3: Certain belief statements are correlated with investment decision.

Preliminary data was first obtained from a population of thirty-five financial institutions so as to value human resources of each firm. Human asset statements were then prepared by adjusting the conventional ones provided. The adjustment was done by capitalization of salaries of the employees over their lifetime to retirement. The figure obtained was adjusted by the probabilities of death before retirement which was obtained from mortality tables. The discount rate used was the average market interest rate. The total value of the human resources was then shown as an asset in the balance sheet. The corresponding amount was shown as deferred salary liability which was decreased by any salary paid while the credit went to cash. After adjustment the financial statements were prepared and the required ratios such as the return on total assets calculated.

In the next stage, the laboratory experiment was conducted to test the hypothesis. Out of the 35 companies, two companies were selected and their financial statements given to 54 third year Bcomm students doing a finance course. They were also given statements of two hypothetical companies, alpha and beta. They were to make investment decisions, with and without human asset information.

The McNemer test, the contingency coefficient, the Chisquare test and the t-test were used to analyse the information. The results showed that human resources accounting information caused a significant change in investment decision when provided with conventional accounting information and that background variables such as number of articles on human resources accounting read, second year G.P.A and other similar variables, did not affect the investment decision. He called for further research in the area. These results are similar to those of the study carried by Elias (1972). Oonge (1985) thus concluded that human asset accounting would change investment decision and should therefore be provided in financial statements. Though he showed the importance of human asset information on investment decision and the fact that the decision was different purely due to the fact that human asset information was provided, he failed to address the issue of the reasons for the omission of this important information. He however showed that there was a case for human resources in Kenya.

2.4 Need for Human Resources Accounting/Practical Application

Every organization relies to a large extent on the contribution made by human skills and judgement. Human skills and knowledge are important in the effective management and utilization of all other assets. Despite this, human resources are not ordinarily considered assets and are not reported on the balance sheet under the conventional accounting system.

Many authors unanimously agree that human resources accounting information is important for both internal and external purposes.

Oonge (1985) divides the potential users of human resources accounting into two; the internal and external users. The internal users are comprised of the management while the external users are comprised of investors, the government, present and past employees, trade unions and firms in the same industry. Oonge observes that human resources accounting would provide information presently hidden such as the effect of cost reduction programs on employees morale, motivation, and ultimately on employees productivity. He points out that Human Resources Accounting (H.R.A) would aid on decisions of cost control programmes, reallocation of a plant and provide information on standard cost of bringing an employee upto his present level of technical competence. Other internal uses include effective control of such costs as hiring and training, planning of staff in the short, medium, and long-term by highlighting the hiring policy, and improvement in profitability and decision making in a firm. Human resources accounting would also provide information to external stakeholders to help them make good decisions. Such information includes information to the stockholders on the stewardship of all assets including human assets, information on return on investment and so on.

Citing Giles and Robinson (1972), Glautier and Underdown (1976) list the following applications of human resource accounting measurements:

a) Measuring the return on capital employed on total organizational assets, including the human assets.
b) Proper planning of resources as information on all resources is reported.

c) Examining the disposition of resources. By allocating relative human asset values to different job groups, the location of organizational investments in human resources would be highlighted.

d) Examining personnel expenditure and reappraising expenditure on personnel services and training.

e) Preparing organization and personal profiles which is important for personnel planning especially in the area of requirements and disposition.

f) Remuneration determination which is important in solving industrial relation problems, for example strikes and salary grievances.

g) Valuing businesses, where the human asset value becomes a relevant factor in mergers and take-over decisions.

h) Integrating human assets values with financial accounts for reporting purposes, so as to represent the true and fair state of affairs as it is argued that without this information, financial statements are understated.

Siegel (1989) looks at human accounting's management role and in particular the role in assessment of the costs and value involved in a decision. He observes that measurement of the cost and value of human resources are needed to facilitate personnel planning and decision making by personnel management staff and to enable top management to evaluate the effectiveness with which human resources have been developed, observed and utilized by lower levels of management. This information is useful in making decisions on all phases of human resources management process such as acquisition, development, allocation, conservation, utilization, evaluation and rewards of human resources.

The Report of the Committee on Human Resource Accounting (1973) points out that the purpose of Human resources Accounting is to improve the quality of financial decisions made both internally and externally concerning an organization. This emphasizes the view taken by Oonge (1985). The report adds that Human Resources Accounting data should result in a widening of the scope of present decision-making by permitting the consideration of a larger set of variables or improving the basis on which these variables are currently considered in decision making since the impact of human resources would be taken into account. This would be relevant for capital budgeting decision as a human resources accounting system would provide the data necessary to convert the qualitative decision making in the management of human resources into a more quantitative framework. Human Resources Accounting would also provide information to external users, such as investors, of the extent to which the human assets have increased or diminished during the period. Thus the Human Resources Accounting system will have the following practical applications:

1. Improved decision-making: Human Resources Accounting system provide important information for managerial and investor decision making in such areas as acquisition of human resources, relocation of plants etc.
2. The effects of human asset value on various alternative courses of action will help top management to make more rational decisions since this information will be incorporated when planning changes in the use of a firm's resources.
3. Disposition of resources: By allocating human asset values to different job grades, a company can determine which area its investments in human assets lay at a point in time, thus helping in radical reconsideration of established personnel policies and expenditure.

4. Applications in service industries: The information will be more useful to these industries because in service industries, financial and physical assets form a minor part of the total value of the firm e.g. in accounting firms. This information will be useful in determining the return (or productivity) on the human asset investments.
5. Personnel turnover: Valuation of human resources will highlight the cost of turnovers, which can be included in the analysis of a given course of action which may affect the employees morale and motivation.
6. More improved management information systems: Inclusion of human resources information will give a more complete picture of the state of affairs.
7. Measuring the return on capital employed: Profits expressed as a percentage of net assets plus human assets will give a more accurate measure of the returns on total investments which will reveal unexpected trends within company or differences between companies in the same industry since employees policies will be taken into account while computing this measure.

It is clear that human resources accounting information will serve as an important decision-making tool. If conventions in the human asset area are widely accepted, the whole business community and other interested parties such as the government, will benefit as a result of efforts of both the accounting and personnel specialists and the management whom they serve. Indeed, the fact that the Kenyan government has set aside a separate ministry for education and human resources development points to the governments recognition of the importance of skilled human resources in a developing country like Kenya.

