AN ASSESSMENT OF HUMAN ASSET ACCOUNTING TECHNIQUES AND ITS APPLICATION TO NIGERIA PRIVATE SECTOR

BY

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A DISSERTATION SUBMITTED TO THE POST-GRADUATE SCHOOL,AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE DEGREE IN ACCCOUNTING AND FINANCE.

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DECLARATION

May I hereby declare that this research work was solely conducted by me under the supervision of Dr. M. A. M. Mainoma. To the best of my knowledge and belief, this work has never been submitted in any institution for an award of a degree or a certificate of whatever kind.

All borrowed materials are duly and properly acknowledge. I take sole responsibility for mistakes contained in this research work.

Lawal I. Lamidi.

CERTIFICATION

This dissertation entitled, "An evaluation of Human asset accounting techniques in Nigeria" by Lawal; Itopa Lamidi meets the regulations governing the award of Master of Science Degree in Accounting and Finance of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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CHAIRMAN, SUPERVISORY COMMITTEE DATE

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MEMBER, SUPERVISORY COMMITTEE DATE

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ABSTRACT

The most important asset in the knowledge economy is the Human asset. It is an economy where a large amount of the value of the company resides in the heads of the employees instead of the tangible assets of the company. This realization made us to undertake a study of evaluating the present human accounting techniques. It is an attempt to study what is available along with what ought to be.

We found out that most Human asset accounting has been around since 1960s. And its perceived weakness centered mainly on the clash with generally accepted accounting principles. There is also the problem of coming up with a model of valuing Human asset acceptable to all. These are the drawbacks in the practical application Human asset.

We discovered that there are various methods of valuing Human assets that can be classified into three namely: Historical cost approach, opportunity cost and discounted present value method.

We also found out that compliance with human asset accounting will assist users of financial statement especially investors and employees. We discovered that it is not the absolute value of human asset that is critical, but more its significance as an indicator of the importance that management should pay to it. There is a growing consensus that employees have moved from being a cost to becoming a resource and today they are considered to be an asset or a capital.

Our recommendation is that Lev and Schwartz method of accounting for Human asset with some modification should be used because of it simplicity and appeal for acceptability. Therefore, to compute the value of human capital, multiply the number of employee by their salaries; multiplied by the average length of tenure for employee; multiplied by average increase in wages per year; all discounted back to year one. The resulting figure represents the human asset value for the firm.

We also recommend that for convenience sake, the following organisations can readily apply it, namely sport clubs, management consultancy firm, Accounting firms and Banks.

Human asset accounting information in our opinion should be included in our present financial statement as an additional statement unaudited as presently being practiced by twelve Indian companies.

PLAN OF THE STUDY

This study will be divided into five chapters. The outline of the study is given below:

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1.4 Research questions and Hypothesis

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CHAPTER ONE

INTRODUCTION

General Background to the study.

Management is a process of attaining the objectives of an organisation through people. This definition placed emphasis on the human elements in an organization to achieve corporate goals. It is therefore surprising that the value of Human resources is not stated in the financial statement of an enterprise.

Human resources cannot be ignored in an organisation. They are the active agents of development while material resources are the passive agents. We need to accord top priority to human resources since they have to use other resources to achieve the objectives of an enterprise. And as Moorehead and Griffin (1989: 34) assert, " *As resources, people are one of an organisations most valuable assets. People create the organisation (for organisation means a group of people working together to achieve common goals), guide and direct its course, vitalize and revitalize it. People make its decision, solve its problems and answer its question".*

The American Accounting Association defined Human asset accounting as *"the process of identifying and measuring data about human resources and communicating this information to interested parties"*. Flamholtz, (1974) regards Human asset accounting as *"accounting for people as an organisational resource. This involves ascertaining the costs incurred by organisations to recruit, select, hire, train and develop its work force. It also involves measuring the economic value of people to organisation. It is therefore going to be an attempt in this study to find how best to measure this resource and report same."*

1.1 **Objectives of the study**

Accounting is defined as the "language of business" American Institute of certified public Accounting terminology (1913) describe accounting as *" the 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"*.

We were motivated as Accountants to under take this study because of the need to accord top priority to human assets in an organisation, value their contributions, assess the valuation techniques of human asset and its application to Nigerian private sector.

The perceived weakness of human asset accounting has outweighed its strengths. This study shall juxtapose the merits of Human asset accounting with its demerits with a view to recommending ways of mitigating the disadvantages. The benefits derivable from the application of Human asset accounting techniques to Nigerian private sector shall be stated.

The rationale for this study, is also succinctly captured in the following poem credited by R.F. Giwa (1990) to one J.R.T. Brown:

"Though your balance sheet is a model of what balance sheet should be, typed and ruled with great precaution in a way that all can see,

Though the groupings of these assets is commendable and clear. And the details, which are, given more than usually, appear,

Though the investments have been valued at the sale price of the Day and the auditors certificate shows everything is Ok,

One asset is omitted and its worth I want to know. The asset is **the value of the men who run the show.**

Employees are the greatest assets to an organisation. The ability to attract and retain them is the key driver of an organization's future success.

The new economy is often called the knowledge economy. Emerging from an industrial age, this new economy distinguishes itself by a large amount of the value of the company residing in the head of the employees instead of in the tangible asset of the company.

This study therefore brought to fore that the Human asset implies that the people in the organisation represent more than just expenditure, that they are not to be seen only in the income statement but more in the balance sheet as an asset.

1.2 Statement of Research Problem

We are fairly sure that the way to succeed today lies in Human assets, in other words people, to be less academic. A real loyal, dedicated and productive human resources availability to an organisation are indeed much valuable assets but not reflected on the balance sheets.

There have been various efforts about ways of valuing the human assets in an organisation and stating their values in the balance sheets. Can something that is not owned by the organization be regarded as an asset is a concern within the relative terminology of the accountancy, whereas accounting conventions and standards treat the employee, the real human capital inventory as a variable cost of operation (production), with no value. This idea is challenged and suggested way of measuring the value of an employee to the employing organisation.

Question arises as to what will be the satisfactory and commonly acceptable measure to over come accounting concepts and also to

establish a fair value to encourage the perception of employees as an asset.

The 1999 Business week article showed that the valuation of Microsoft was superior to the valuation of fifteen big companies. Yet, the only value at Microsoft resides in the heads of its employee! This emphasized the fact that human assets that is the people in the organisation represents more than just expenditure that they are not to be seen only in the income statement but more in the balance sheet as an asset. This study will analyze and recommend appropriate models, which have been developed to quantify the intangible and specifically the human component.

Research Questions

In order to arrive at a meaningful conclusion at the end of this study, we pose the following hypotheses:

H1-H0- There is no significant difference between financial statements with human asset values and the one without

H1- There is significant difference between financial statement with human asset values and the one without.

H2-H0- There is no significant increase in value of financial statement with human asset compliments.

H1-There is significant increase in value of financial statement with human asset compliments

1.6 Significance of the Study

We are living in a very dynamic world where the only permanent thing is change. The accounting profession is therefore challenged to rise up to the fore to address some problems, which could not be solved by the present accounting types.

Human asset accounting which according to Keith Davis (1981) encourages managers to take a long run outlook towards the value of people rather than a short run quick profit outlook that ignores them or neglects them is of paramount importance in this respect. Steven Robbins (1984) observes that a major advantage of human asset accounting is that it makes manager aware that attracting and retaining employees have long-term value to the firm.

This study will address the perceived weaknesses of Human asset accounting and also evaluating its present techniques. This will help to reveal the immense benefits derivable from the effective implementation of human asset accounting by Nigerian corporate entities.

There have been only three areas all of economic history: the agrarian era, the industrial era, and the knowledge era. Each era has been defined by the factor of production that has served as the foundation for wealth creation. Not surprisingly, in agrarian era, land was the primary source of wealth. In the industrial era, the primary sources of wealth were machinery and, to a lesser extent, natural resources. In the knowledge era, human capital is the source of wealth.

For the above reasons, the knowledge based economy calls for a new conception of disclosure- one that accommodates the changing role of human resources in the value creation process, and facilitates better evaluation of human resource practices in strategic corporate decision making. This study will therefore provide a complementary system for

measurement, reporting, and disclosure that puts human capital on an even playing field with other assets.

This study has the following specific objectives:

i. An assessment of Human asset accounting techniques for the period 1960 to year 2003, and
ii. Assess the application of Human asset accounting techniques to Nigerian private sector.

The new economy is often called the knowledge economy. Emerging from an industrial age, this new economy distinguish itself by a large amount of the value the company residing in the head of the employee instead of in the tangible assets of the company. Any discussion of human asset implies that the people in the organisation represent more than just expenditure; that they are not to be seen only in the income statement but more in the balance sheet as an asset. This study will compliment earlier work on human asset accounting to reposition accounting information to serve wider spectrum of measuring, reporting and communicating to interested parties about the hidden value of intellectual capital that is the edge in knowledge era.

1.7 Scope of the Study

During the course of this study, we intend to obtain as much data as possible about the concept of Human asset accounting techniques and its application to Nigerian private sector. The period of the assessment shall be from 1960 to the year 2003. An analysis of the various valuation models for the above stated period for Human asset accounting would also be considered. A particular model that is considered appropriate for Nigerian private sector will be dealt with in details.

A comparative analysis of the merits and demerits of the application of Human asset accounting techniques to Nigerian private sector shall be stated.

A practical illustration of an enterprise financial statement using Human asset accounting shall be rendered.

The experience of India companies that have employed Human asset accounting in their financial statement and the implication for Nigerian Companies adopting similar approach shall be analyzed.

On final note, the reality or otherwise of Human asset accounting techniques being applicable to Nigerian private sector in view of its conflict with general accepted accounting principles shall be stated.

In an era of knowledge economy, the significant role human assets play in this era and their not be stated as assets in the balance sheet and its implication for accounting information as presently rendered by enterprises shall be considered.

1.8 **Definition of Terms**

1. **Human capital/Asset:** is the embodiment of productive capacity within people. It is the sum of people's skills, knowledge, attributes, innovations, and fortitude. It can be given or rented to others, but only on a temporary basis; its ownership is non-transferable.
2. **Human capital Asset management:** It is the way to understand human capital as a business asset by connecting all the various areas of Human resources into a system that helps the firm create revenues.

It makes clear what investments are and where returns will be achieved.

3. **Data:** are recorded observations about the phenomenon being studied (Nachmias and Nachmias, (1982:153).
4. **Accounting principles:** are alternative ways of reporting and disclosing information in financial statements and related footnotes.
5. **Disclosure:** Revealing information. Financial statement footnotes are one way of providing necessary disclosures.
6. **Control:** A policy or procedure that is part of internal control.
7. **Analytical procedure:** A comparison of financial statement accounts with the auditor's expectation. An example is the comparison of actual interest expense for the year (a financial statement amount) with an estimate of what that interest expense should be. The estimate can be found by multiplying a reasonable interest rate times the average balance of interest bearing debt outstanding during the year (the auditor's expectation). If actual interest expense differs significantly from the expectation, the auditor explains the difference in the working papers.
8. **Capitalized:** Recorded as an asset.

9. **Accounting data:** includes journals, ledgers and other records such as spreadsheets that support financial statements. It may be in computer readable form or on paper.

10. **Comparability:** users evaluate accounting information by comparison. Similar companies account for similar transactions in similar ways. Another goal is comparison of one Company's information from one period to the next (consistency). Operating trends should not be disguised by changing accounting methods.

11. **Allocation:** Distribution accounting to plan. Deprecation, amortization, and depletion are methods to allocate a cost to periods benefited.

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Appendix B: List of private sector companies based at Kaduna

CHAPTER TWO

LITERATURE REVIEW

2.1 The concept of Human asset Accounting

The American Accounting (1973) defines Human resources accounting (HRA) as " *the process of identifying and measuring data about human resources and communicating this information to interested parties".*

This concept is based on the premise that an organization's employee group should be considered as one its primary assets on the same basis as its physical plants and equipment. Accounting to Flamholtz (1974), Human resources accounting (HRA) or Human Asset accounting means" *accounting for people as an organisational resources. This involves ascertaining the cost incurred by organisations to recruit, select, hire, train and develop its work force. It also involves measuring the economic value of people to organisation".*

Likert (1967) enunciated the concept of Human resources accounting as the " *valuation of the " Human capital' which is available to an organisation at any time. The purpose of accounting for human capital' is to provide information in monetary terms which can be*

included in the annual financial statements in the same way investments in equipment, machinery or plant, are now included".

According to Lermusiaux (2001), "employees are an organisation greatest assets, and the ability to attract and retain them is the key driver of the organization's success. Employees in the organisation represent more than just expenditure; they are not to be seen only in the income statement but more in the balance sheet as asset".

In relatively simple terms, we could regard Human asset accounting as "an accounting system, which reckon with Human as well as material resources as assets in preparing an enterprise's financial statement.

Arian (2001) defines Human asset accounting as " *the measurement and reporting of the cost and value of people as organisational resources. It involves accounting for investment in people and their replacement costs, as well as accounting for economic value of people to an organisation".*

Crumbley and Richard (1975) defines Human resource accounting as *"an accounting system that is more concerned with management control within an enterprise".*

To Osaze (1978), " Human resource accounting and finance is a subject that has been so brow-beaten that it has become almost thread bear". While Leonard (1980) in his analysis of a corporate human resources development describes human resources accounting as, *"the thrust in accounting field which is not to depreciate the role of humans or to consider them as extensions of machines. But rather, the purpose of human resources accounting is to find a way of taking the financial resource related to human beings and producing some qualified data".*

2.2. **Objectives of Human Asset accounting**

Arain (2001) had posited that "A real, loyal, dedicated, skilled, efficient and productive human resources availability to an organisation are indeed much valuable assets but not reflected on the balance sheet. When we consider human assets accounting, the underlined idea is, we are considering the human inventory stock of a

company incorporated available to the organisation to perform the activities. A Company is a person or persons associating with other, associations of persons for trade".

There is a popular axiom that "what gets measured gets managed". This accord substantially with Bassi (2001) who stated that" Good managers know that measurement is a prerequisite for good management". He is therefore of the opinion that the fundamental source of wealth creation- Human asset- is seriously under managed in most organisations. He opined that most organisations' systems of measurement, shaped in part by accounting and reporting requirements, are still unduly influenced by measurement concepts dating back to the industrial era when physical capital was the primary source of wealth creation. Using these out-of-date measurement systems to manage today is roughly analogous to steering a car with the rear view mirror".

Knowledge measuring is regarded as an essential growth factor. Often, it is regarded as a more important asset for stimulation of

growth and competitiveness than the mere, though necessary, investments in machinery, buildings and other types of tangible assets.

Naraynan and Mehrotra (2002) asserted, "The economy of the world has changed the way we look at our Human work force. It is now called Human capital and intellectual capital. Thus there is a need to define and develop methods that measure this invisible component of a company's resources. In knowledge economy people should not be regarded as costs but rather revenue creators and wealth. The importance in measurement of human capital is in understanding of the organisational environment and the internal working of it".

Navaynan and Mehrotra (2002) advanced eight reasons for development of human resources measurements Viz:

i. To improve human resource management;

ii. To focus on employees as assets;

iii. To retain qualified labour force;

iv. To overcome problems arising from the valuation of intangible assets;

v. To redistribute social responsibilities between the public and the private sectors;

vi. To overcome the difficulties in providing sufficient information to investors in traditional balance sheets;

vii. To profile the enterprise and improve its image;

viii. To attract future employees.