2.5 Valuation methods in Human Resources Accounting

The Report of the Committee on Human Resource Accounting (1973) identifies the following valuation methods, which are categorized under cost, value, and non-monetary measurements.

A. COST

i) Historical or Acquisition cost

ii) Replacement cost

iii) Opportunity cost

B. VALUE

i) Discounted Future Salaries/Incomes

C. NON-MONETARY MEASUREMENTS

i) Statistically based surrogate methods

ii) Behavioral-based methods.

A: COST

i) Historical or Acquisition Cost

This refers to the actual, historical outlay that was actually incurred to acquire and develop people.

In this method actual costs incurred on recruiting, selecting, hiring, training and developing the human resources of the organization are capitalized and amortized over the expected useful life of the human resources.

Pyle assisted by Brummet and Flamholtz first developed the historical cost model of valuing human resources. It has actually been used to accumulate the amount invested in human resources by R.G Barry Corporation, a leisure footwear manufacturer. In its 1969's balance sheet, the company credited half the amount to be capitalized to the retained earnings account and the other half to deferred taxes payable in the implementation year. The debit went to investment account, an asset account. Any asset expiring before the end of year was expensed to the profit and loss account in that period. (Pyle, 1970).

As pointed out earlier, costs of recruitment, selection, hiring, placement, orientation and on-the-job training are included. If the asset is liquidated prematurely, losses are recorded. If the useful life is recognized to be larger than originally expected, revisions are made in the amortization schedule. If additional costs are incurred that can be expected to increase the future benefit to be derived from the asset, these are capitalized to be amortized over the remaining life. The method has the following merits;

i) It is simple and is consistent with the conventional historical cost accounting principle (Flamholtz, 1971)

ii) It provides a basis for evaluating a company's return on its investment in human resources since the total investments are included.

iii) This is the only method which is used both for the valuation of human resources and recording the data in the books of accounts and presenting it in financial statements as shown in the case of R.G. Barry Corporation.

iv) From the existing records the cost information can be easily extracted to construct the human resource accounts.

v) The technique is easily recognizable by accountants and members of management, and can probably be relatively objectively applied to the costs to be capitalized.

However, it suffers several drawbacks associated with historical cost accounting.

i) Appreciation and amortization of these assets once they are capitalized is very subjective. This is because it is difficult to estimate the number of years an employee is going to be with the firm.

ii) The real economic value of human assets may be higher or lower than the cost hence the method does not reflect the true value of human resources. This is a major criticism of the historical cost convention.

iii) The economic value of human resources increases over time as the people gain experience. However, in historical cost approach, the capital cost decrease through amortization hence it is difficult to reconcile this difference.

ii) Replacement cost method

The replacement cost of human resources refers to the sacrifice that would have to be incurred today to replace human resources presently employed. It includes the cost attributable to the turnover of a present employee as well as the costs to the firm to recruit, hire, and train and develop replacements to the level of proficiency and familiarity with the organization and its operation, presently experienced with the existing employees.

It was developed by Flamholtz in 1971 on the basis of the concept of replacement cost first suggested by Rensis Likert (1967) who assumed that a new similar organization has to be created from scratch. Hekimian and Jones (1967) also advocated for this method by stating that we would value a human being at the estimated cost to us of replacing him with another person of equivalent talent and experience.

Flamholtz also developed a model for measuring the cost of replacing individuals occupying specified organization positions.

Replacement cost has been suggested as an alternative to, and in some cases as an addition to historical cost. Infact, it is similar to the historical cost method and the same principles of amortization and write-off apply. However, replacement cost methods allows for changes in the cost of acquiring, training, and developing employees instead of capitalizing the historical costs of these items. It has the following merits;

i) It incorporates the current value of the company's human resources and takes into account the fluctuations of the job market and the general price changes.

ii) It is present oriented and measures current value in terms of current units, thus is not affected by instability of monetary unit.

iii) More meaningful estimate of return on human investment will be obtained and the holding gain or loss on each employee can be determined by comparing the acquisition cost with the current cost.

The major drawback is that it is inconsistent with the conventional accounting practice of valuing assets because of the problem of subjectivity and lack of verifiability in the application of the technique. There may be no similar replacement for a certain existing asset (Hekimian and Jones, 1967) because it is very difficult to find identical replacement of the existing human resources in actual practice. Furthermore, it is unrealistic to assume that a new similar organization can be created.

iii) Opportunity cost model

As a solution to the deficiencies in the replacement cost method of measurement, Hekimian and Jones (1967) proposed a competitive bidding process that is closely related to the economist's concept of opportunity cost.

The method advocates for establishing the opportunity cost value of an employee through competitive bidding of a scarce employee within the organization, so that the division or department with the highest bid wins the particular human resource and include its price on its investment base. This is based on the value of an employee in his alternative use as a basis for estimating the value of human resources employed by the organization. Hekimian and Jones (1967) believed that this method would provide for more optimal allocation of personnel and set the quantitative base for planning, evaluating and developing the human assets of the firm.

The merits of this method include:

- The bidding process under opportunity cost approach provides for more optimal allocation of personnel as stated above.
- When determining bid prices, management has personnel records available as well as financial records. The bid prices may contain the considerable additional information on prediction and may improve the ability of the financial records to serve as a lead indicator.

The drawbacks of the method include;

- The method has narrowed down the concept of opportunity cost by restricting it to the next best use of employees within the same organization.

- The method does not show the true cost of human resources in an organization because it excludes the employees who are not being bid by other departments or investment centers.
- The inclusion of scarce employees in the asset base may be interpreted as 'discriminatory' by other employees.
- The method is likely to lower the morale and productivity of the employees who are not covered by the competitive process.
- The method provides only partial solution as the employees of the type that can easily be hired from outside are not assets under this approach.
- To determine the bid price for an employee, a manager must make a judgemental estimate of that employee's value. Hence, a low degree of objectivity is expected from this method.
- There is no arms-length transaction.
- The bidding process is hypothetical.

B: VALUE

i) Discounted Future Salaries/Incomes

Hermanson (1964) suggested the adjusted present value method, which involves the discounting of expected wage payments over the next five years at the most recent normal rate of return. The results are then modified by a weighed average of the effectiveness of performances over the last five years (efficiency ratio). As noted earlier, the choice of 5 years was arbitrary. Lev and Schwartz (1971) described the measurement of human wealth in terms of the present value of future income streams. They suggested the use of an individual employee's future compensation as a surrogate of his value.

This model identifies an individual's expected economic value to the organization as his future earnings for his remaining active service life which is discounted to arrive at the present value of his services. The value of total human resources of an organization is found out by aggregating the present value of all employees.

Oonge (1985) refers to this method as `compensation` model. Other researchers who have advocated for the use of this method include, Flamholtz (1971), and Flamholtz and Lundy (1975) who have tried to incorporate both turnover and role changes in the changes in the organization, Friedman and Lev (1974), and Jaggi and Lau (1974). They advocated for discounting of future streams of income.

In this method the earnings profiles of homogenous groups of employees are aggregated and averaged. The earning profile is a mathematical representation of the income stream generated by a person, which represents his productivity to the firm. Productivity is assumed to be associated with age such that the more a person ages the higher are the benefits of experience initially, but subsequently the more his productivity declines because of technological obsolescence and health deterioration. The value to the firm of human capital in a person of age n can be given as:

$$V_n = \sum_{t=n}^{T} \frac{I(t)}{(1+r)^{T-n}}$$

Where:

V_n = the human capital value of a person n years old

I(t) = the person's annual earnings upto retirement represented by the earnings profile.

T = retirement age.

The derivation of a firm's human capital value using this approach allows for two values to be attached to the firm's labour force i.e. a general value based on overall census data, and a specific value derived from the specific wage scale of the firm. The discount rate used is the cost of capital of the firm.

This method has the following merits.

a) It allows the ratio of human to non-human capital values to be determined so as to indicate the value of labour intensive.
b) It provides information about the changes in the structure of a firm's labour force. This information also shed light upon the firm's recruiting and wage policy.

However, it suffers from the fact that in accounting, the reported values of non-human assets is not based on the earnings profile of those assets, and hence unless non-human assets are valued in a similar manner, the ratio of human to non-human assets would be meaningless.

It has also been criticized on the ground of assuming that the earnings profile of the labour force should be the basis on which the labour force should be valued. There is no evidence to suggest that a significant relationship exist between an individual's value and his earnings. There is also subjectivity in the determination of the level of future salary, length of expected employment in the firm, and the discount rate.

C: NON-MONETARY MEASURES

Oonge (1985) refers to some of these measures as statistically based surrogate methods. Under this, he considers the corporate report and the performance measures. The corporate report presents descriptive information which may indicate the potential services that the organization may derive from the human resources such as the number of employees, sex, age and so on. Nabhani (1995) identifies some of the items as social responsibility items that fall under the area of human resources. They include the following items:

1.Name and pictures of employees as well as directors in the annual reports.

2.Provisions of medical facilities for the employees

3.Increases in minimum wage levels paid.

4.New Jobs expansion

5.Voluntary program to provide expanding job opportunities for employees

6.Training and development programs for employees

7.Pre-retirement counseling program for employees

8.Effective alcoholism, stress control program, Family planning program

9.Improved working condition and environment including safety awareness

10.Compensation towards employees accidents

11.Schemes to improve job satisfaction through long service award.

12. Equal opportunity for all

13. Good industrial relations with trade unions.

14. Transportation for employees

15. Sponsorship of employees' sporting activities and participation

16. Profit sharing and management bonus scheme for staff.

Other than this descriptive disclosure in the corporate report, performance measures can also be used. A performance measure reflects the effectiveness of a person in achieving pre-determined company requirements e.g. intelligence, staff relations, punctuality etc. It is a performance appraisal tool. According to Oonge, these two methods can be used instead of valuing human resources in the balance sheet.

Other non-monetary models for human resource accounting are those which are dominated by behavioral variables, for example, Likert's Causal, Intervening and End-Result variables model (Likert and Bowers, 1968), and Flamholtz's social, psychological and economic determinants of a person's value to an organization (Flamholtz, 1972).

Likert's Causal, Intervening and End-Result variables model assumes that the organizational productivity can be explained in terms of the human organization. He tries to model the variables which determine the effectiveness of a firm's human organization and the effectiveness of the enterprise as a whole. Causal variable are identified as the independent variables which can be directly changed by the organization and its management and which can in turn determine the course of developments within the organization e.g. managerial behaviour, or organizational structure. Intervening variables reflects the internal state, health and performance capabilities of the organization e.g. loyalties, attitudes and so forth. The end result variables are the dependent variables reflecting the results achieved by the organization such as productivity, costs and so on. Likert states that there is an interrelationships between these variables hence if meaningful relationship among the three can be established, the trend in earnings can be predicted. Forecast of predicted earnings can then be discounted to determine the present value of the firm and its human resources.

These models have an advantage of taking into account human behaviour. However, these measures are neither objective nor reliable though they possess potential lead information to users requiring information for prediction. This is because predicting human behaviour is more judgmental than objective, hence these methods lack objectivity.

In conclusion, it can be said that there are many suggested methods of valuing human resources and presenting the same in the annual accounts, with each method having its merits and demerits. It remains for the organization to agree on one accepted method which would objectively present human valuation while suffering from few drawbacks. This is in light of the fact that accounting is full of approximations and estimates, and there is little doubt that there is need to capitalize the human asset. Different kinds of information are needed and consequently the different methods of human resources accounting should be available. The method a firm chooses to adopt depends on what the reporting objective is and for which user group the information is meant for. Just like in the choice of the best accounting principles to be adopted by a firm, it is important that the method to be used and the reason for its application be disclosed in the financial statements.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 The population

The population consisted of all companies listed the Nairobi Stock Exchange for the five years from 1994 – 1998. There are 52 companies which are listed.

The public quoted companies were preferred to the unlisted companies due to the ease of accessibility of their financial statements. These statements can easily be obtained from the Nairobi Stock Exchange since the listed companies are required to publish their annual accounts and submit copies to the registrar of companies as well as to the Nairobi Stock Exchange.

Secondly, listed companies compete for funds in the Stock Exchange hence we would expect them to make more voluntary disclosure in order to attract investors.

Thirdly, since these firms are large enough in terms of asset turnover, we would expect them to set the pace in such disclosure.

The five year period was chosen to aid comparability so that the trend of progress of the disclosure of human resource information could be determined.

3.2 The Sample

The sample consisted of all the companies listed in the Nairobi Stock Exchange. However for a company to qualify it must have been continuously quoted for the last five years. As a result 49 companies were selected. The NSE classifies companies into four sectors namely: Agriculture, Commercial & Services, Finance & Investment and Industrial & Allied. This was the classification used to classify the companies. Out of the sample of 49 companies, 9 companies came from the Agricultural sector, 11 from commercial & services, 12 from Finance & investment and 17 from Industrial & Allied sector.