They stressed the fact that the focus of the measurement of intangible is on human capital as this is the field where the Human resources management plays critical role. They further enumerated other objectives of measuring of intangibles in knowledge management as hereby stated: -

i. To improve human resource management;

ii. Identifying the range of skills, competencies and expertise available within the organisation;

iii. Identifying the most appropriate person(s) for particular tasks;

iv. Assisting in putting together teams of staff for particular projects;

v. Revealing gaps in skills and competence in the organisation;

vi. Classifying roles in organisation, including roles as 'knowledge brokers';

vii. Assisting in planing for career progression; succession, training or development and knowledge management;

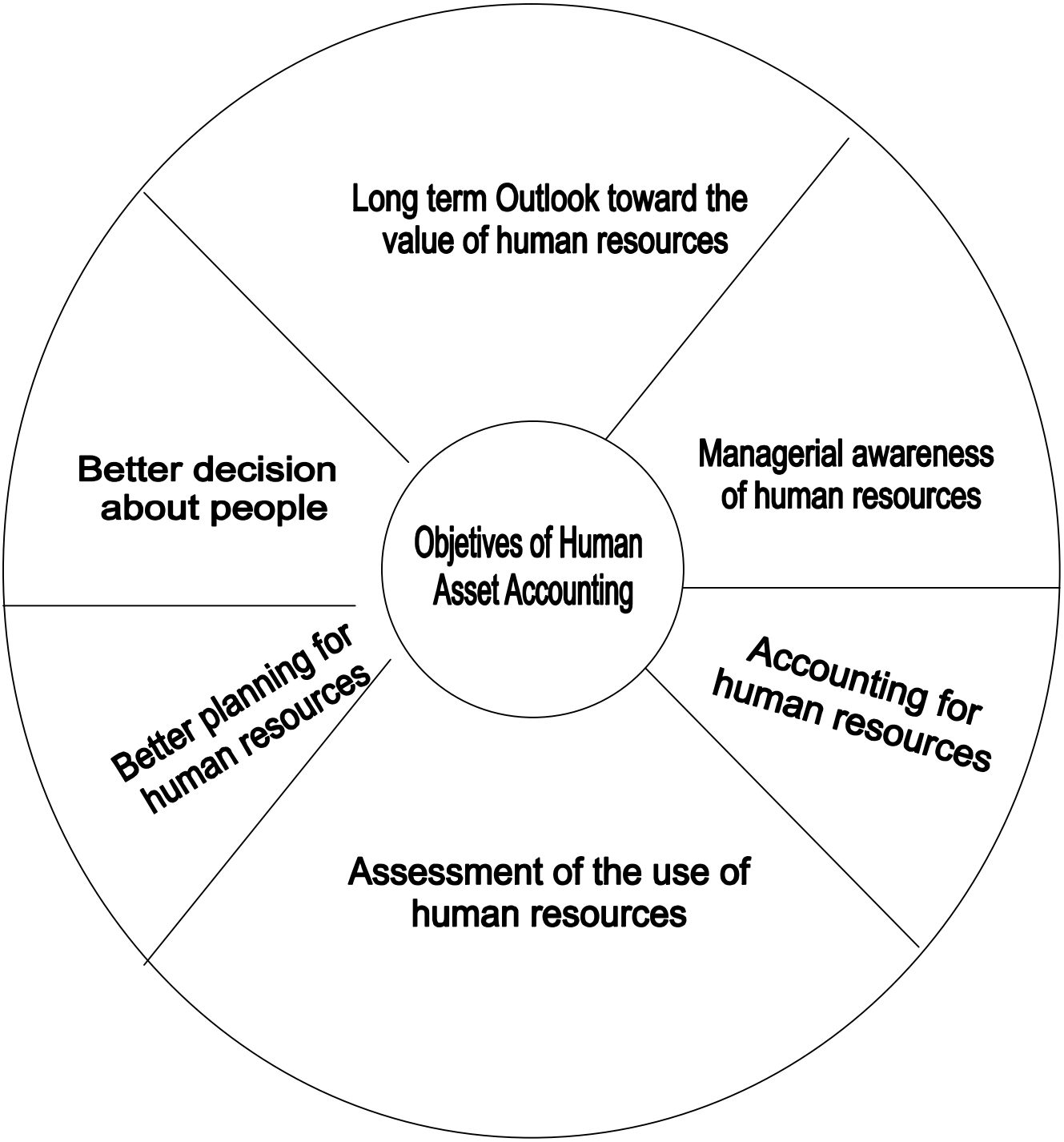
To indicate human resources as an asset in order:

- To attract and support investment in the organization;
- To convince investors and other staff of the value of human resources;
- To provide information indicating:
- The links between human resource interventions and financial results;
- The returns on investment in training and development;
- To present an image of the companies that will attract new staff and increase the retention of existing staff;
- To provide information to investors and potential investors about the capabilities of the organization;
- To present an image of the company as capable and competent;
- To attract targeted and new customers and clients;
- To attract new business;

- To keep up with competitors.

The objective of Human asset accounting to outsiders like investors is that they have an improved basis to assess the value of an enterprise and to make better investment decisions. It also offers one of the most realistic basis for which organisations that refuse to embark on training and development of the employees could easily be identified.

Keith Davis (1981) summarized the above points and presented them in a kind of pie chart and calls it objective of Human asset accounting



Source: Objectives of HRA See Keith Davis (1981:515)

The genesis of human resource accounting lies in the recognition in the 1960s of the need for human asset measurements for decision making in the context of a managerial philosophy aimed at maximizing business income. We believe that social responsibility accounting implies a welfare concern with employees-as people- and for this reason, we consider that human resource accounting is concerned with providing information relevant to the social management of organisations, and with the measurement of human resource contributions.

The mainstream of thought regarding human resource accounting sees the significance of this development in terms of the effective use of human assets represented as financial costs. This is stated in the definition of human resource accounting that has featured in the literature.

Two early contributors to thinking on Human resources accounting, Likert and Bowers (1968), adopted a broad view of the definition of 'human

resources', and by implication, a broad view of the scope and objectives of Human resources accounting, in the following definition:

"These resources include the value of all such assets as a firm's human organisation, its customer loyalty, its reputation among the financial community, and its reputation in the community in which it has plant and offices".

The above broad definition was quickly abandoned by subsequent writers, because it presents conceptual and measurement problems from an accounting viewpoint.

Flamholtz, the most prolific writer on Human resource accounting, adopted a much more practical definition, which focused essentially on "accounting for people as organisational resources'.

The above definition of Human resource accounting led Flamholtz to identify the main areas of research interest in Human resource accounting as being:

i. The determination of the value of individuals to organisation;

ii. The determination of reliable and valid measures of value and cost;

iii. The design of operational systems for these measures;

iv. The determination of the effects on decision-makers of the availability of Human resource accounting.

2.3 THE FOUNDATION FOR HUMAN CAPITAL ADVANTAGES AND ITS IMPLICATIONS.

All leaders- regardless of what they work with constantly ask themselves: what is the road to success? It goes without saying that there is no absolute answer to that question.

Wallin (2002) asserted, "The road to success today lies in human capital, in other words people, to be less academic.

Not so many years ago you could be very successful through having a unique solution. Today it is getting all the more difficult to come up with some thing that is totally your own and the competitors soon catch up.

That is why it's a matter of finding the right people, people who are not only good at their jobs but also have a burning enthusiasm for what they do. People who burn with enthusiasm build success."

Meyer (2002) opined, "The individual is the biggest thing on the balance sheet. We do not have human capital accounting which has macro economic implication as well".

In a knowledge era, if human capital is becoming a scare resource, you happen to be the owner of the capital, so you may be giving up too much of a return on it. You may be making an inappropriate risk trade with your employer. You are trading away all or much of your upside risk, in exchange for certainty. But, you also may be giving away too much of the economic rent on your human capital to your employer.

If the notion of people as revenue creator is accepted, Naraynan and Mehtrotra (2002) are of the opinion that we have to come closer to the source' of their knowledge if we wish to measure it more accurately.

In knowledge economy the organisation structure can be perceived in terms of basically three capital pools: -

- Organisation capital
- Human capital
- Customer capital.

The resource pools of organisation thus have to develop strategies and methods that concentrate on the integration of the above-mentioned capital. There is basically a trade off between incremental costs encountered in measuring the invisible assets of the company and the benefits accrued from them. The implementation of these tools must be decided in the context of the stage in which the company is, technology used, business strategy, and role of human capital.

The individual employee competence aggregated with others formed the building block for an organization's success and survival. Individual competence is the people's capacity to act in various situations. It includes skills, education, experience, values and social skills.

People are the only true agents in business; all assets and structures, whether tangible physical products or intangible relations, are the result of human action and depend ultimately on people for their continued existence. Competence cannot be owned by anyone or anything but the person who possesses them, because when all is said and done employees are voluntary members of the organisation.

Meyer (2002) defined that one of the three drivers of future is the Human capital. Others are efficient markets and social capital. It is the opinion of Meyer that money is not as scare of a resource as it used to be relative to today's scarce resource - the human capital. If all markets are becoming efficient and the most valuable kind of capital is human capital, then there are going to be markets for human capital. Arain (2001) posited that " the concept of "investment" in employees; the human capital of the organisation, push forward a view- that one is looking for a profit to be gain from the investment and therefore the focus is on development of employees for a specific purpose to gain monetary benefits". Trade and industrial historical studies indicate the human capital contributions for their respective organisation without which the recognition to work force would not be possible.

According to Bola (2001), "Investment in employees" from human resource investment perspective, contributes to improved profitability, as creative abilities are unleashed. The firm will prosper in its market place. This is why most companies in their mission statement persist in quoting the cliché " people are our business… our greatest asset". In accordance with law of property, general employees do not own most commercial businesses. Employees' share holdings are likely to be insignificant compared to institutional block holdings-investors, which call the tune on profitability.

Money is, of course, one of things -but by no means the only thing- that people want through their work. Sociologist's concept of mutual gift giving" probably comes closer to getting at the essence of human capital advantage. Because human capital cannot be owned (or even transferred), extracting the maximum advantage from it requires that an organisation first understand what people want and then give it to them.

Human capital represents a huge operating cost that must be managed efficiently because of its sheer magnitude, in Nigeria, for example, nearly seventy percent of all operating costs are ultimately attributable to people. At the same time-because human capital is also the only asset that cannot be owned-it must be managed wisely, but also with humanity. Consequently, a strategy that focuses exclusively on efficiency and cost containment can at best only be successful in the short- run. This creates a fundamental paradox.

Exceptional management in the knowledge era is defined by the ability to resolve this paradox through a "both / and", rather than an "either/or" strategy. The both / and strategy requires a relentless focus on finding ways to cut costs and improve productivity, while Simultaneously evoking the passion, creativity, loyalty and best efforts of the people on whom an organisation relies.

2.4 Valuation models for Human asset.

The accounting and reporting system that has developed over centuries in developed nations rest on the foundational assumption that physical assets

(land, machinery, buildings, natural resources and inventory) generate wealth. Human capital does not even appear on the balance sheet.

Rao (1983) reported that human asset accounting is one of the latest concepts adopted by Indian companies of recent times. Most of the enterprises, which follow human asset accounting, spare a separate section in their annual reports for detail account of their human resources. Human resources reporting in India usually include a profile of human assets, the compensation pattern, training and development, human asset productivity, human asset value and the total wealth of the organization.

Hermanson (1964) proposed an adjusted present value model to quantify the value of human capital of a company. According to him, the amount of future wages payable represent a liability while human resources (or operational assets) an asset in the balance sheet.

Economists like Becker (1964), Thurow (1970) Jacob (1962), and Schultz (1962), have dealt with the concept of the rate of return of investment in human capital, and reported varying observations. The basic premise (Flamholtz, 1974) the theory of accounting for human resources are:

i. People are valuable resource of an enterprise; and

ii. Information on the investment and value of human resource

is useful for internal and/or external decision making.

The original cost model of Brummet, et al (1968) suggested capitalization of the firm's expenditure on recruitment, selection, orientation, training and development of people, and treat them as assets for the purpose of human resource accounting. The amounts so capitalized are to be shown in the balance sheet, under the heading human assets, as distinguished from physical assets. The amortization and write off policies of conventional accounting methods shall be applied to human assets as well (Brummet, 1969). R.G. Barry Corporation of the USA implemented this model during 1968-1974.

The opportunity cost model advocate by Heikimian, Jones (1967) gave impetus to assess the opportunity cost of key employees for quantitative base for planning and controlling the activities of human resource function. Lev, Schwartz (1971) valued human capital as the present value of the future earnings of the people till retirement.

Likert (1973; Likert, Pyle, 1971) developed a model to diagnose the changes in human organisation over a period of time. The human variables are divided into three categories:

i. Causal variables;

ii. Intervening variables; and

iii. End -result variables.

The interaction between causal and intervening variables has been shown to affect the job satisfaction, costs, productivity and earnings.

Flamholtz (1971) developed a model to measure the human resource value to the organisation with the help of stochastic process. He considered the movement of employees from one position to another over a time period. The value of human resource as established by Flamholtz is equal to the present value of the future rewards adjusted with the probability of mobility and separation.

Rao (1983) developed a system of human resource accounting, and illustrated its application in a transport equipment manufacturing concern.

He has designed the system, based on the input/output control mechanism. The output variables of the system are described to be the indicators of human resource investment subsystem. To identify the human resource investments, all the human resource costs, whose benefits are expected to effect in future periods, are treated as investments. Then the annual human resource investments are adjusted to the tune of changes due to intake or separation or natural deterioration. The intake of people results, in addition of human resource investments, while separation, necessitates writing off of human resource investments. The human resource deterioration is measured and adjusted with the help of amortization rates in each year under study.

2.4.1 Approaches to Human Assets Accounting

Two approaches to the implementation of the Human asset accounting have been advocated. One is the cost (Koontz, 1984) or investment (Keith Davis, 1981) approach. This aims at measuring the naira investments of human resources. Some of these costs are:

i. **Acquisition costs:** This is the cost incurred in recruiting, selecting, hiring or promoting and placing an individual by the personnel department to fill up a vacant position. All of these costs except promotion can be regarded as direct costs.

ii. **Training, development costs:** This includes all costs incurred from within and outside the organisation for training and developing employees to enhance their skills and knowledge.

iii. **Maintenance costs:** This is the cost of maintaining the resources on day to-day basis. This includes wages, salaries, fridge benefits, welfare costs etc.

iv. **Separation costs:** These are obligatory payments made to the employee when he leaves the organisation, like gratuity payment and other terminal pay.

v. **Replacement costs:** This considers the costs to be incurred in replacing a person with a substitute who can perform equivalent services and at a given time. This may also represent the cost of replacing the entire work force or specific persons. Replacements cost however may suffer from subjectivity and also vary from one person to another.

The second approach is to obtain regular evaluation of the current worth of human resources through assessing the present value of individual members of the organisation. If the value of the work force is to be ascertained in monetary terms, then possible methods of measuring the total worth of the

human resources should be devised. The following are ways the value of the work force can be ascertained:

(i) **Historical cost method**: This method which makes use of the conventional accounting techniques values the human resources at the unexpired cost incurred in recruiting, selecting, hiring, placing and developing employees.

(ii) **Opportunity costs** : This is an economic approach and bases the value of human resources on the alternative foregone in order to replace any employee or group of employees.

(iii) **Discounted or Present value method** : This method is based on the calculation of present values of future services to be provided or contributions to be made by the human resources and discounted to a particular date and the figure arrived at is taken to be the value of human resources. Lester Witte, a certified public Accountant says the anticipated cash income to be generated by the employees should be discounted back to the present. He says if developed properly, billable hours and fees at various stages of the employee tenure can be predicted, (Flipp, 1980). But as in the conventional accounting systems, this method suffers from the controversies surrounding the

adoption of a correct discount factor and the determination of a useful life of an individual employee.

The third approach is to value Human assets using the under listed methods:

(i) Replacement costs;

(ii) Competitive bidding method;

(iii) Capitalization of salary;

(iv) Economic value method;

(v) Return on effort employed;

(vi) Behavioural variables method.

(i) **Replacement costs** : The historical cost of human assets is compatible with the traditional accounting treatment of assets, and requires collecting the costs involved in recruiting, hiring and training human resources. The use of replacement costs has the advantage of adjusting the human value to price level changes and can assist the process of manpower planning by providing estimates of the costs involved in obtaining labour for different positions. By providing such information, it is possible to make decisions about the quality of personnel to hire and the nature of training programme that they should follow. A good example is decision about whether to employ

less qualified personnel and to train them internally for position, rather than hiring qualified personnel?

(i) **Competitive bidding method**: the replacement cost method suffers from two deficiencies. First, management may have some particular asset which it is unwilling to replace at current cost, but which it wants to keep using because the asset has a value greater than its scrap value. Secondly, there may be no similar replacement for a certain asset. It has been suggested that the solution to these difficulties lies in using the opportunity cost concept that is the value of an employee in his alternative use, as a basis for estimating the value of human resources employed by an enterprise. A human asset, therefore, will have a value only if it is a scarce resource, that is, when its employment in one division denies it to another division. The division or department with the highest bid would win the particular human resource and would include its price in its investment base. One disadvantage of this method is that it makes serious omission of certain asset values. It excludes employees of the type that can be hired readily from outside the firm, so that the approach seems to be concerned with only one section of a firm's human resources, having special skills within the firm or in the labour market.

(ii) **Capitalization of salary**: Another method that has been suggested is the valuation of a firm's labour force by aggregating and averaging the earning profile of homogeneous group of employees. The earnings profile of an individual is a mathematical presentation of the income stream generated by a person, and this of course is his productivity to the firm. The value to the firm of the human capital embodied in a person of age r is the present value of his remaining future earnings from employment calculated as follows:

$$Vr. = \sum_{t=r} \frac{1(t)}{(1+r)^{t-r}}$$

Where:

Vr = the human capital value of a person r years old.

1 (t) = the person annual earnings up to retirement represented by the earning profile.

r = a discount rate specific to the person.

T = a retirement age.

It is possible to arrive at a value of the total human capital associated with the firm based on average earning data of a homogeneous group of

employees. This approach, it is suggested, allows two values to be attached to the firm's labour force; a 'general' value based on overall census data, and a 'specific' value derived from the specific wage scale of the firm. The discount rate that is used is the cost of capital as used in capital budgeting decisions. Reporting the 'general' and 'specific' values of human capital may also usefully throw light upon the firm's recruiting and wage policy.

iv **Economic value method:** According to economic theory, the value of an asset to a firm lies in the rate of return to be derived by the firm from its employment. Therefore, an individual's value to an organisation may be defined as the present worth of the set of future services he is expected to provide during the period he is expected to remain with the organisation. The economic value method suggests that an individual's value to an organisation should be conceptualized and measured as the present worth of his expected services.

Accordingly, in order to measure an individual's worth to an organisation, it is necessary to estimate the time interval during which the individual is expected to render services to the organization and assess the services expected to be derived from him during this period of time.

The economic value method focuses on the individual's value to a specific organisation for two reasons. First, individuals are a central focus for much organisational decision making and secondly, measures of individual value can, in principle, be aggregated in order to value larger units of people.

One limitation of this method is that advocates of this method have not suggested means by which a value may be derived in practice. Moreover, it also has a narrow view of an organisation. Since the analysis is restricted to individuals, it ignores the added value element of individuals operating as groups. It should also be noted that the economist's method of valuation is fraught with difficulties of measurement, and for this reason replacement costs method are usually more acceptable alternatives.

v **Return on effort employed.**

One method of accounting for human resources involves the measurement of effort employed on various functions - buying,

manufacturing and selling. This kind of information may lead to a more effective and efficient allocation and use of human resources.

Factors, which distinguish quantity and quality of effort expended, may be used to rate the contribution made by individuals. Such factors are:

a. **Level, or grade of work done.**

Firms are obliged to distinguish between different grades of jobs for the purpose of developing wages structures.

The following factors may be applied to job grades in NEPA as an example: -

Job Grade	Factor
10 (e.g General Manager)	10
7 (e.g District Manager)	7
4 (e.g Meter Reader)	4
1 (e.g Driver)	1

b. Effectiveness with which the individual performs his job.

Personal Assessment	Factor
Very good	1.5

Satisfactory	1.0

c. Experience, which increases up to a point in line with learning curve theory, the efficiency of job performance.

Years of Experience	Factor
0-1	1.0
1-3	1.1
4-6	1.2
7-9	1.3
10	1.4
Over 10	1.5

These factors are then multiplied together in determining a measurement of effort employed for each individual. For example, a very good District Manager in NEPA with more years' experience would score 1.5x7x1.3 = 13.65 for effort employed. When all the calculations for every individual are aggregated, we obtain a figure that represents the total effort employed in an organization.

If the primary functions of an organisation like NEPA are power generation, transmission and distribution, and there are three business areas, it is

possible to relate the profit of these areas to the effort involved in producing the profit:

Business Area	Generation	Transmission	Distribution & Marketing	Total Effort	Total Profit ₦	Total Profit over Total Effort
1	300	1800	700	2800	280,000	₦ 100 per unit of effort
2	160	2000	240	2400	48,000	N20.00 per unit of effort
3	200	4000	800	5000	1,000,000	N200 unit of effort

The above calculations show wide divergences between business areas and the return of effort expended. Area 3 gives a return of ₦200 per unit of effort expended as against ₦20 only for area 2. This kind of information assists management to be aware of such differences, their causes and devise possible means to improve the performance of less effective areas. As in financial accounting we consider return on investment, in human resource accounting we consider the return on effort expended, and ask whether it is satisfactory. This process leads to a more effective allocation of human resources.

Vi **Behavioral variables method.**

One problem not adequately covered by the previous measures is that information is needed about the effectiveness with which an organisation maintains the condition of its human resources. This arises from the fact that managers can exert pressure on employees in order to increase short run performance. This could cause a serious cost to the organisation, because a fall in the quality of human resources can have unfortunate effects on long-run performance. Where a behavioral variables method of human resource accounting is in operation in an organisation, when pressures are exerted on employees, their value will be shown to be less at the end of management pressures than at the beginning.

In increasing productivity, human assets may have been liquidated, if so this cost should have been quantified and charged against the increased output.

According to (Likert, (1973), there is only one solution to this problem and it does not lie in more precise accounting data. The solution is to obtain periodic measurements of the character and quality of the human organisation.

The variables which need to be measured to maintain the quality of human assets involved such factors as loyalty to the organisation, level of motivation of members, degree of confidence and trust among members, amount and quality of teamwork and aptitude scales of members.

2.5 Human asset accounting- the myth and reality.

According to Anjorin (1992), "the purpose of accounting for ' human capital ' is to provide information in monetary terms which can be included in the annual financial statements in the same way investments in equipment, machinery or plant, are now included". In this way, shareholders, capital lenders and employees are informed of the work of the human capital of organisation. The philosophy behind this idea sounds very good, but in-depth analysis of it has proved to be highly controversial.

Accounting for human capital in financial statements has been a Herculean task. And, as such a few scholars have argued that its inclusion would violate some accounting principles, thus making its treatment problematic.

Anjorin opined that financial accounting theory would be healthier without the concept of human resource accounting, that the prudential aims of human resources accounting might be more effectively achieved by other means rather than its inclusion in the financial statements.

Human resources experts had for sometime been uncomfortable in the presentation of organisational financial statements that invariably excluded the most important and most precious asset -the ' human capital'. The inclusion of human asset in the financial statements being very important asset, which is the instruments used in judging the quality and viability of an organisation is very crucial.

Hopwood (1976) stated that" perhaps more significantly, a related and seasoned suggestion from non-accountants that one approach to the solution might take the form of an extension rather than a restriction of the focus of accounting systems". There is no doubt that the form of extension in reporting human resources in financial statements as suggested by non-accountants would definitely be a deviation from

the traditional accounting system, since such reporting, would not be compatible with the existing accounting practice.

The work of Flamholtz (1970) regarding the application of replacement cost of people is an interesting study. In reality the replacement of people can be very complex organisational operation rather a simple market transaction. It is not the cost of buying 'A' in order to replace 'B', since neither A' or B can be bought but the cost of employing the services of 'A' rather than 'B'. The concept of replacement cost can be applied only in the following two cases:

i. If slavery exists or;

ii. Where a man or woman can be replace by a machine not aided by human being, such machine fulfils the exact role played by human being and such machine has price.

The human asset accounting debate is heavily valued laden and has pretensions to 'prove' its veracity by empirical means. Thus we get measurement and estimating statements such as:

If a person's salary is ₦x, their true value to the firm is probably ₦x times 2.5 when we take into account their replacement costs, training

/embedding in of replacements, pressure on remaining staff who have to cover, lost production and loss of their net worth. Lose a good player and who will replace him? How much time will pass before the organisation regains his know-how and drive'.

Arguments have been advanced and some work done to quantify the value of human capital to organisations. The work of Leif Edvinson and Skandia (2001), in Sweden is interesting. Skania supplements their annual report. This seeks to measure and evaluate "soft" asset that would not normally find their way into the shareholders annual report.

The difference between the accounting treatment of human capital, and the accounting treatment of other assets are attributable to the prevailing view that human capital (and investments in human capital) is more difficult to value. They are not controllable in the way as tangible assets, and are otherwise different from tangible assets.

Regardless of the merit of these claims, the fact remains that human capital is not treated in the same way as tangible assets in the context of financial accounting and reporting practices. This is because of the

heavy reliance in capital markets on financial data. Human capital- the stocks of skills, competences, and know-how in a company, and the effort to renew them- are outside the visible spectrum of information that typically informs investment and lending decisions.

The philosopher- scientist Werner Heisenberg (2002) articulated an insight known as the complementary Principle. It asserts that measurement is not neutral and external. The scientist, in making measurements, interacts with the observed object and this causes it to be revealed not as it is in itself but as a function of measurement. Applied to assets, Heisenberg's principle means that the act of measuring alters the nature of what is measured. There is also a popular axiom that "what gets measured gets managed". The non-implementation of human asset accounting means that the fundamental source of wealth creation -human capital is seriously under managed in most organisations. Measurement and recording are not neutral actions. Counting what people do is a way of valuing what they do. The act of measuring can alter reality.

In Summary, the accounting treatment of human capital is different from that of tangible assets. It can be argued that these differences distort the relative price of human capital and tangible assets inside companies. They are also to blame for marked differences in the external visibility of human capital compared to tangible assets, because of the heavy reliance on financial data as a source of information on companies.

2.6 A demonstration of the cost of Human asset

Since the use of human resource accounting concept is still in the experimental stage, research about its contribution to the organisation is limited. Nevertheless, a demonstration of a cost analysis of Human assets will help illustrate its potential contribution. The up john company experience, discussed here, deals with the return on measurement of human resources rather than their cost. We rely on Chastain (1979:23) for his analysis of the cost of human resources as reported in the University of Michigan Business review.

Just as conventional accounting continues to report most economic events and transactions in terms of cost, many human assets

transactions can be presented in cost terms. Many decisions involving people may need to be based, at least in part, on approximate costs.

Human resource costs may be divided into direct and indirect costs. Direct costs refer to the amounts that can be traced directly to the resource. Indirect costs cannot be traced directly since they are incurred for general use in more than one activity, and they must be allocated among activities based on assumptions relating to benefits received. Opportunity cost, often quite important in Human resource accounting and in managerial decisions, is used to refer to revenue, costs or income forgone, or lost, when a decision is made. For example, to acquire and train a new manager might cost a company ₦6000, while to promote a person internally might result in ₦5000 familiarization and training costs. Once the management makes a decision to have the new person, actual costs of ₦6000 are incurred, while the opportunity cost (those forgone) are ₦5000.

Human asset costs may generally be broken into three major components-acquisition, learning, and separation. To illustrate each of those and some of their uses we have gone through a step-by-step

breakdown in Exhibits 1, 2, and 3. The exhibits reflect the costs incurred in (1) acquiring Rasheed Mora and (2) training him as production manager for production department number one in NEPA Generation Company Ltd. Separation costs are given in Exhibit 3.

Exhibit 1

Acquisition costs

Name of employee: Rasheed Mora, Manager, production department No. 1, hired July 1 1985

	Direct	Indirect.
1. Recruitment-costs incurred to identify possible sources of personnel Advertisement -newspaper	₦ 40.	
College recruiting.		-----
Employment agency fee (one half month salary)		2000
Entertainment -dining at the country club		160
Travel-visit with the company		200
Administrative.		200

₦2,600

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2. Selection to determine which applicant is offered employment-Interviewing, testing, administrative Costs for three applicants: Mora, Sanni, and John - ₦ 1,000.

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3. Hiring and placing -costs to bring Mora aboard.

Hiring, moving and travel allowance. 2,200

Placement-administrative costs to place Mora in the job (company ID, placing his name in the payroll and department records, arranging for auto parking) 200

₦2, 400

---

4. Promotion or hiring within considered opportunity costs, alternative selection of Musa, assistant manager

in a different department; cost of moving him and

acquiring a replacement -------- ₦7,000

₦6000 ₦7, 000

Exhibit 2

Learning Costs

Rasheed Mora began work July 1, 1985

		Direct	Indirect
1.	Formal training-two week course,		
	Salary,		₦2, 000
	School costs, books and fees		400
			₦2, 400
2.	On- the-job training only		
	40 percent effective first three		
	Month's on the job, cost of		
	Ineffectiveness equals 60 percent times		
	#12, 000 month salary		₦7,200
	70 percent effective second three months,		3,600
	Cost equal 30 percent times ₦12000		10,800
3.	cost of trainer's time production		
	Superintendent, one half month		

	Times his salary ₦6000		₦3,000
	Production manager from		
	Department No. 2, One half month		
	times his monthly salary	₦4,00	₦5000
4.	Lost productivity by other people during		
	The training period		
	Production Department No. 1		₦2000
	Production Department No 2		1600
	Sales, administration		1400

			₦5, 000
		----------	----------
	Total	₦13, 200	₦10, 000
		----------	----------

Original human resource

Cost, Rasheed Mora

	Total	Direct	
Grand Indirect			
Acquisition	₦13,000	₦6,000	₦7,000
Learning	23,000	13,200	10,000
	----------	----------	----------
	₦36,000	₦19,200	₦17,000
	----------	----------	----------

Some elaboration on the information in Exhibits 1,2 and 3 will probably be helpful. The indirect costs, as mentioned earlier, cannot be traced directly to Rasheed Mora, but must be allocated among the costs of human assets and other activities that are involved. The selection process for a new production manager involved three people. Mora, Sani and John. The recruitment and selection costs for the two people not hired is treated as part of the cost of acquiring Mora, since the total recruitment and selection costs were incurred to acquire one production manager.