3.3 Data Collection

3.3.1 Data collection Method

The research used secondary data collected from the Nairobi Stock Exchange. The financial statements of the sampled companies were to be analysed in order to get the relevant information. This data is easily available at the Nairobi Stock Exchange.

3.3.2 Data analysis method

Tables, percentages and proportions were used to get the information on objective (a).These were appropriate since the study is exploratory in nature. The first tables for instance, showed the number of companies disclosing a given human resource item in the years between 1994 to 1998. The human resource items were developed from the available literature and from the researcher's analysis of the companies' financial statements.

For the second and third objectives the chi – square test was used as a test of homogeneity among the criteria specified in the objectives. The null hypothesis stated that the human resources items disclosed do not differ according to the sector of the company and also according to the accounting firm that audits the company's accounts. These hypothesis are shown in the section on data analysis and findings.

The chi-square test is used for test of goodness of fit, independence and homogeneity among criteria of classification.Two criteria are said to be independent if the distribution of one criterion in no way depends on the distribution of the other, whereas they are said to be dependent if there is an association between the two. Homogeneity tests for similarity in some characteristics of interest in several populations.

In a 2 x 2 contingency table the $\chi 2$ value is calculated as $\chi 2 = \frac{n\,(ad-bc)^2}{(a+b)(b+d)(a+b)(c+d)}$

Where the variables are as shown below,

Second Criteria of classification	First criteria of classification		
	1	2	Total
1	a	b	a+b
2	c	d	c+d
Total	a+c	b+d	N

a,b,c, and d, represent the actual frequencies of the observations.

In order to determine the critical value of $\chi 2$ for a chosen level of significance (α), it is necessary to determine the appropriate degree of freedom given by number of rows (r) and number of columns (c). The number of degrees of freedom is given as (r-1) (c-1).

For a contingency table with dimensions exceeding 2x2 the following formula is used:

$$\chi 2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where $_{ij}$ represent the element in the i^{th} row and j^{th} column

O is the observed value.

E is the expected value.

$$E = \frac{(n_1)(n_2)}{n}$$ where;

n_1 = Total in relevant level of the second criterion of classification

n_2= Total in relevant level of the first criterion of classification

n = Grand total.

CHAPTER FOUR: DATA ANALYSIS,FINDINGS AND DISCUSSIONS

4.1 Overview

To achieve the objectives outlined in Chapter 1,the necessary data was collected from the sampled companies and presented in the form of tables and percentages. In order to determine the trend of human resource information disclosure in the period 1994 to 1998, the human resource items were grouped into four categories namely, Human Resource Items No.10, No.6, No.11, and others. The list of human resources items is as shown below. Human resource item no.10 is on appreciation of employees' contribution, item no.6 is information on training and development of employees, no.11 is an acknowledgement of employees as important organization's assets while all the other items are collectively classified as others for ease of analysis given that these items only represent 28.5% of the total disclosure. Presentation of these combined items separately would distort the results since chi-square tests require that items with a frequency of less than five be combined to make the frequency greater than five.

The analysis was presented in four stages. The first stage presented data on the human resources items disclosed. The second dealt with the trend of human resources information disclosure in the financial statements of the sampled companies between 1994 to 1998. The third presented data on the relationship between the human resource items disclosed and the sector of the company. The last stage presented data on the relationship between the human resource item disclosed and the firm auditing the company's accounts.

List of human resource information items

1.Name and pictures of employees in the annual reports

2.Provisions of medical facilities for the employees

3.Benefits such as housing

4.New Jobs expansion

5.Voluntary program to provide expanding job opportunities for employees

6.Training and development programs for employees

7.Pre-retirement counseling program for employees

8.Effective alcoholism, stress control program, Family planning program

9.Improved working condition and environment including safety awareness

10.Appreciation for employees contribution such as statements of thanks

11.Acnowledgement of employees as organization's assets

12.Compensation towards employees accidents

13.Schemes to improve job satisfaction through long service award.

14. Equal opportunity for all

15. Good industrial relations with trade unions.

16. Transportation for employees

17. Sponsorship of employees' sporting activities and participation

18. Profit sharing and management bonus scheme for staff

19. Statistics on employees' turnover and on number of employees.

20. Statistics on recruitment and selection costs for employees

21. Involuntary retirement package and retirement plans

22. Employees recreational facilities such as canteens, holiday cottages and social clubs

23. Page on personnel and public relations

24. Increases in minimum wage levels paid.

25. Statistics on training and development costs.

Only the names and pictures of the employees were considered in Item no.1 above due to the fact that including the pictures and names of the directors would distort the results since the directors can not ordinarily be considered employees of the company.

4.2 Disclosed items.

Table 1 shows the number of companies disclosing a particular human resource item. The most disclosed item during the period was the appreciation for employees contribution which was mainly presented as a word of thanks to employees and staff and written as a concluding remark of the chairman's report(Item no. 10). It represented 48.4% of the total disclosure. It was followed by item no. 6, which was information on training and development programs for employees. This item represented 12.2% of the total disclosure. Item no. 11, which acknowledges employees as organisations' assets, follows closely representing 10.9% of total disclosure. The other disclosures are however minimal, representing 28.5% of the total number of disclosures.

TABLE 1: NUMBER OF COMPANIES DISCLOSING A GIVEN H.R ITEM.

HUMAN RESOURCE ITEM	NO OF COMPANIES MAKING DISCLOSURES IN THE GIVEN YEAR						% OUT OF TOTAL DISCLOSURE
	1994	1995	1996	1997	1998	TOTAL	
10	33	38	36	40	39	186	48.4
6	10	8	10	9	10	47	12.2
11	8	8	9	8	9	42	10.9
15	3	2	2	2	3	12	3.1
4	0	0	1	0	0	1	0.3
5	0	1	0	0	0	1	0.3
2	1	1	2	2	1	7	1.8
13	0	2	1	1	1	5	1.3
3	0	0	1	1	1	3	0.8
17	3	2	3	4	2	14	3.6
19	5	3	3	4	4	19	4.9
14	1	1	1	1	1	5	1.3
7	1	0	0	1	1	3	0.8
16	0	0	0	1	1	2	0.5
9	2	2	3	3	2	12	3.1
21	2	3	3	3	1	12	3.1
20	1	0	0	1	0	2	0.5
23	1	1	1	0	0	3	0.8
25	1	1	1	1	1	5	1.3
22	0	0	0	0	1	1	0.3
18	1	1	0	0	0	2	0.5
1	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0
TOTAL	73	74	77	82	78	384	
NO OF ITEMS DISCLOSED	15	15	15	16	16		

4.3 Trend of disclosure.

Table 2 shows the trend in the number of companies disclosing a given item for the period 1994 to 1998. For example, the most disclosed item was appreciation of employees' contribution (item no. 10) with 63.7% of the total number of companies disclosing it in 1994. In 1995, 77.6% the companies disclosed it while this percentage reduced to 73.5% in 1996, increased to 81.7% in 1997 and decreased to 79.6% in 1998. It was followed by the items collectively referred to as "others" while the item on employees training came third. The item acknowledging employees as important assets trailed behind. This trend on specific human resources items is shown in appendix 4. Overall, the trend shows that the disclosure has increased as compared to the 1994 disclosure.