Exhibit 3

Separation costs

Rasheed Mora, manager, production department No.1 resigned effective December 31st, 1985.

Direct

Indirect

1.	Separation pay-None given to Mora who left		
	Within one year		0
	Cost due to reduced efficiency in other		
	Department in December when Mora		
	decided to resign		₦1, 600
			₦1, 600
2.	Loss of efficiency prior to separation,		
	Mora did not concentrate well on		
	the job in December.		₦1, 000
3.	Cost of vacant position, January 1986		
	Cost in department No. 1		₦4, 000
	Related costs in other department		₦2, 000
			₦6, 000
	Total Separation cost	₦1, 600	₦7, 000

Replacement cost for production department No 1 Manager

		Grand Total	Direct	Indirect
1.	Acquisition	₦3,000	₦6,000	₦7,000
2.	Learning	₦23,200	₦13,200	₦10,000
3.	Separation	8,600	1,600	7,000

Total	₦44, 800	₦20,800	₦24,000

The opportunity cost to transfer Musa from another department to production department No. 1 is ₦ 7,000, the cost of moving him, recruiting and hiring a replacement. This opportunity cost should be recorded in supplemental records, not only in support of the current decision, but because such data will likely be useful in future manpower acquisition decisions. The original cost of human asset- for production Manager department No. 1 is ₦ 36,200, shown at the bottom of Exhibits 2. Under Human asset accounting, this amount should be capitalized, entered on the balance sheet, and amortized in future period as Rasheed Mora contributes to the revenues of the company.

An HR Ledger controls account would contain total human resource costs for all personnel covered by the HR accounting system: subsidiary ledger records with supporting information should be kept for each appropriate individual member. The control account should be debited periodically for all additions, replacements, development, and transfers in, and credited for amortization, turnover losses (voluntary and involuntary), obsolescence, and transfers out.

2.7 Value of Human Resources: The concept that people have value to an organisation, derived from general economic value theory, relates to the expectation that they will contribute services to it in the future. Two meanings of value are that a resource commands purchasing power or has exchange value, while the second is termed use value. The Theory of human resource value, based on the latter concept, relates to the expected future benefits, contributions, services, or utility of organisational personnel.

Measurement of value is a many faceted and difficult issue. Human resource accounting faces the more preponderable task of valuing the intangible associated with the potential services of personnel. The task may be broken down into three subtasks: - (1) individual employees, (2) groups such as departments or responses to centers, and (3) for the total human organisation.

The original cost of ₦ 36,200 for human resources at the bottom of Exhibit 2 is comparable to the total cost of inventory when it is placed on the shelf ready for sale where it incurred the invoiced cost of the goods, transportation, receiving, unpacking costs and so on. Similarly a machine's

total costs include those necessary for it to begin effective operations. The human resource is ready to fully function in the position or Service State for which it has been hired.

The resignation of Rasheed Mora on December 31, 1985 is designed to show the separation costs incurred when an employee leaves. The period of six months, while short, points up a problem many firms have of the costs of turnover.

The total replacement cost of ₦44, 800 may be titled the gross cost of turnover. Identifying the cost of personnel turnover is a prime step involved in reducing it.

Standard costs may be developed for the acquisition and training of people to improve efficiency. Returns on investment techniques are being applied, much in an exploratory stage yet, to evaluate the efficiency in utilizing human resources.

Reporting only the cost or measurement in human resources is often strongly criticized. The reason is that the present value of an employee's expected future contributions to the entity may differ greatly from cost. Therefore,

Human asset accounting gives much attention to determining the value of human assets.

Furthermore, the measurement model described earlier of acquisition, training, and separation items does not report all costs that are important for human resource decisions. Future costs related to the expected services of an employee may be needed.

A current example of the usefulness of human resource data to management comes from the Montreal office of the Accounting firm of the Touche Ross & co. The firm manages its investment in personnel by monitoring the rate and cost of turnover, along with recruitment; selection, and training. Touche Ross uses human resource accounting for several reasons. One is to account for outlay and opportunity costs. The firm's long-term survival depends largely on the development of younger members to replace senior professional staff. In addition, the diversion of the senior member's energies into training junior staff represents an opportunity cost-the senior's could be performing billable work instead of conducting training. Also, turnover rates in public accounting are quite high. The measurement and control of both the cost of training and turnover led to the development of an accounting

system featuring both outlays costs (out-of-pocket expenditures) and opportunity costs (billings to clients forgone).

To implement the system, time records were introduced that were kept regularly by the auditors to keep track of time spent on client work. A cost-of -time analysis report was then developed. It addressed three dimensions of professional staff time: chargeable time, measurement time (an expense within future service potential). The report also compared planned versus actual hours for activities under the category, investment (such as recruiting, orientation, counseling, and development; formal training programmes, and research). This planning and control report assist in monitoring human services and the personnel who are alerted to its existence may be motivated to improve their allocation of time by tasks.

Another product of this approach to human asset accounting was a summary of human resource investment that produced a total shown for investments in personnel during the year. This total was often compared with the planned investment under the corresponding category in cost-of-time analysis report. The summary listed both the outlay and opportunity costs components of the human resource investment. The end result was a tool for monitoring the

effective and efficiency of investment in human capital, thus permitting the firm to evaluate whether or not training and other objectives were met.

Another product of the system was the statement of Human resource flows. It reported on changes in human capital inventory both in terms of physical qualities and monetary units. Transfers from other offices and recruiting from outside the firm augmented an inventory at the start of the year during the year. The closing inventory reflected transfer unit, departures, and amortization.

The reports described provided Touche Ross official with information that should help them improve the management of their human resources, particularly in these areas: determining the proper staff mix, controlling professional turnover, hiring policies, and training expenditures.

2.8 An assessment of valuation methods: Merits and Demerits

Aside from the foregoing ways of imputing values to human asset in an enterprise balance sheet, we could also classify and appraise the various methods as hereby stated:

i. **Cost based approaches**:

Brummet, Flamholtz and Pyle Model in brief: The cost of acquisition, training and development of individuals capitalized with subsequent amortization over the years to reflect the value of individuals and the organization

Appraised: It's based on historical cost.

Remarks: Capitalization of the cost, contrary to its expense nature in accounting practices, may not be acceptable.

. Accumulated cost of Human asset acquisition and development may not reflect their value. Cost amortization is inappropriate, due to performance rating of individuals.

. It is based on historic cost approach. This may not truly represent the human asset value of an organisation.

ii. **Replacement cost method:-** Flamholtz method.

Model in brief: the cost of replacing individuals and rebuilding cost of human organisation to reflect the Human asset value.

Appraisal: The replacement cost may be relevant only for key individuals.

Remarks:

- Human asset is not traded in the market; hence replacement cost may not exist.
- Replacement alternatives may be many and assessment of correct alternative may be subjective.
- In absence of arriving at proper replacement cost of an employee, this model is not useful.

iii. **Opportunity cost-based approaches:**

Competitive bidding model-Hekimain & Jones.

Model in brief: It based on competitive bidding amongst the investment centre managers to win the individual employees for use, based on the highest bid price to be included as value of human asset along with investment in physical assets while assessing the return on investment by individual investment centre.

Appraisal: More and more individuals may be out of the bidding process and may have no value in the organisation.

Remark:

- It requires assessing the likely contribution from each individual for future assignments.

- It is more subjective and may not be uniform across the company. The assessment may be based on the perception of the individuals involved in bidding.
- It is more subjective and hence cannot be used effectively.

iv. **Economic Models:**

(a) Goodwill method-Harmanson model

Model in brief: Extra profits earned by organisation as compared to industry average rate, that is Human asset value = goodwill. Investment in human asset/total investment.

Appraisal: The rate of earnings may be influenced by other external factors also and cannot be purely linked to Human asset.

Remarks:

- Goodwill may not be attributable to investment in suppliers, the customers, the public image etc.
- This model cannot be implemented if the rate of earnings of the company is less than the industry average.
- This model is more subjective and unless relationship of various factors to the company's goodwill is established, this model is debatable.

(iv) B **Adjustment discounted future wages method Harmanson model:**

Model in brief: Present value of future wages payable for the next five years discounted at the adjusted rate of return is the Human asset value. The adjustment rate of return refers to average rate of return on owned assets of all firms in the economy multiplied by the efficiency ratio of the organisation during the last five years on weighted average basis.

Appraisal: Rate of return of a specific organisation may not be comparable with other firms in the economy.

Remarks:

- The model is subjective with respect to present value being restricted for five years, efficiency rate calculated in past five years, and assignment of weightless for past rate of return.
- It is too subjective and hence cannot be used.

(iv) c **Lev and Schwartz model:**

This is the present value of likely future earning of an employee till his retirement. This involves the estimation of wages and consequently human asset value on a group basis. Wages are calculated as a function of age alone.

Appraisal: Possibility of employees leaving the organisation is not considered.

Remarks:

- It has to be seen with the present value of future contribution receivable from the employee.
- This is easy to implement and use.
- Also it is the most widely used model as it can be easily adopted.

(iv) d **Jaggi and Lau**

Model in brief:

Human asset value depends on rank and performance rating. Assuming the past trend to continue in future estimation on retirement, death and service movements need to be arrived at.

Appraisal:

The present value of the likely services from employees relevant to different service states considered as Human asset value.

Remarks:

- Past trend is not an indication for the future.
- The model does not recommend any method to evaluate the extent of services that may be available from the employees.

- It is based on the past trend. In a technology-intensive industry like software, past trends may not be representative of the future likelihood.

(iv) e **Myers and Flowers**

Model in brief: An employee's attitude governs his productive behaviour on the job. The employee's attitude index multiplied by the wages payable should reflect the likely benefits to the organization and hence the human asset.

Appraisal:

Individual's attitude matters more than the group's attitude.

Remarks:

- Weightings based on the job grade level and tenure of service may not be appropriate.
- Attitude is not the only parameter to influence employee behaviour.
- It is difficult to assess the attitudes of the individual employees and is more subjective.

(iv) **Behavioural Model: Likert model**

Model in brief:

The model aims to establish through psychological test results, how a set of casual variables reflecting the management systems adopted by an organisation determine the depreciating or appreciating of human asset.

Appraisal:

Establishing valid relationships between organisational health and performance is difficult.

Remarks:

- In the absence of a valid relationship, the condition of human asset may not be true reflector of the human asset performance.
- More difficult to implement and is more subjective.

2.9 Human asset valuation practice in India.

Human asset valuation in India is mostly based on the present value of the future earnings of the people. The Indian corporate world is showing interest in accounting for human asset value, in spite of the fact that there are no internationally accepted standards.

In the foregoing analysis, most of the secondary data need are collected form the published annual reports of selected companies. So far, there are about twelve companies in India that have adapted the concept of human asset accounting. These companies are.

(i) Bharat Heavy Electrical Ltd, (BITEL), which is the pioneer in publishing human resource accounts in the annual report since 1974-75, it is one of the fortune five hundred companies listed outside the United States.

(ii) Steel Authority of India Ltd (SAIL), which is a holding company consisting of five integrated steel plants, and two alloy steel units.

(iii) Minerals and metals trading corporation of India Ltd (MMTC), which is the biggest trading organisation in India.

(iv) Southern petrochemicals Industries Corporation of India (SPIC), which is one of the biggest organisations, producing fertilizers, and chemicals.

(v) Associated cement companies Ltd, one of the largest cement manufacturers in the private sector.

(vi) Projects Equipment Corporation, a Government of India undertaking;

(vii) Madras Refineries Ltd, an oil refinery company in the private sector;

(viii) Hindustan Zinc Ltd, the only enterprise in India producing zinc and lead (a Government of India undertaking);

(ix) Engineers' India Ltd, one of the public sector consulting organisations.

(x) Oil and Natural Gas commission, a Government of India organisation;

(xi) Oil India Ltd, and

(xii) Cement Corporation of India (a Government of India enterprises).

Valuation model:

The India companies basically adapted the model of human resource valuation advocated by Lev, Schwartz (1971), Lev Schwartz employed the following equation to compute human asset value:

$$E(VJ) = 1\ PJ\ (t+1)\ 1$$

Where E (VJ) is the value of human asset of an individual j years old; 1 (I) is the individual's annual earning until retirement; T is the age of retirement; Pj

(t) is the probability of an individual of age j dying at age t: and r is the rate of Discount. In practice, all the enterprises observed the basic theme of Lev. Schwartz model in the sense that they have computed the present value of future direct and indirect payments to their employees as a measure of their human asset value. While doing so, the common assumptions set by the aforesaid companies are the pattern of employee compensation, normal career growth, and weightage for efficiency. The India companies have considered some additional features from the Flamholtz, and the Jaggi and Lau models. These models provide some scientific basis for employee mobility and for valuation of homogeneous groups of employees, respectively. Viewed thus, MMTC had taken 12 percent; SPIC has considered the rate of return that is used for evaluating the company's capital expenditure proposals, while SAIL has applied 14 percent to arrive at the present value of human asset. BHEL also reported human asset value with similar model using twelve- (12) percent discount factor on the future earnings of its employees.

For example, BHEL has incorporated certain improvements relating to human asset efficiency for valuing its human assets. The company has classified its employees into six categories, based on skill, type of work,

experience, and qualifications. In each category, ten to fifteen salary grades are identified to facilitate human asset value computation. The model adopted by BHEL is as hereby stated:

$$HRV = (P*12)\ N\ (E)\ (1) / (1+r)\ n$$

Where HRV is the human resource value of group of employees in a particular salary grade; (P*12) is the annual compensation per employee in a given salary grade. N is the total number of employee in the grade; E is the weightage for efficiency level; I is the increment factor, and (1+r) n is the discount factor.

Mean salary in each grade is taken as the vital factor in the basic framework of human resource value computation. Various items, such as basic pay, house rent allowance, benefits like provident fund contribution, medical, gratuity, and other allowances are included in the computation of mean salary. A reduced level of efficiency of around five percent for each period of five to six years has been observed. While an increment factor of about five percent for five to six year's period is included in the computations as captured by the variables like weightage for efficiency level, and

incremental factor of the above model. The other companies also followed the same methodology with minor changes.

Evaluation:

Indian companies focused their attention on the present value of employee earnings as a measure of their human asset. A critical look at the logic of human capital approach raises a bit of doubt, as far as human asset value to the organisation is concerned. It may be nearer to truth, when viewed from the employee's perspective. But may not probably hold well, from the employee's angle. In the Indian context, more particularly in the public sector, the payments made to employees are not directly linked to productivity. The relationship between the wage/salary bill and the value of production is not always vital. The fluctuations in the value of employees' contributions to the organisations are hardly proportional to the changes in the payments to employees. Under the Lev, Schwartz (1971) model, the value of human resources will be more or less increasing, even if the organisation continuously incurs losses. The attitude and morale of the employees, the contribution of employees to the organisation, and such other factors are out of the purview of the Lev, Schwartz model of human resource

valuation. Therefore, the companies may consider a human resource model based on the employees' contribution to the organisation.

Likert (1967) has advocated for the Naira estimation of the changes in the value of human organisation. Changes in the key dimensions of the human organisation are used to predict the human asset value. The process involves measuring the key variable through a social-psychological measurement instrument, in two time periods. The measurement instrument would contain variables like leadership, motivation, communication, decisions, goals, control, etc, covering the profile of organisational characteristics (Likert, Bowers, 1973), which is briefly explain in table below:

Items used to measure Human organisational Dimensions

Managerial Leadership: Team building: Extent manager displays the following **Support** - Friendly pays attention to what you are saying - Listens to your problems **GOAL EMPHASIS:** - Encourages best efforts - Maintain high standard

HELP WITH WORK

- Shows ways to do a better job
- Helps you plan, organize, and schedule
- Offers ideas, solution to problems

TEAM BUILDING

- Encourages subordinates to work as a team
- Encourages exchange of opinions and ideas

GROUP PROCESS-EXTENT OF

- Planning together, coordinating efforts
- Making good decisions, solving problems
- Knowing jobs and how to do them well
- Sharing information and wanting to meet objectives
- Having confidence and trust in other members
- Ability to meet unusual work demands.

SATISFACTION WITH:

- Your fellow workers
- Your job
- This organisation compared with others.
- Your pay
- Progress you have made in the organisation up to now

- Your chances for getting ahead in the future.

ORGANISATIONAL CLIMATE; COMMUNICATION FLOW:

- You know what is going on
- Those above are receptive
- You are given information to do job well
- Decision-making practices

DECISION MAKING PRACTICES:

- You are involved in setting goals
- Decisions are made at levels of accurate information
- Persons affected by decisions are asked for their ideas
- Know-how of people at all levels is used.

CONCERN FOR PERSONS: THE ORGANISATION:

- Is interested in the individuals welfare
- Tries to improve working conditions
- Organizes work activities sensibly

INFLUENCE ON YOUR DEPARTMENT FROM:

- Lower level supervisors
- Employees who have no subordinates

PEER LEADERSHIP-EXTENT; PEERS DISPLAY THE FOLLOWING TECHNICAL ADEQUACY

- Support
- Friendly
- Pays attention to what you are saying
- Listens to your problems

GOAL EMPHASIS

- Encourage best efforts
- Maintains high standard

HELP WITH WORK

- Shows ways to do a better job
- Helps you plan, organize, and schedule
- Offers ideas, solutions to problems

TEAM BUILDING:

- Encouragement from each other to work as a team
- Emphasis on team goal
- Exchange of opinions and ideas
- Improved methods are quickly adopted
- Equipment and resources are well managed

MOTIVATION:

- Differences and disagreements influence on your department from:
- Lower lever supervisors
- Employees who have no subordinates

Sources: Rensis Likert, David C Bower, Improving the Accuracy of P/L Reports by Estimating the change in dollar value of Human organisation, Michigan Business Review March, 1973, P. 17-18

The human organizational score (HOS) obtained in two time periods would form the basis for estimating the human asset value. Likert's proposition may be presented in the following mathematical form:

HAV = A HOS/CYHOS) RIC. Q 1(100/NROR)

Where HAV is the human asset value; HOS is the change in the human organisational score. A HOS is the standard deviation of the human organisational score; R is the co-efficient of correlation of HOS and production cost; C is the cost of production; Q is the quantity of annual output; and NROR is the normal rate of return.

If the human asset value as proposed in the earlier equation is adjusted with the human organisational score, as out line by LIKERT, it will reveal more realistic value of the human assets of an organisation. Unlike physical asset, the human assets are susceptible for certain influences (socio-psychological). The human asset value computed from a model having the variables of human organisational score would be of more relevance, since significant relationships are found between human organisational characters and overall organisational performance. Then the modified version of the model can be expressed in the following equation:

V=I I @ (Ri-P) EFI/(I+R) At I HOST = I i +1

Where EF is the efficiency factor that can be derived from the weightage attached to age, experience, skill formation, skill obsolescence, etc; HOS is the human organisational score of attitude, loyalty, commitment, job-satisfaction, etc.

The above model with additional features of the behavioural side of the individual and organisation is expected to reveal the value of the human organisation of an enterprise with a reasonable precision.

Illustration of inputting value(s) to human asset in an enterprise balance sheet.

The following data relate to ultimate management consultants PLC. The company commenced business in the year January 1st, 1990. The personnel data are hereby stated.

S/N	Name of staff	Date of commencement of work	Starting Gross salary P.a	Age of entry	Training cost per annum	Annual increment
1.	A Musa	1/1/90	₦ 12,000	25	₦ 400	₦ 500
2.	M. Moses	1/1/90	6,000	30	100	200
3.	O. Amao	1/1/91	5,000	26	100	200
4.	C. Zubair	1/1/90	3,000	30	100	200
5.	Jafaru J.	1/1/90	4,000	35	100	200
6.	K. Itopa	1/1/93	5,000	36	100	200
7.	I. Ifabiyi	1/1/94	7,000	24	200	400
8.	F. Fatimoh	1/1/95	8,000	20	200	400
9.	`C. Rekiya	1/1/96	4,000	20	100	200

10.	B. Bello.	1/1/90	8,000	28	200	400

The company's Trial balance as at 31st December 1996 is as detailed below:

	Dr.	Cr.
Sale and Purchases	500,000	1,000,000
Sales & purchase returns	5,000	3,000
Debtors and Creditors	1,000	4,900
Plant & Machinery	1,000	
Motor vehicle	2,000	
Land & Building	3,000	
Long terms loans		12,000
Shareholders fund		6,000
Stock (1/1/96)	1,000	
Selling & Distribution expenses	10,000	
Administrative expenses	500	
Telephone		100
Insurance		500
Staff Training & development		500
Cash		50,505
Bank Balance		200,000
Rent	500	505
Salaries & wages		250,000
Audit fees		500
Legal & other Professional fees		800
Discount	500	1,000

1,021,405	1,021,405

Additional information:

(i) ₦250 insurance relates to January to December 1997.

(ii) ₦200 Telephone expenses owed as at 31/12/96

(iii) Closing stock ₦500

(iv) Depreciation: plant & Machinery - ₦200

Motor vehicle - ₦400

Land & Building - ₦300

(v) Retirement age in the country is 60 years

(vi) Average Interest rate: 1990-1996 = 10%

Required: Prepare the company's profit and loss account for the year ended 31st December 1996 and the balance sheet as at that date.

ULTIMATE MANAGEMENT CONSULTANTS PLC

TRADING, PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1996

	₦	₦		₦	₦
Opening Stock		1,000	Sales	1,000,000	
Add purchase	500,000		Less returns	5,000	995,000
Less returns	3,000	497,000			

		498,000			
Less closing stock		500			
Cost of goods/services sold		497,500			
Gross profit c/d		497,500			
		995,000			995,000
Selling & Distr. expenses		10,000	Gross profit l/d		497,500
Admin expenses		500	Rent received		505
Rent		500	Discount received		1,000
Discount allowed		500			
Audit fees		500			
Legal & other Professional fees		800			
Insurance		250			
Telephone		300			
Depreciation:					
Plant & Machines	200				
M. Vehicle	400				
Land & Building	300	900			
Net profit		484,755			
		499,005			499,005

ULTIMATE MANAGEMENT CONSULTANTS PLC

BALANCE SHEET AS AT 31ST DECEMBER 1996

₦	₦	₦		₦
Shareholders fund	6,000	**Fixed asset**	cost	Dpr. NBV
Net profit	484,755	Plant & M	1,000	200 800
	490,755	M vehicle	2,000	400 1,600

Long term loan		12,000	L. Building	3,000	300	2,700
				6,000	900	5,100
Current liabilities			**Current Asset**			
			Prepayment	250		
Creditors	4,900		Stock	500		
Accrued exps.	200	5100	Debtors	1,000		
	---		Bank	200,000		
			Cash	50505		252,255
						257,355
			Human Asset			
			Cost -	123,259		
			Appreciation (1990-1996) -	126,741		
			Appreciation (Training)	500		250,500
		---				---
		507,855				507,855

Workings: Ultimate Management Consultants Plc

Calculating the human asset value for the company employees using a modified model of Lev and Swartz as hereby stated:

$$A = (1tr)^{n} \times n$$

Where A is the Human asset value, r is the discount rate and n is the number of years the employee will stay in the organisation (that is employee's useful life in the organisation). This is the Retirement age in the country less the employee's age at the time of employment. P is the Gross starting salary per annum.

S/N	Employee's Name	Future Human asset value For the useful Life	Useful life

1. A. Musa = useful life = 60 -25 = 35 years 35 yrs

   $A = (1+r)^{n \times n}$

   $= 12000\ (1.10)^{35} \times 35$

   = ₦11, 803,008.

2. M. Mose $6000\ (1.10)^{30} \times 30$ 30 yrs

   = ₦3, 140,890

3. O. Amao $5000(1.10)^{34} \times 34$ 34 yrs

   = ₦4, 343,109

4. C. Zubair $3000\ (1.10)^{30} \times 30$ 30 yrs

   = ₦1, 570,446

5. J. John $4000(1.10)^{25} \times 25$ 25 yrs

   = ₦1, 083,470

6. Korede Itopa $5000\ (1.10)^{24} \times 24$ 24 yrs

   = ₦1, 181,964

7. I. Ifabiyi $7000\ (1.10)^{36} \times 36$ 36 yrs

   = ₦7, 790,000

8. F. Fatimoh $8000(1.10)^{40} \times 40$ 40 yrs

   = ₦4, 482,944

9. C. Rekiya $4000\ (1.10)^{40} \times 40$ 40 yrs

   = ₦7, 241,472.

10. B. Bello $8000\ (1.10)^{32} \times 32$ 32 yrs

= ₦5, 405,133

The grand total of future Human asset value of Ultimate Management Consultants Plc is ₦58, 042,439.

To calculate the present value of the above named future value of human asset of the company, we have to divide the grand total of future human asset value of firm of ₦58, 042,439 by the product of the average useful life of the company's employees and the rate of discount used. V13:

$$= \frac{₦58,\ 042,439}{(\text{Interest rate})^{n} \times \text{average useful life}}$$

$$= \frac{₦58,\ 042,439}{(1.10)^{32.6} \times 32.6} \qquad \frac{₦58,\ 042.439}{14.42 \times 32.6}$$

$$= \frac{58,042,439}{470.9} \qquad = \qquad ₦123,259$$

Workings

Average useful life: $\frac{35+30+34+30+25+24+36+40+40+32}{10}$

$= \frac{326}{10}$ = 32.6 years

2.10 Human asset accounting and generally accepted

Accounting principles (GAAP)

Most organisations system of measuring Human asset shaped in part by accounting and reporting requirements of generally accepted accounting principles regard physical capital as the primary source of wealth creation. The accounting and reporting systems that have developed over centuries reflect this standpoint.

In most developed nations, the generally accepted accounting principles and their related reporting requirements rest on the foundational assumption that physical assets (land, machinery, building) generate wealth. Human asset does not even appear on the balance sheet.

In an audit engagement, one of the basic criteria in verification of an enterprise's assets is beneficial ownership of such assets by the organisation. This reason, which transcends history, accounted for the Human asset not appearing in the balance sheet. Unlike all other factors of production, Human asset is the only factor that cannot be

owned. The omission of human asset from the balance sheet can play mischief in the wise allocation and management of resources.

Human asset is an unrecorded asset, which means that although it is something of value it is not recorded anywhere on a company's financial statement as asset. Since it's true value is contingent on a future event, it is difficult to calculate a precise measure of human asset. Accountants, who deal with historical costs rather than future value, are perfectly justified in ignoring it.

To date the perceived weakness of Human asset accounting have over shadowed its strengths. Of primary importance, Human asset is not yet within the realm of generally accepted accounting principles. A basic difference is that, under Human asset accounting, employees are considered as assets, not costs. Under authoritative accounting rules, employees would have to be recorded as costs and amortized in the same manner as physical assets. Another clash with generally accepted accounting principles is that Human asset accounting reports employees' current values rather than historical (acquisition) costs, a controversial accounting practice.

Human asset accounting underlying problem is that measures of cost and value of human resources are not precise enough yet to enable managers to make the kinds of decisions they are able to make using traditional accounting data.

2.11 Merits of compliance with Human asset accounting

We now consider the merits of Human asset accounting. Determining the value of individuals (certainly periodically) would be useful in evaluating individual performance, the performance of management, in business acquisitions and combinations, for appraising salaries and wages for promotions, for merit and other pay increases, for transferring employees and for lay off and terminations. A number of monetary methods for valuing individuals have been suggested.

Measuring the value of groups may be important for evaluating management performance, mergers and business combinations,

insurance, liquidation, bankruptcy, and for evaluating stock prices and security issues.

Human asset accounting has been around since the 1960s, it is still an exploratory technique in contemporary applied management. It is now gaining some acceptance as an internal control device in managing human resources.

We want to observe that despite the ticklish measurement problems associated with Human asset accounting, it is better than using no measurement at all. The acceptance of a formal system of measuring the worth of employees is long overdue. In addition, measuring human assets enhances the value of people. Steven Robbins (1984: 465) observes that a major advantage of human asset accounting is that it makes managers aware that attracting and retaining employees has long-term value to the firm. If managers were charged with the unamortized balance in an employee's account should that employee leave, they would be inclined to try to prevent turn over. Under a Human asset accounting system, executives would also be more hesitant to lay off employees to increase profits in the short-range. Robbins says this is true because, "the un amortized balance of the

investment made in the employee would be charged against the manager's unit at the time of lay off".

Giles & Robinson (1972) have listed the possible uses of human asset values as follows:

(a) Measuring the return on capital employed on total organisational assets, including the value of human assets;

(b) Planning the use of resources, taking into account the valuable human resources in considering the use of financial and physical resources;

(c) Examining the disposition of resources, for by allocating relative human asset values to different job grades, the location of organisational investments in human resources would be highlighted. This would have significance influence for management, and for established personnel policies and expenditure;

(d) Examining personnel expenditure and re-appraising expenditure in personnel services and training;

(e) Preparing organisation and personal profiles, so as to plan the desired amount and disposition of human assets;

(f) Valuing businesses, where the human asset value becomes a relevant factor in mergers and take over decisions;

(g) Industrial relations problems, where human asset values may, if accepted, provide a rational basis for discussing reward structures;

(h) Integrating human asset values with financial accounts for reporting purposes.

"Our employees are our greatest assets, and the ability to attract and retain them is the key driver of our future success". This is now a routine sentence for any company reporting on its health and its future. The new economy called the knowledge economy distinguishes itself by a large amount of the value of the company residing in the head of the employee instead of in the tangible assets of the company. People in the organisation as recommended by Human asset accounting represent more than just expenditure; that they are not to be seen only in the income statement but more in the balance sheet as an asset. People are assets. It is about time that we

valued them for what they can do. People, as assets require a new accounting system. An asset perspective means enabling human beings for which the market economy has no use to redefine themselves as contributors. That requires more than a static inventory. It requires a dynamic information system constantly updated by live transactions.