TABLE 2 : TREND SHOWING PERCENTAGE OF COMPANIES DISCLOSING A GIVEN ITEM.

TREND SHOWING PERCENTAGE OF COMPANIES DISCLOSING A GIVEN ITEM.					
ITEM NO	1994	1995	1996	1997	1998
18	2	2	0	0	0
10	67.3	77.6	73.5	81.7	79.6
6	20.4	16.3	20.4	18.4	20.4
11	16.3	16.3	18.4	16.4	18.4
15	6.1	4.1	4.1	4.1	6.2
2	2	2	4.1	4.1	2
17	6.1	4.1	6.2	8.2	4.1
19	10.2	6.1	6.2	8.2	8.2
14	2	2	2	2	2
7	2	0	0	2	2
9	4.1	4.1	6.2	6.2	4.1
21	4.1	6.2	6.2	6.2	2
4	0	0	2	0	0
5	0	2	0	0	0
13	0	4.1	2	2	2
3	0	0	2	2	2
16	0	0	0	2	2
20	2	0	0	0	0
23	2	2	2	0	0
25	2	2	2	2	2
22	0	0	0	0	2

From table 1, a total of 15 items were disclosed in 1994, 1995 and 1996, while a total of 16 items were disclosed in 1997 and 1998. This represent an increase of 7% in items disclosed from 1994 to 1998. Disclosure has also increased with the total frequency of human resources information disclosure being 73 times in 1994 and 78 in 1998. The highest disclosure is however in 1997, when 82 disclosures are made. Overall from Table 1, it can be seen that the overall trend of disclosure is increasing. This trend is depicted in the line graphs shown in the appendix 3 and appendix 4.

4.4 The relationship between disclosure and the company's sector.

The following hypothesis was tested:

HO: $P_1=P_2=P_3=P_4$. (There is no relationship between the human resource item disclosed and the company's sector)

HA: $P_1 \neq P_2 \neq P_3 \neq P_4$. (There is a relationship between the human resource item disclosed and the Company's sector).

CONTINGENCY TABLE 1:Relationship between disclosure and the company's Sector.

HUMAN RESOURCE ITEM	COMPANY'S SECTOR				
	AGRIC	COMMERCIAL &SERVICES	FINANCIAL	INDUSTRIAL & ALLIED	TOTAL
10	34	47	40	65	186
6	0	2	23	22	47
11	4	6	12	20	42
OTHERS	18	9	29	53	109
TOTAL	56	64	104	160	384

The contingency table shows that the Industrial & Allied sector led in disclosure, disclosing 41.7% of the total items disclosed. It was followed by the Financial sector with 27.1% of the total disclosure. Next came Commercial and Services disclosing 16.7% of the total disclosure and the Agricultural sector trailed behind with 14.6% of the total disclosure. From the calculated $\chi 2$, it can be seen that there exists a significant relationship between the item disclosed and the sector of the company.

The null hypothesis stated that there was no relationship between the human resources item disclosed and the company's sector while the alternative hypothesis stated that there was a relationship. The calculated $\chi 2$ was 41.388 which was far greater than the critical $\chi 2$ value at $\alpha=0.05$ (3.3325). This led to the rejection of the null hypothesis. Thus the sector of the company significantly influence what human resource item is disclosed.

4.5 Relationship between the human resource items disclosed and the auditor

The following hypothesis was tested:

HO:$P_1=P_2=P_3=P_4=P_5=P_6$ (There is no relationship between the item disclosed and the Company's auditor).

HA:$P_1\neq P_2\neq P_3\neq P_4\neq P_5\neq P_6$. (There is a relationship between the item disclosed and the Company's auditor).

CONTINGENCY TABLE 2:Relationship between the human resource items disclosed and the company's auditors.

HUMAN RESOUR-CE ITEM	PRICE WATER HOUSE	COO-PERS	KP MG	DELO-ITTE	ERNST & YOUNG	OTHERS	TOT-AL
10	25	42	36	42	10	31	186
6	6	6	7	15	5	8	47
11	5	13	2	10	8	4	42
RARE ITEMS	10	28	9	30	10	22	109
TOTAL	46	89	54	97	33	65	384
$\chi 2=$	25,30761						

The contingency table shown above shows the number of times a given human resource item was disclosed by companies audited by different accounting firms within the five-year period. For example, in the five year period item no. 10 was disclosed 25 times by companies audited by Pricewaterhouse, 42 times by companies audited by Coopers and so on. For the purpose of the 1998 accounts the merger between Pricewaterhouse and Coopers is ignored with the assumption that it had not yet become effective and the firms were still following their previous separate policies.

The human resources items were grouped into four categories namely, Item No.10, No.6, No.11, and rare items. Similarly the auditing firms were grouped into Pricewaterhouse, Coopers, KPMG, Deloitte, Ernst &Young, and others as shown in the contingency table above.

A chi-square test was conducted to test if there was a relationship between the human resource item disclosed and the firm auditing the company's accounts. The calculated $\chi 2$ value (25.3) was greater than the critical $\chi 2$ value (7.26) at α=0.05.This led to the rejection of the null hypothesis which assumed that the human resource item disclosed did not differ according to the firm auditing the company's accounts.

From the chi-square results it seems that there is a relationship between the human resource item disclosed and the firm auditing the company's accounts thus indicating that accounting firms play a major role in advising their clients in what aspect of human resource information to disclose.

CHAPTER FIVE: SUMMARY AND CONCLUSION

5.1 Summary of the findings

From the research findings, it was evident that the state of human resources in Kenya is still in its infancy stage since no single company had yet incorporated its human resources values in the balance sheet.