A case can, however, be made for including competence in the balance sheet, because it is impossible to conceive of an organisation without people. People tend to be loyal, if they are treated fairly and feel a sense of shared responsibility. That is why companies are generally willing to pay some kind of compensation to those who retire, or have to be laid off. This kind of compensation varies from country to country, but often takes the form of redundancy pay and pensions. Although such commitments are not recorded as liabilities in the balance sheet; they can be seen as pledges or commitments, like leasing or rental contracts, and thus a form of invisible financing of employee competence.

Human resources experts argue that if about Seventy five percent of total costs of production of goods and services are personnel related, it stands to reason to suggest that they ought to be properly accounted for in the financial statements. After all, financial statements are expected to provide their users with qualitative and quantitative information for decision-making.

Flamholtz (1972) has explained the importance of measuring human resource values in monetary terms. According to Flamholtz (1972), the…." failure to measure and report the value of human resource to management can conceal sub-optimal decision-making in organisation".

Accounting procedures usually treat expenditure on building up human assets as expenditure of a revenue nature. Expenditure on recruitment, induction, training and development of personnel is charged against the income of the period in which the expenditure was incurred. By this practice both the profit and the balance sheet values are under stated. Other assets deem 'capitals' are shown in the accounts, some at reduced value (because of depreciation), and some perhaps at an increased value. The main point being that they are

shown as being part of the company's present asset value. If human assets were treated in the same way, the statement of income of an organisation; and also the attitude of management to such expenditure would be greatly affected (Appleby, 1980).

Furthermore, if the expenditure on building up human asset were not regarded as cost to be borne out of current income but as contributing to the building of assets that can bring benefits for future years, training and development cost would have been treated differently. If this view were adopted, training and development costs would be considered similar to those for technological repairs and overhaul, arrived at keeping the organisations "human equipment" in the most effective operating state. This is what Keith Davis (1981)-call investment approach to human asset accounting. This would provide a justification for amortizing these costs over several years, rather than including them in a single year's expense Sikulla (1976), Appleby (1981).

New techniques that value intangible assets are becoming increasingly prominent in finance, Human resource management, and government

regulator circles (Lev, 2001). Employee contributions are a key missing asset in traditional financial valuation information.

Other benefits of human resource accounting to outsiders like investors are that they have an improved basis to assess the value of an enterprise and to make better investment decisions. It also offers one of the most realistic bases for which organisations that refuse to embark on training and development of her employees could easily be identified.

Finance is starting to acknowledge the gaps between traditional accounting practices, market capitalization, and asset values (Lev, 2001). Investors for a long time have been valuing stock shares beyond the book value (that is, physical and financial assets) of the companies (Lev, 2001). Take a look at your favorite securities portfolio, and you will note that in spite of the recent stock market deflation, many stocks are still trading significantly above what their tangible assets are worth. This is because markets realize that intangibles help predict what the future cash flows will be worth (Lev, 2001). Empirical evidence and theory increasingly suggest that stock -

market wealth creation involves optimally mixing people, technology, and physical assets as they perform together in combination to produce strategic goals (Becker & Huselid, 1998); (Boudream & Ramstad, 1997), (Di Francesco & Berman, 2000), (Huselid, 1995), (Lev, 2001) and (Provo, 2000).

In supporting the invaluable nature of human asset accounting, Kenneth Sinclair (1978: 97), observes that human asset accounting can enhance an organization's decision-making capabilities, both internally and externally in the following ways:

(i) Individual projects can be compared from year to year, and so can the entire investment in acquisition or conservation of human resource by recognizing the investment alternatives and potential returns.

(ii) Assist in planning staff expenditures by highlighting the strengths and weaknesses in the entire workforce.

(iii) Highlight any changes that might be needed in recruiting policies. For instance, the cost of hiring and training new employees might exceed the outlay required to retain an employees who is considered to be surplus at the time.

(iv) Improve corporate profitability through more enlightened and all encompassing decision making. The result would be a more strongly motivated workforce and management team.

Of all the assets an organisation may have, Human resources are the greatest and most important. Human asset accounting thus offers an interesting and logical method of explaining the nature of the human resource and of determining the value of the work force to the organization. Keith Davis (1981: 15) maintained that it encourages mangers to take a long-run outlook toward the value of people rather than a short-run, quick profit outlook that ignores them or relegates them to secondary positions. This point has to be appreciated for as Giwa (1990), the then Chairman, Manufacturers Association of Nigeria (MAN) rightly commented, "although the kingdom of heavens runs on righteousness, the governments, business and kingdoms of this world are runs by men-human resources".

Optimizing of profits would result only if an organisation develops clear and comprehensive strategies and initiatives for the training and development of its employees. The inventory cost; its basis of valuation, the investment in shares; its marketable cost, and all that is necessary for financial evaluation

is required to be disclosed, except the people, the human capital conducting the affairs of that company in factual terms is nothing but merely a title.

Killian stated " to understand the critical importance of people in the operation and competitive position of a company is to recognize the human elements and the human activities. Most often, company failure is one of people failure. People fail to accurately gauge the forces of change and thus make the wrong decisions. People fail to find a need and meet it. It is people who employ, promote, organize, lead, and decide which products are produced and advertised and where the product will be marketed. The decisive difference in service is determined by people" (Killian, 1976). The one way to attract importance to the human elements is to state their values in an enterprise financial statement. One of the benefits of human asset accounting to an organisation lies in the efficient allocation and use of human resources. This will require that the right person with the right skill is available at the right time to do the job Flippo (1980), Sikulla (1976).

However, it is not the absolute value of Human asset that is critical; but more its significance as an indicator of the importance that management should pay to it. Employees have moved from being a cost to becoming a

resource and today they are considered to be an asset or a capital. Any careful management must take care of its assets and try to maximize the return on them. Human asset accounting is an effort towards maximizing the human capital in a company.

Accounting for human assets assists in a better allocation of resources. By treating labour costs as expenses an important part of the investment base is ignored. The use of an incorrect investment base yields an incorrect estimate of return on investment. Therefore, when comparing competing investment projects, human assets should be included in the calculations if a realistic comparison is to be made. The same argument may be applied to external reporting; assuming that funds seek the highest rates of return, the exclusion of human assets from the investment base of companies causes an imperfect allocation of resources within the economy. Some Writers assert that trend in the ratios of investments in human assets to total assets (the human asset investment ratio) may be a useful predictor of future profit performance. They contend that there is evidence to indicate a degree of meaningful correlation between profitability of organisations and their expenditures in acquisition, training and retention of human resources. This suggests` that

firms with a high human asset ratio will ultimately generate high profits while firms with a low ratio may experience profit declines.

Human asset accounts constitute a tool to represent the intellectual capital of a company. Through these accounts, a company both internally and externally communicates its value as being highly influenced by its intellectual capital, that is, the assets related to the employee knowledge and expertise, and the efficiency of the company's business processes. Intellectual capital, also termed 'knowledge capital', helps to explain the difference between the company's market value and book value because the intellectual capital is not included in financial accounts.

The following reasons could also be advanced for the development of

Human asset accounts viz:

- The human asset accounts can be used to support the group of the company.
- Both internal and external attention can be drawn to the company's way of functioning. This brings the company's management system and its development over time into focus.

- The ways in which investments in human assets are reflected in the results of the company can be illustrated.
- The intended implementation of the central strategies of the company can be demonstrated. Since developing a vision is often lengthy process, the human asset accounts can help to illustrate how and at what rate the company will move towards its strategy.
- By publishing human asset accounts, a company can prove the existence of long-term perspective to interested parties. The intellectual capital accounts can be used to demonstrate that the long-term aspect is present in every daily action.
- Towards the employees, the human asset accounts can be used to stress the importance of devoting attention to the development of human and technological resources over a long period of time.
- Disclosure of costs and assets within the area of human resources becomes possible. This is of particular importance to knowledge-intensive companies where the competence of the staff is a critical asset.

Human asset accounting helps to pave way for the company to its future. It is the bedrock measurement devise to form the bridge to the future. We believe that social responsibility accounting implies a welfare concern with employees- as people- and for this reason, we consider that human resource accounting is concerned with providing information relevant to the social management of organisations, and with the measurement of human resource contribution.

2.12 Demerits of Compliance with Human asset accounting

To date the perceived weaknesses of Human asset accounting have overshadowed its strengths. Of primary importance, Human asset accounting is not yet within the realm of generally accepted accounting principles. A basic difference is that, under Human asset accounting, employees are considered as assets, not costs. Under authoritative accounting rules, employees would have to be recorded as costs and amortized in the same manner as physical assets. Another clash with generally accepted accounting principles is that Human asset accounting reports employees' current values rather than historical (acquisition) costs, a controversial accounting practice.

While no one denies that employees are major factors in the future well being of an organisation, their direct valuation expressed in monetary terms is simply unworkable as a result of two factors. The first one is the inability of the accounting profession to develop a meaningful system of measurement; and the second one, human being which is of greater theoretical importance, simply do not qualify as 'assets' under the usual definition of the term as something of value owned by a firm. For example, rented machines and others are not shown as assets in the balance sheet but of rentage and they appear as expenses.

It is an abomination and highly impossible to own human being as an asset because slavery no longer exist. It is a crime against society for anybody to voice or act as an owner of other human being. For this simple reason, the notion of valuing an individual in monetary terms does not arise. People are no longer owned, although, man is an animal who has been fed, clothed and taken care of.

Whilst it is normal for the cost of a cow to be higher than that of calf due to the expenses incurred for the calf to become a cow, are we ethnically prepared to translate these same ideas to human beings? And even if we are prepared, how can we scientifically isolate the physiological cost, and then the educational cost? It is possible to justify the high income earned by a man due to his physiological and educational advancement; this cannot be regarded as the cost of the man but the cost of the service he rendered.

In the present accounting and reporting requirements, investments or expenses on human resources cannot be capitalized and written down (that is, amortized) when the envisaged portion is to be consumed. The reason for this treatment is that, investments in people seem more tedious than investments in machines, and because there are difficulties between the future benefits of such investments/expenditures and the portion consumed currently. This is so because the services of employees are highly unpredictable, their relationships are delicate, and their permanency is grossly uncertain. Since employees are not owned, the guarantee that their services will

be available for future benefits after training or other capital outlays on them cannot be certainty.

The treatment of capital outlays on human resources as consumptions for the period in which the capital outlays are made rather as investments are the results of the conventional boundaries of the concept of assets. The objective of accounting is to provide the users of financial statements with quantitative and qualitative economic information that will enhance their decision-making. Accountants must provide the necessary information that would not becloud the judgement of the users of financial statements. They therefore must understand the close bond between information and decision-making.

Human asset accounting underlying problem is that measures of the cost and value of human resources are not precise enough yet to enable managers to make the kinds of decisions they are able to make using traditional accounting data.

Finally, attaching financial values to individuals can create many other problems. It is conceivable that managers could use human asset

accounting as a means of manipulating employees. An employee's naira worth might be decreased as a punishment. Managers might even transfer some people at the end of the year to make the department balance sheet look healthier. Employees could conceivably demand more money once they learnt their naira value had increased. The value attached to an individual could have a strong negative or positive impact on a person's career, even in situations where the value was inaccurate.

Another expressed concern is that the people who attached financial values to other people would be seen by many as wielding too much power over the lives of others.

2.13 Interpretation of Financial statement with human asset Value(s)

There are a number of methods in use for interpreting information relating to human asset in an enterprise financial statement. We shall therefore consider some of them as stated below:

(i) **HRCA-Human Resource costing & Accounting-** this places emphasis on personnel accounting calculations for use in

decision-making. This method can assess the cost of sick leaves and of personnel turnover and designed indicators that can be used as rules-of-thumb by managers.

(ii) **Balanced score card:**

This is not designed specifically to measure and publish intangible assets but it helps to take a more" balance view" on internal performance measurement.

(iii) **Intangible Asset Monitor:**

This "family-of-three categorization and corresponding theory about measuring intangible assets was developed by a Swedish working group in 1987 and published in a report in Swedish language. The "Konrad theory' has since become widely used in Scandinavia. More than forty Swedish companies measured and reported their intangible assets according to these principles in 1995. The theory was further developed for management information purposes, which is called the "Intangible Assets Monitor". The three categorizations are stated:

(v) **Human Resource Auditing:** The term human resource auditing becomes its title and rationale from accountancy, it also makes use of the system and methods of the social and scientific information. It measures human resource outputs and effectiveness under the given circumstances and the degree of utilization of human resources in the best possible manner conducive to the organisation. The audit of human assets is analytical rather than presumptive. It is one of the methods of gathering factual information of management controls and activities based on an unbiased assessment of objective evidences rather than subjective opinion.

Human resource audit can help the organisation to improve its systems and working and can assist:

(a) How to obtain the desired working efficiency out of the available human resources;

(b) Can suggest ways and means to the organisation how to achieve the target objectives;

(c) To improve the entire communication system;

(d) Can assist the organisation in constructing the basic policy framework in the corrective directive;

(e) Human resources audit in relation to possible products/services and labour market scenarios.

It is a fact that leading organizations today recognize that their human assets are as critical to their long-term success as their physical and financial assets.

(v) **Human capital Asset management (HCAM)**. This technique suggests that the key to measuring and maximizing the value of the intangible assets (e.g. employees, brand, and technology) is in their joint contributions to the overall throughput. It provides casual explanatory mechanisms to describe how revenues are created by employees' performance. It is the way to understand human capital as a business asset connecting all the various areas of human resource (HR) into a system that helps the firm create revenues. This is done in way that makes it clear where the investments are and where returns will be achieved. HCAM is more of a strategic framework that views human capital as an asset of the firm. One of the critical paradigm shifts required understanding human capital, as an asset is to understand that the human capital of a business is not people. People are the owners of their own human capital and invest some of it in their work. Therefore, the human capital of a business is the sum of

what its entire people have invested in their work. The value of human capital is derived from the value it helps to create.

To Jeanne Difrancesco "*Business assets (as opposed to financial assets) are assets because they have certain productive capabilities. This is an important concept. This is not a concept of liquidated value, more a concept of "value in use".* Business assets have value as part of a production function. When the liquidated value is greater than the "value in use", companies get broken-up. We deal with human capital's value in a going concern-not its liquidated value.

(a) **Individual competence:** It is people's capacity to act in various situations. It includes skill, education, experience, values and social skills.

(b) **Internal structure;** It consists of a wide range of patents, concepts, models, computer and administrative systems. These are created by the employees and are thus generally "owned" by the organisation, and adhere to it. The internal structure and the people together constitute what we generally call the "organisation".

(c) **External structure:** It consists of relationships with customers and suppliers, brand names, trademarks and reputation, or "image". The value of such assets is primarily influenced by how well the company solves its customers' problems, and there is always an element of uncertainly here. Reputations and relationships can be good or bad, and can change over time.

Balanced scored card Vs Intangible Asset Monitor

There are some similarities between the two theories. Both theories suggest that non-financial measures must complement the financial indicators. Both concepts categorize the non-financial, the intangible areas into three. Both also argue that the non-financial ratios and indicators must be lifted from the operational to the strategic level of firm. Both also agree that this approach to measuring is not a new control instrument; it should be used for improving learning and dialogue. But there are also some important theoretical differences.

The intangible Assets Monitor is based on the notion of people as an organization's only profit generators. The profits generated from people's actions are signs of that success, but not the originator of it. Human actions are converted into both tangible and intangible knowledge "structures". These structures are directed outwards (external structures) or inwards (internal structures). These structures are assets, because they affect the revenue streams. Balance scorecard does not make this assumption.