However, the results showed that companies are now engaging in what is referred to as statistically based human resources accounting. The fact that this is done on a voluntary basis indicate that companies are now recognising the need for human resources accounting in the financial statements.

The pattern of disclosure sheds light on many aspects regarding the voluntary disclosure.

Firstly, it was evident that many companies did not disclose anything substantial on human resources apart from appreciating the employees' contribution, as a concluding remark. This could mean that either, companies just mention employees as a formality or that they recognise their importance but do not know how to show their worth in the financial statements. The latter is probably the case, given that 11% of the total items disclosed, is an acknowledgement of employees as important organizational assets. This is further strengthened by the fact that 12.2% of the total disclosure was on the companys' attempts to develop and train their human resources, which show that companies recognise the need of the users of the financial statements to know the calibre of their employees. This could be interpreted to mean that they see this as adding value to the investment decisions.

The trend of human resources information disclosure showed a positive trend apart from 1998 when there was a 4.8% decrease in disclosure. This decrease could be explained by the fact that 1998 was an economically hard year and many companies were engaged in cost-cutting measures such as downsizing their workforce. Apart from this, it is evident that more and more companies are engaging in voluntary disclosure of human resources information, in their annual accounts.

This means that in future a regulatory framework may be necessary to ensure uniformity in the disclosure and thus points to a positive development in human resources accounting. The fact that companies are increasingly disclosing information on their human resources show that companies are recognising the omission of this asset. In future, it may even be necessary to value the human assets in the balance sheet as a way of ensuring that financial statements are more useful to the users.

The other notable conclusion that emerges is that there is a significant relationship between the human resources items disclosed and the company's sector. Companies in the industrial and allied sector led with 41.7% disclosures out of the total disclosures among the companies. The financial sector follows with 27.1% of the total disclosure, followed by commercial and services and finally the agricultural sector. This could be due to the relatively high number of persons employed by the Industrial and allied sector as compared to the other sectors.

Finally the results show that there is a relationship between the human resource item disclosed and the accounting firm that audits the company's accounts. This leads to the conclusion that accounting firms play a role in advising their clients on what aspect of human resource information to include and whether to include or omit this information. Accounting firms therefore have an important part to play in the future development of human resource accounting. The present state indicates that companies audited by different auditing firms differ significantly in their disclosure of human resources items, with the companies audited by the major accounting firms tending to disclose more on human resources. This therefore points the way forward as the major firms are now setting the pace.

5.2 Limitations

The significance of the results of the study should however be analyzed in the light of the following limitations to the study:

1. The population of the study may not have been large enough to justify making a generalization of all companies operating in Kenya.
2. The study did not address the exact relationship between the human resource item disclosed and the sector of the company as well as the relationship with the accounting firm auditing the company's accounts. The study only determined that there exists a relationship but the nature of the relationship was not investigated.
3. There may exist other factors that influence the human resources information disclosure such as the influence of the company's Chairman personality. These were however not captured in the study.

5.3 Suggestion for further research.

This study was intended to get an insight into the current state of human resources accounting in Kenya. Further studies could be conducted in the same area to determine the following:

1. The reasons why companies disclose some items and not others and why they choose to disclose this information as opposed to completely omitting it.

2. The study did not capture the views of accounting firms and other stakeholders as regards this branch of accounting. A study could therefore be conducted to determine their views as well as the regulatory framework necessary for such a development in accounting.
3. Further research could be conducted to determine what other factors influence the disclosure of human resource information in the financial statements.
4. Further research could also be conducted to determine the exact nature of the relationship of human resource items disclosed and the company's sector and auditors. This would establish the exact role these two are playing in the development of human resource accounting.

APPENDIX 1 : LIST OF SAMPLED COMPANIES

AGRICULTURAL

Brookebond Ltd

Eaagads Ltd

George Williamson Kenya Ltd

Kakuzi

Kapchorua Tea Co. Ltd

Limuru Tea Co. Ltd

Ol Pejeta Ranching Ltd

Sasini Tea &Coffee Ltd

Theta Group Ltd

COMMERCIAL AND SERVICES

A.Baumann & Co.Ltd

CMC Holdings Ltd

Car & General (k) Ltd

Express Ltd

Hutchings Biemer Ltd

Lonrho Motors EA Ltd

Marshalls(E.A) Ltd

Nation Media Group

Pearl Drycleaners ltd

Standard Newspapers Group

Uchumi Supermarket Ltd

FINANCE AND INVESTMENT

Barclays Bank Ltd

City Trust Ltd

C.F.C Bank Ltd

Diamond Trust Bank Ltd

I.C.D.C Investments Co Ltd

Housing Finance Co. Ltd

Jubilee Insurance Co. Ltd

Kenya Commercial Bank Ltd

Nation Bank of Kenya Ltd

National Industrial Credit Ltd

Pan Africa Insurance Ltd

Standard Chartered Bank Ltd

INDUSTRIAL AND ALLIED

British American Tobacco Kenya Ltd

Bamburi Cement Ltd

B.O.C Kenya Ltd

Carbacid Investments Ltd

Crown Berger Ltd

Dunlop Kenya

E.A Cables Ltd

E.A Packaging Ltd

E.A Portland Cement Ltd

East African Breweries Ltd

Firestone East Africa Ltd

Kenya National Mills

Kenya Oil Co. Ltd

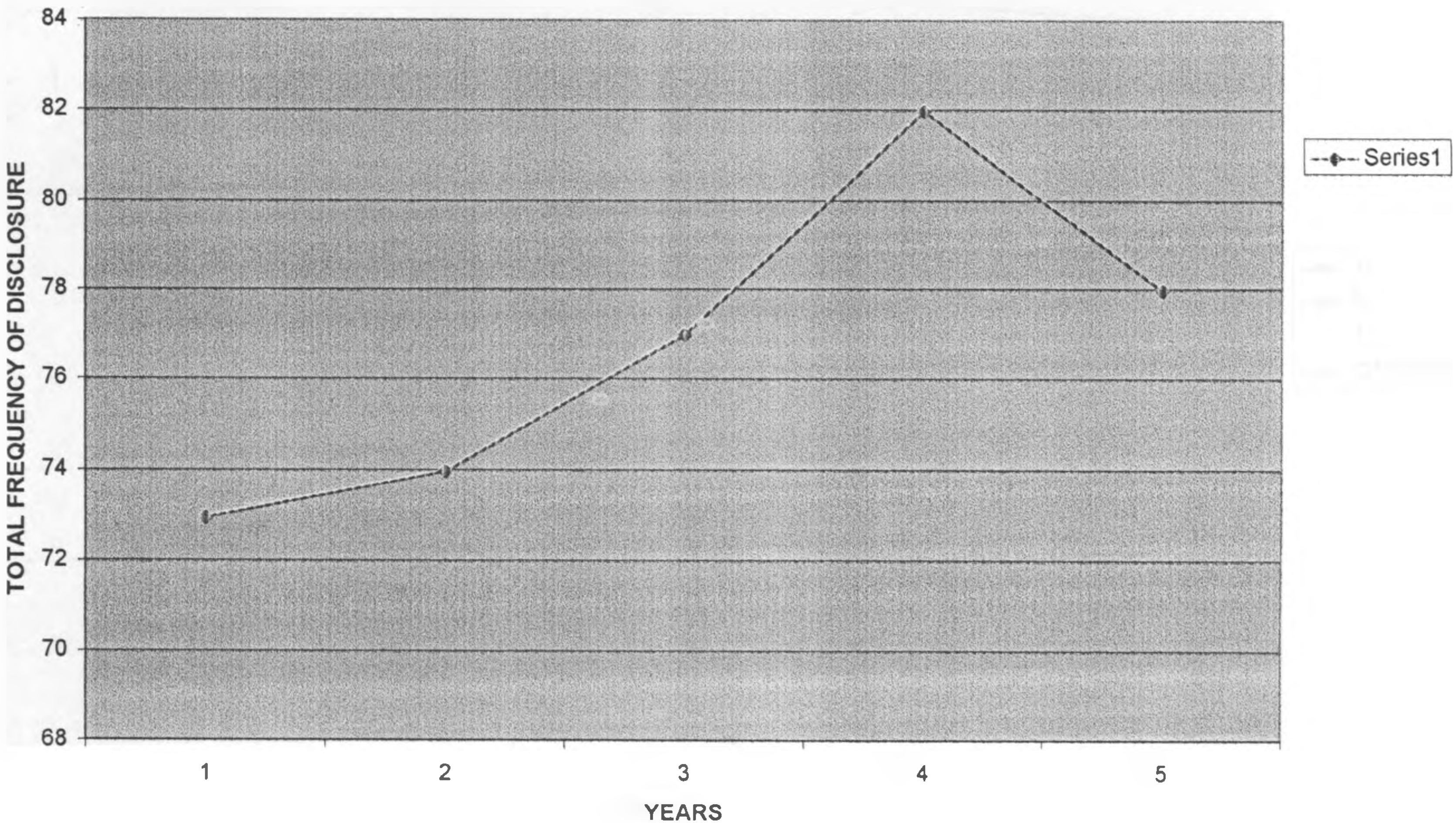
Kenya Orchards Ltd

Kenya Power & Lighting Ltd

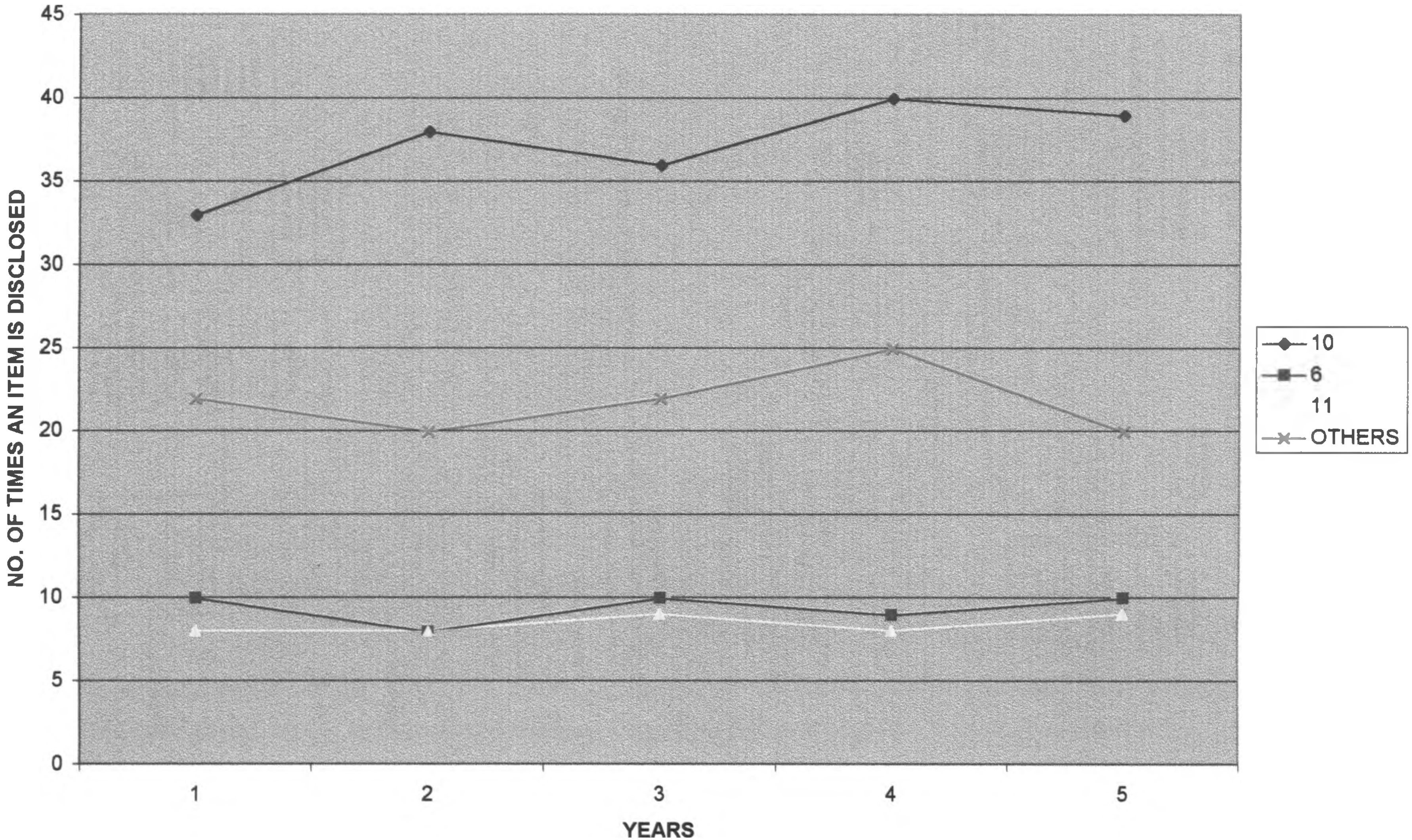
Total Kenya Ltd

Unga Group Ltd

APPENDIX 2 . **GENERAL TREND OF HUMAN RESOURCES INFORMATION DISCLOSURE**



APPENDIX 3. **TREND OF DISCLOSURE OF SPECIFIC HUMAN RESOURCES ITEMS**



APPENDIX 4: MODELS OF THE DETERMINANT OF AN INDIVIDUAL'S VALUE TO A FORMAL ORGANISATION

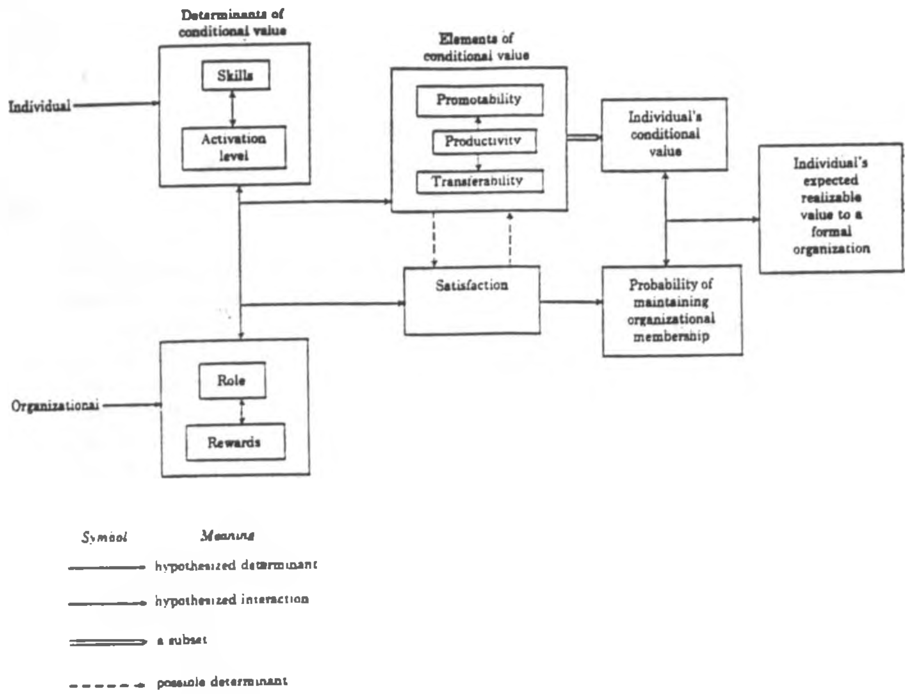


FIG. 1. Model of the Determinants of an Individual's Value to a Formal Organization.

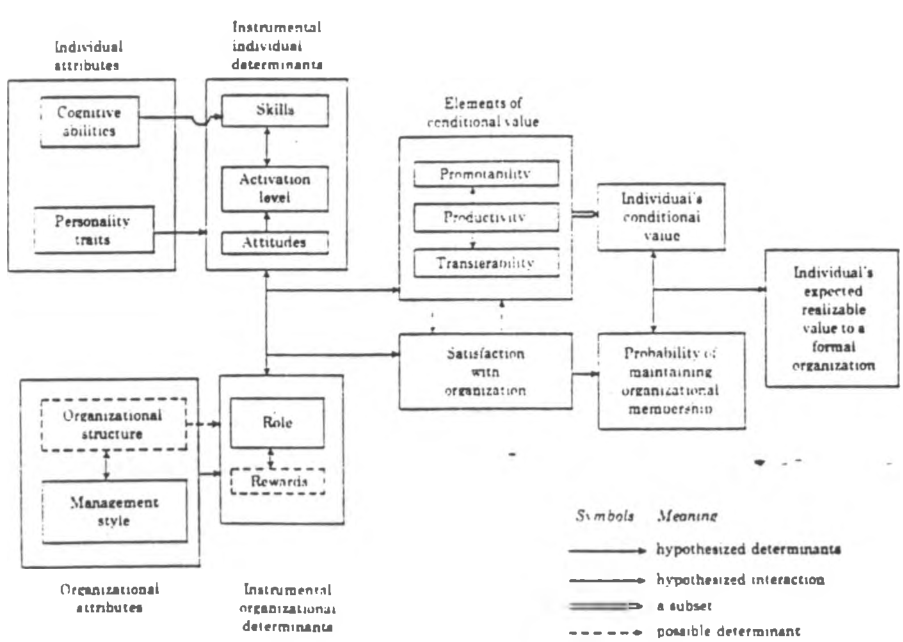


FIG. 3. Revised Model of the Determinants of an Individual's Value to a Formal Organization.

APPENDIX 5: HYPOTHESES ABOUT AN INDIVIDUAL'S VALUE

TABLE 1

Broad Hypotheses Tested in Field Study

Number	Hypotheses
1.	The greater an individual's productivity, the greater his positional value.