The intangible asset monitor assumes a set of three intangible assets, and that we should try and find metrics indicating the growth, renewal, efficiency and stability of these assets. The idea should be to get a "peek" into how the intangibles assets) are developing, by designing indicators that correlate with the growth of the asset in question, its renewal rate, how efficiently we are utilizing it, and the risk of loosing it. Balance scorecard achieves its purpose to balance the traditional perspective by adding the three other perspectives; there could in principle be many more perspectives.

Balance score card does not question the foundation of what constitutes a firm". While the intangible assets monitor is based on the

motion of a "knowledge perspective" of a firm. Balance scorecard regards the notion of the firm as given by its strategy. The Balanced score card complements financial measures of past performance with measures of the drivers of future performance. The objectives and the measures of the score card are derived from an organization's vision and strategy "

Both concepts thus agree that money is only one of many possible proxies for measuring human actions, but the conceptual standing point is different.

(vi) **Performance Ratios /Indicators for Human resource management.**

A question to really focus our mind is "what data might we use when accounting for human assets?

- FTES-Full time equivalent staff
- Head count (H) e.g. total FTES at month end.
- Revenues (R) - total operating income (total sales)
- Expenses (E) - operating expenditure excluding tax, interest and extra -ordinary items.

- Profit-R less E (far too simple, what is the true profit? Who decides what the profit is?).
- Cash - like reward (C) - emoluments: salaries, wages, overtime, business, and commissions including national provident contributions.
- Benefits (B) - other rewards that may or may not be taxed as "benefits in kind" - cars, pensions, company loans etc.

Staffing Performance Indicators

This can be classified into Internal and external Indicators:

Internal:

(a) **Sales per employee:** Indicates general employee productivity. Compare SPE this year over last year and with SPES of rival organisations (bench marking). Their turn over may be smaller but they may have a better SPE

SPE = R/H

H may increase if the business expands. Was the growth worth it (SPE)?

(b) **Recovery Rate (RR)**: Aggregate compensation and benefits then divide by revenue. RR compares staffing costs with

revenues delivered. Are we obtaining better or worse returns on each Naira of staff expenditure? A decreasing RR is desirable

RR = C+B/R

Unraveling influences on RR is difficult e.g. is it the staff turnover or a new marketing approach or manufacturing plant? The impact on additional investment should show through in RR later-revenue increases whilst staffing costs fall.

(c) **Utilization %** This can be applied to a consultancy company or school whose main business is allocating or selling the time of its staff. We assume that an increase in U% is desirable- is this always the case?

U% = R/C + B

Revenues (R) can be substituted by another measurable output e.g. wagons delivered, dustbins emptied, examination results (points). Calculation must include staff costs of the whole business unit- direct and support staff.

External:

(d) **Profit per Head**

Like Roce (return on capital employed), shareholders and business analysts may use profit per head or profit before tax per head to focus on employee-related costs and returns.

Pp H = P/H

A firm's Pp H rating may highlight under achievement and profit potential when compared to industry competitors. Corporate predictors may be attracted. A publicly funded organization such as a college may see its funding reduced if its funding authorities use the ratio as a control measure.

(e) **Compensation per # Profit**

This evaluates profits against cost/employee rather than head count. Interpretation can be difficult. CPP can swing with profits e.g. where there are close links between profits and staff compensation (profit related bonuses).

CPP = C+ B/P

CPP is negative where a firm is making a loss. What if CPP is a small positive number and CPP a small negative number? CPP

may indicate that better management could improve cost-effectiveness or controls

Are we getting VFM from Personnel /HRM services?

We can evaluate the productivity/contribution (value for money?) of those delivering personnel/HRM services to the business. Organisation size, location, corporate culture etc however makes external comparisons more difficult.

(f) **Personnel services expenses (PSE).**

What are the total operating expenses of the personnel (salaries, cost of facilities/equipment, training and development budgets, research/project expenditure, communications activities etc.)

(g) **Personnel Services Head count (PSH)**

Total FTE for the period/HR section in the calculation period.

(h) **Personnel Services cost % (PCS)**

Divide PSE by total operating expense (E) to identify trend and to influence budgeting processes.

PSC = PSE/E

2.14 Summary of the chapter.

We have tried to review the work others have done in this area of study and try to juxtapose our efforts in this study with early work in its proper perspective.

The valuable insight gained from earlier studies will greatly assist us to focus on a more specific frontier toward assisting us invariably to make our contribution to knowledge. Sources consulted have been duly acknowledged.

We shall now consider various instruments and methodologies available to us to carry out incisive research on "the assessment of Human asset accounting techniques and its application to Nigerian private sector".

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In carrying out a study, a Researcher has the option to choose from among several investigative techniques that could be used alternatively or as compliments. At times, it is needful to use more than one of such methods. As Hill way (1964) puts it:

" In any given investigation, it may even be necessary to use two or more of these general types of research in combination.

There is no reason, for instance, why one should not seek the solution of a

Problem by studying its history through an examination of documents

(Documentary research) and then determining its present status by some sort

of survey (descriptive research)".

The object of this research is an assessment of human asset accounting techniques and its application to Nigerian private sector. To do this, attempt shall be made towards identifying them various types of research methods available and highlight the research framework under which the research problem can be resolved.

We shall also try to identify and justify our population; scientifically select the sample of the population, and our data analysis instruments for the data we have collected.

3.2 RESEARCH METHODS

A research must lend itself to some methodology of data acquisition, aggregation, analysis, and interpretation.

It is interesting to note that there are various research methods that are available to any Researcher for his use depending on the nature of the problem, the one he wants to use, subject to his ability and resources.

These research methods include historical methods, developmental methods, descriptive methods, case studies method, regression analysis, correlation analysis, and experimental research method.

Historical research tends to interpret past trends of attitude, events, and fact. Apart from

discovering what has happened, it tries to establish the genuiness of the position. It is based on collected and recorded data emanating from secondary sources in the literature, libraries, journals, periodicals, books and so on. Data from historical sources facilitate the research process and reduce the expense of going into the field to collect raw data (Osaze, 1985). However, the researcher must exercise caution in using historical sources for various reasons: one, such data may have been overtaken by recent findings, more advanced and more accurate techniques and methodology. Two, such pieces of research may have been time bound. Third, they may have been culture specific which tends to limit their general application.

Developmental research gains its usefulness from descriptive research. The method investigates pattern and sequences of change in growth as a function of time.

Regression analysis or causal research tries to reveal why a certain phenomenon behaves the way it does. It is an in- depth study of phenomenon and it tries to uncover why phenomena variables behave the way they do. Casual research establishes relationships between variable that may be dependent or independent of each other. Essentially it draws conclusions from in-depth studies and makes recommendations thereon. However, it relies heavily on statistical tools of analysis such as variance analysis, statistical test of significance and regression analysis.

Correlation analysis investigates the extent to which variation of one factor corresponds to some other factors. It deals with large number of variables. It is concerned with the establishment of relationships among the variables as well as predicting future occurrence.

Experimental research requires the actual comparison of certain variables in an attempt to establish the cause and effect relationships. Experimental data usually come from a laboratory situation either in the field or in pure science laboratory. In this case, the researcher is conducting experiments to discover trends, new phenomenon or to confirm or disconfirm earlier established phenomena. Usually, the researcher will have both an experimental group on

which the research is being conducted and control experiment group to which nothing is done in order to discover any changes that might occur.

Where one does not have full knowledge of the characteristics of the context of the phenomena being studied, different settings can be simulated. For example, in landing a man on the moon, the researchers had to experimentally simulate the conditions on the moon so as to know how to prepare the astronauts for the journey. In preparing for the Gulf war (1991), the Americans practiced their " Desert storm" maneuvers in the deserts of California.

Descriptive or survey research as the name suggests tends to describes what is really on the field. It involves the collection of first-hand information and data from primary sources by the researcher. This may be done either by observation or inquiry through the use of questionnaire and interview. Very often, it is more accurate than historical research sources since the researcher is in control of the actual situation. However, the accuracy of information so collected depends on the ability and c competence of the researcher, his honesty, integrity and capability to relate questions asked to the objectives of the research.

Descriptive research can be

(i) **Case study**: Which entails the detailed description and analysis of every thing that is in the history or development of a phenomenon (person, institution, event) and does not generalize to other groups. Case studies are intensive studies of a particular concern. Quite often, the question arises as to whether it is better to have a case study or a sample. However, it often depends on the objectives of the research, the resources available to the researcher, and the state of knowledge of the research problem. If the topic has been thoroughly researched through survey and sampling method and the researcher wishes to obtain in-depth knowledge of the behaviour of some of variables, it might suit him to engage in case study (Osaze, 1985). Case study exposes new relationships that could be measured by statistical techniques. It can also be used for making generalizations about a population especially if the case is typical of the cases in the population.

(ii) **Cross-sectional**: It is a study in which data are collected at one point in time but different sub-group is sampled with the basic assumption of homogeneity.

(iii) **Longitudinal study**: This entails data to be collected on the same phenomenon but at different points in time.

(iv) **Sample survey study**: This study describes the population characteristics by the selection of an unbiased sample. If the population is small, all units in the population in a descriptive research could be more appropriate to be used. For a study of this nature, efficiency of design imposes on the researcher an effort to determine a sufficient sample. A sample survey study describes both large and small populations by selecting an unbiased sample, the result of which will then be used to make generalization on the population.

(v) **Judgement tasks**: In this method, the researcher " shops" for the respondents he believes are capable of rendering answers or judgement that are not uninfluenced by their background. This technique is appropriate for selecting a typical sample and when the researcher wants to control for certain factors or variables.

Non empirical research strategies

(i) **Computer simulations**: Increasingly, researchers have taken to computer simulations and field studies. Different contexts can easily be developed within which the researchers can observe phenomena without getting directly involved. In American Business schools, students acquire " practical experience" with the help of computer based business games, which stimulate business realities.

(ii) **Formal Theory**: Making use of prior empirical knowledge, some researchers have been able to build theoretical models upon which logical manipulations are made. Many economic models on consumer behaviour and national income were derived this way. The Keynesian model is one well-known example.

The research methodology adopted in this study is analytical and investigative in nature. We considered the following factors in choosing our research method for this study namely:

(i) The merits and demerits of the method adopted;

(ii) The state of prior knowledge we have about the problem of this study;

(iii) The nature of the research problem in this study;

(iv) The resources and time available to us.

Given the above scenarios, we shall adopt sample survey method. As we have observed earlier, survey research describes both large and sample populations by selecting an unbiased sample

and using the results to generalize on the population.

Sample survey:

The issue for this is an assessment of the human asset accounting techniques and its application to Nigerian private sector". We went out and met respondents who were selected by a sampling process that we are convinced will give information we want. We made sure that the context in which the data were collected would not influence the outcome that was guaranteed by confidentiality and anonymity.

3.3 SOURCE OF DATA

On the determination of the type of information needed to accomplish this study's objectives, decision must be made as to which sources of data can be used. There are two main sources of data namely: primary source and secondary source.

3.3.1 primary source data

This is a form of data obtained for a specific research or project at hand. It is a first hand or original data that has been recorded by an actual eyewitness or participant in an event or document for a research project. The source data used in this study is questionnaire. It is a device for getting original answer to question by using a form, which the respondent fills by himself. The method of presentation is basically direct contact or mailed questionnaires. The direct contact approach was adopted in this study. We have thirty-one questions contained in the questionnaire. Questionnaire method was adopted to obtain answers to the research problem through responses by responsible officers, which would lead to the solution to the problem.

3.3.2 Secondary source data

Secondary source data are those already available, originally and previously collected for some other purposes but are applicable to the study. The use of secondary data is less expensive and much of the data are ‘ instant’, since they already exist and merely needs to be discovered. However, the existing data might not fit the researcher’s study because of the difference in definition. Besides, second hand information refers to situations where existing data are found in second data, therefore might be inaccurate due the recording or transferring of the original data.

However, care was taken since the secondary data were subject to inherent danger of inaccuracy due to many factors. They were only used as supportive to the primary source and not as the main source of data for this study.

3.3.3 Source of data used

We used both primary and secondary data in this study. The primary source of data used is the questionnaire designed to obtain origin al view and answers from the respondents. Private companies/firms based in Kaduna were served with the questionnaires to fill them (copy of the questionnaire is attached as an appendix). We personally delivered the questionnaires to the companies. This was also supplemented with personal interview of principal staff of the companies concerned.

The secondary source of data used to support the view and opinion of the respondents to the questionnaire include the following:

(i) The previous research work conducted on Human asset accounting;

(ii) Papers presented at seminars/workshops on human asset accounting;

(iii) Journals, reports, newspapers obtained from Central bank of Nigeria, Ministry of Commerce and Industry Kaduna, Professional bodies like Institute of chartered Accountants of Nigeria (Kaduna

District society), Nigerian Bar Association Kaduna branch, Institute of personnel management of Nigeria (Kaduna branch), and manufacturing companies in Kaduna;

(iv) Google search on the internet on human asset accounting;

(v) Other appropriate journals, write-ups and annual financial reports of companies.

3.4 DATA COLLECTION INSTRUMENTS

(i) **Questionnaires:** A questionnaire was prepared and sent to number of respondents cutting across all business sectors of our economy. This was the primary source used to sample opinions and views of appropriate officers in private sector companies based in Kaduna. In order to ensure the validity of our questionnaire, personal visits were paid to our target respondents and questionnaire were then completed. This ensured that data collected were relevant to the problem of this study.

We consider the following ethical issues in packaging of our questionnaire and data collection:

(a) The respondents must know the purpose of the research and the use to be made of the data;

(b) The subjects were assured that no unpleasant consequences would result from the procedures in this study;

(c) Assurance that data gathered would be treated with confidence and not traceable to the volunteers;

(d) Respondents were never asked to perform in an unprofessional manner, and

(e) Subjects were assured that they might receive a summary of the analyzed data.

(ii) Interview

Interviews as data collection techniques are meetings in which the researcher directs questions at the subjects and records the obtained responses. They are often face-to- face interactions, although they can as well take place on the phone.

We personally direct questions at our respondents and record obtained responses. An interview schedule was used in most cases using the questionnaire as our guide.

(iii) Library research:

The questionnaire and interviewing were supplemented by reading on similar studies conducted in Nigeria and other parts of the world especially Britain, United States of America and India. Such readings have been duly acknowledged in this study.

A thorough analysis of the questionnaire was then made in the light of the existing literature and the need of this study. A sample of the questionnaire is attached as an appendix.

3.5 RESEARCH POPULATION

The population of this study consists of Nigerian private sector companies. We shall concern ourselves with the private sector companies

based in Kaduna. The objective of the study is an assessment of human asset accounting techniques and its application to Nigeria private sector.

Research population is the totality of all elements, subjects, or members that possess a specified set of one or more features. A population could be finite or infinite. For instance, the number of private sector companies in Nigeria at any point in time is infinite. This is because everyday at corporate affairs offices nation wide, new companies are being registered. In this study our population shall be functional private sector companies based in Kaduna.

We obtain information from the Kaduna state Ministry of Commerce and Industry and Board of Internal revenue, Kaduna that the existing functional private sector companies in Kaduna as at August 28th, 2003 is about four hundred and six.

The population is made of manufacturing companies, professional practice firms, Banks, Trading companies, Hotels, and others.