2.	The greater an individual's promotability, the greater his conditional and realizable values.
3.	The greater an individual's transferability, the greater all dimensions of his perceived value.
4.	The greater an individual's skills, the greater all dimensions of his perceived value.
5.	The greater an individual's activation level up to the optimum, the greater all dimensions of his perceived value.*
6.	The greater an individual's role in an organization, the greater all dimensions of his perceived value.
7.	The greater an individual's organizational rewards, the greater all dimensions of his perceived value.

* In a review of research on activation theory, Scott (1966) points out that: "The relationship between activation level and performance is generally described by an inverted *U*. At low activation levels, performance is handicapped by a lack of alertness. . . . At intermediate levels of activation, performance is optimal, and at high levels performance is again handicapped by hypertensiveness, loss of muscular control, impulsion to action, and in the extreme, total disorganization of responses (pp. 12–13)." Thus, increases in activation will probably be seen relating to increases in value up to or perhaps slightly beyond the inferred optimum.

TABLE 2

Hypothesized Dimensions of Individual Value

Dimensions (criteria)	Meaning
X: Expected Positional Value	The value of an individual to the organization in terms of the services he is expected to render in his current position during the coming year.
Y: Expected Conditional Value	The value of the individual to the organization during his expected service life, assuming that he remains in the organization for the entire time period.
Z: Expected Realizable Value	The value of the individual to the organization during his expected service life, taking into account the likelihood that he might leave during that period.

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