3.6 SAMPLING TECHNIQUES AND SAMPLE SIZES

In practice, most of the information obtained by researchers about any population comes from examining a small representative subset of the population. This is called a sample. Sampling is the process of examining a representative number of items (people or things) out of the whole population or universe (Lucey: 1979:71).

Based on literature, there are six types of sampling methods. These include simple-random sampling, stratified sampling, systematic sampling, multi-stage sampling, cluster sampling and quota sampling.

A scientific sampling using stratified sampling method was used to select twenty percent of the population of private sector companies based in Kaduna. This brings to eighty as the sample size. They are made up of medium and large-scale private companies that include manufacturing companies, Banks, hotels, aviation companies, Trading companies, and professional practice firms.

The stratified sampling method was used because it extends the idea of simple random sample to ensure that a heterogeneous population has it defined strata taken account of in the sample. One advantage of this method is that the sample itself is free from bias. However, it requires an extensive sampling frame. The selection of the strata is subjective and it increases cost due to the extra time and labour necessary for the organization and implementation of the sample.

We need to classify stratified sampling method into two: random and non-random sampling method. Stratified non-random sampling method is used here, the simple reason being to reduce sampling error. Attention is given to private sector companies in operation at Kaduna and not those necessarily registered with corporate affairs commission. In addition, the population is further subdivided based on ownership structure, that is those publicly owned and those privately owned companies based in Kaduna. Companies were also sub-classified into the nature of business such as Hotels, Professional practice Firms, Manufacturing companies and Banks. The essence is to obtain precisely as possible, a representative sample that cuts across the heterogeneous research population.

A detailed break down of the research population is shown in table 3.6.1 below:

OWNERSHIP STRUCTURE			**PLESENT STATUS**			**NATURE OF BUSINESS**						
PUB	PRI	TOTAL	MS	LS	TOTAL	BK		PF	H	MC	TC	TOTAL
26	380	406	359	47	406	25		14	20	29	318	406
26	380	406	359	47	406	25		14	20	29	318	406

HINTS: PUB =public, Pri=Private, MS= Medium scale, LS= Large scale, BK=Banks, PF = Professional practice Firms, H=Hotels, MC= Manufacturing companies, TC=Trading companies.

SOURCE: Field Research Data corroborated with corporate affairs report (2002), Board of Internal Revenue and Journal of Ministry of commerce and Industry, Kaduna state and that of Ministry of Information, Kaduna.

Table 3.6.1 shows that the research population is made up of 406 private companies that can be sub-classified based on ownership structure, present

status (scale of production), and nature of business. Based on ownership structure, the population is

made-up of 26 public buy-owned private companies and 380 privately owned companies based in Kaduna. On the basis of present status-scale of production, the population consists of 359 medium scale and 47 large-scale companies. Finally on the basis of nature of business we have 25 Banks, 14 professional practice firms, 20 Hotels, 29 Manufacturing companies and 318 Trading companies.

We hope that a selection from these sub-strata would be an adequate representation of private companies based in Kaduna.

TABLE 3.6.2. BREAK DOWN OF RESEARCH SAMPLE

OWNERSHIP STRUCTURE			**PLESENT STATUS**			**NATURE OF BUSINESS**					
PUB	PRI	Total	Ms	Ls	Total	B	Pf	H	Mc	Tc	Total
5	75	80	71	9	80	5	3	4	5	63	80
5	75	80	71	9	80	5	3	4	5	63	80

SOURCE: Research Data

Table 3.6.2 shows that the research sample is made of 80 private companies, which represent 20% of the research population. We hope that 20% is an adequate representation of the research population since the companies operate under homogenous economic conditions. A break down of the sample size shows that 5 are public owned companies and 75 are privately owned companies. Out of these figures, 71 companies are medium scale and 9 are large scale.

3.7 Techniques of Data Analysis

In order for the collected data to be useful, the researcher must be able to analyze and interpret it in light of the conditions under which it was collected. This becomes necessary since a research study cannot be considered as complete without proper explanations of the result of data collected. It is therefore necessary to simplify the data collected; so as to make the relationship between variables and object clear for its study its analysis becomes necessary.

Presentation of research data can take many forms. The important thing is that it is under stable. The important question here is whether the reader comprehends what is being communicated.

Questionnaires have been administered, the data were collected and the next step is to analyses the data. Analysis of data is simply the process of tabulating facts or data collected for the purposes of comparing with the research questions with a view to finding solution or answer to a research problem. Osuala (1993) defined data analysis as *"the ordering and breaking down of data into constituent parts"*.

Data analysis is the techniques whereby the investigator extracts from the data/information that was not apparently there before and which would enable a summary description of the subject studied to be made. The information being referred to here is the information that would enable us answer research questions/hypotheses. The information is obtained with the aid of statistical technique.

3.7.1 Statistical techniques: Two common statistic techniques are usually employ in data analysis they are:

(1) **Descriptive Technique:**

The primary intention of descriptive method is to describe characteristics of a group or groups, for example a typical score in the group of scores' spread ' or extent of difference among the scores in the group, etc. Percentages, measure of central tendency and measures of dispersion/viability are examples of descriptive techniques.

(i) Percentages:

This is one of the simplest statistical techniques employed in analyzing data. With the aid of percentage, the researcher can bring out the relative differences of the sample under study.

(ii) Measures of central tendency

This provides an index of where the scores tend to bunch together or of the typical scores in the group of scores. In other words, a measure of central tendency provides some basis for describing the characteristic of a group or groups. Three common measures of central tenancy are mean, median and mode.

(iii) Measures of dispersion/variability

Measures of dispersion or variability of scores describe how much the scores spread out from high to low scores. Measures of dispersion include range, semi-integrative range, variance and standard deviation.

Other techniques of data analysis that fall under the descriptive method are: -

(iv) Tables

Data obtained must be tabulated or put into tables being used for analysis. Summary table allows a great deal of quantitative is information to be presented in a very simple manner. Recall, table 3.6 presents data related to number of private companies categorized into ownership structure, scale of production and the nature of business. The table can be read quickly and easily, and it provides people with useful information on the number of private companies based in Kaduna, their nature of business, ownership structure and scale of production.

(v) Chart

Statistic data can often be presented in chart form, this enables relationships and trends comparisons of data for two or more group to be grouped more readily.

(vi) Graphs: -

A group shows by means of a curve or straight line the relationship between variables.

3.7.2 Inferential Technique

If the research at hand has the primary content of only describing the groups' characteristics the researcher may well terminate analysis with the computation of descriptive techniques, namely percentage, measures of central tendency and dispersion. But this is not always the case; most research studies have inferential purpose beyond more group description. In such a case, the researcher needs to compute the inferential techniques or statistics.

Inferential techniques, unlike those used for descriptive research, are tools for analyzing data in a fashion that will address the research questions or hypotheses. Examples of inferential techniques are measures of relationship and measures of comparison.

(i) **Measures of Relationship**

In some research work, the researcher may be interested in finding out whether or not there is a relationship between one variable and another. For example Human asset accounting and traditional accounting, very often, we may have ideas of what the relationship should be but the ideas are vague, subjective and very from person to person. Objective method of determining the degree of relationship of variables is to compute measures of relationship for example, correlation co-efficient.

(ii) **Correlations Co-efficient**

The degree of relationship between two sets of variable (with two measures on each subject) is called the co-efficient of correlation. Co-efficient of correlation can have values from –1 (indicating complete disagreement) to +1 (indicating complete agreement). Two of the most common methods of computing the co-efficient of correlation methods of computing the co-efficient of correlation

are the Rank difference method and the product moment method. The rank difference method is used if the numbers of scores to be correlated is small. The product method is used where the number of scores is large thus it is the type of correlation that is most commonly represented in test manuals and research studies.

3.8 Selection and justification of research methods and data analysis techniques

3.8.1 Research methods: Research instruments include questionnaires, interviews, and published instruments. Each was ensured that is valid and reliable for the purpose intended.

Questionnaires were employed in obtaining required information from our respondents. This was also supplemented with oral interview personally and through telephone. There are a number of general considerations that made us to use questionnaires and interview.

Interviews and questionnaires were employed because some of the target respondents of this study namely Accountants and financial Analysts are very busy people that questionnaires administered to them might not be retained. Where this situation was noticed, personal structured interviews lasting few minutes were employed to obtain the high rate of responses we got. The financial constraints and time made it impossible to resort to the use of interview alone that would have taken more time and financial resources to meet up with appointments for interviews

3.8.2 Data Analysis Techniques used in this study

Since the focus of this study is an assessment of human asset accounting techniques and its application to Nigerian private sector, this is heavily laden and has pretentious to 'prove' its veracity by empirical means.

The analysis of the sample survey returns was based on simple descriptive analysis of tables distribution of relevant statistical information. It involved the construction and analysis of simple frequency distribution tables of the type and number of responses that were translated into percentages.

This research made extensive use of summary tables in presenting data obtained from field interviews and secondary sources. Analysis of research data can be a chore if a great deal of information has been gathered. Once the data have been processed into usable summaries or tables, measurements and analysis can be under taken. Prominent among methods of data analysis are percentages, ratios, averages and chi-square.

This study made use of percentages in analyzing data obtained through primary and secondary sources. The data received from our respondents were analyzed based on the theory of generality using percentages. A high favourable percentage in regards to a phenomenon observed signified a positive opinion, while a low percentage signified an adverse opinion.

We are assessing the human asset accounting techniques and its application to Nigerian private sector. Opinions of people in accounting and other allied professions are being sought on its applicability to Nigerian private sector or otherwise, its level of development and record of its use. Responses obtained from these groups of people will be shown in tables, charts and translated in to percentages as a way of summarizing the data obtained from them. This will assist immensely in understanding of the results of this study.

3.9 SUMMARY

We tried to bring out clearly here, instruments used in conducting this study. The population of this study has been discussed and the method we used in choosing our sample. A mention was also made of the reasons for choosing a sample size, research methods, and techniques of data collection and data analysis. We intend in the next chapter to use all the instruments discussed here to present our data and analyze them accordingly.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION:

This chapter shall be devoted to the presentation and analysis of data collected from interviews conducted, questionnaires distributed and other field survey. The problem of this study has been discussed and ways of going about solving this problem have been stated. The result of these efforts geared towards solving the problems of this study are hereby presented.

This study aims at assessing human asset accounting techniques and its application to Nigerian private sector. We shall therefore find out whether or not there is a significant difference between financial statements with human asset values and one without. And also whether or not there is significant increase in value of financial statements with human asset compliments.

We shall start with enumerating the number of responses received. This shall be followed by the presentation of the opinions of our respondents and the

interpretation of the respondents' opinions on this study of an assessment of human asset accounting techniques and its application to Nigerian private sector. To achieve the above result the data collected must be presented and analyzed. Besides, the analysis will be used to compare with the research questions of this study. Therefore, this chapter deals with data presentation and analysis of the finding obtained in the course of this work.

Our interpretation and analysis of the data collected from our respondents shall be based on certain main issues stated on the questionnaires. They are geared towards solving the research problems of this study. Some of the main issues to be addressed are:

A – There is no significant difference between the financial statement with human asset values and the one without;

B - There is significant increase in values of financial statements with human asset compliments.

4.2 SAMPLE SIZE AND RESPONSE RATE

We distributed eighty questionnaires to our respondents in private companies based Kaduna. They are made up medium and large-scale companies that include manufacturing companies, banks, Hotels, Trading companies and Professional practice firms. This was supplemented with personal interview. The analysis that follows is based on data and information collected by the use of questionnaires and interview. All figures cited and tables drawn were based on the data provided by the questionnaire and interviews.

A total of eighty questionnaires were distributed based on the sample size whose break down is given below:

Break down of Research Sample

Table 4.2.1

OWNERSHIP STRUCTURE			PLESENT STATUS			NATURE OF BUSINESS					
PuB	PRI	Total	Ms	Ls	Total	Bk	Pf	H	Mc	Tc	Total
5	75	80	71	9	80	5	3	4	5	63	80
5	75	80	71	9	80	5	3	4	5	63	80

SOURCE: Research Data.

Out of eighty questionnaires distributed, five were distributed to public limited liability companies while seventy-five were distributed to limited liability companies. Out these figures, seventy-one companies were medium-scale and nine large-scale companies. The distribution of the questionnaires in regards to nature of business, five were distributed to banks, three to Professional practice firms, and four were distributed to Hotels. The remaining sixty-eight questionnaires were distributed as follows; five to manufacturing companies and the remainder of sixty-three were distributed to trading companies. All questionnaires distributed were returned because of person-to-person follow-up.

Table 4.2.2 QUESTIONAIRE DISTRIBUTED

VARIABLES	**RESPONSE**	**%**
Number returned	80	100%
Number not returned	0	0
Number distributed	80	100%

Source: Responses from Researches questionnaire.

Distribution of the questionnaires according to their response classes namely ownership structure and nature of business: -

Table 4.2.3.Number of questionnaires returned according to ownership structure companies.

Respondents	**Number of Returned**	**%**
Public limited liability companies.	5	6
Limited liability companies.	75	94
Total	80	100

SOURCE: Responses from questionnaire.

Table 4.2.4 Number of questionnaires Returned according to Nature of Business

Respondents	**Number of Returned**	**%**
Banks	5	6
Professional practice firms	3	4
Hotels	4	5
Manufacturing	5	6

companies		
Trading companies	63	79
Total	80	100

Source: Responses from researcher's questionnaire

From the tables above, 6 % representing five respondents from public liability companies, seventy-five respondents giving ninety four percent of liability companies. Six percent of the eighty respondents from banks, 4% from Professional practice firm, 5% from hotels, six present four manufacturing companies and lastly, seventy nine percent from trading companies.

4.3 APPLICATION OF HUMAN ASSET ACCOUNTING TECHNIQUES TO NIGERIAN PRIVATE SECTOR.

The thrust of this study is an assessment of human asset accounting techniques and its application to Nigerian private sector. Some questions in the questionnaires were therefore directed to find out the level of application of human asset accounting techniques to Nigerian private sector companies.

QUESTION 1:

Do you support the opinion that a human asset accounting technique is applicable to Nigerian private sector?

Table 4.3.1 APPLICATION OF HUMAN ASSET ACCOUNTING TECHNIQUES TO NIGERIAN PRIVATE SECTOR.

OPTIONS	**RESPONSES**	**%**
YES	78	98
NO	2	2
TOTAL	80	100

SOURCE: Responses from Researcher's questionnaire

From table 4.3.1, out of eighty respondents, seventy-eight representing 98% agreed that human asset accounting techniques is applicable to Nigerian private sector companies. While two respondent representing 2% disagreed with the opinion that human asset accounting techniques is applicable for Nigerian private sector companies.

QUESTION 2:

We went further to ask whether there are any significant differences between financial with human asset values and those without.

Table 4.3.2, SIGNIFICANT DIFFERENCES BETWEEN FINANCIAL STATEMENTS WITH HUMAN ASSET VALUES AND THOSE WITHOUT.

OPTIONS	**RESPONSE**	**%**
YES	76	95
NO	4	5
TOTAL	80	100

SOURCE: Responses from Researcher's Questionnaire.

From the table 4.3.2, ninety five percent of our respondents are of the opinion that there are significant differences between financial statements with human asset values and those without.

A major area stressed by them in the course of personal interview is the conflict with generally accepted accounting principle, that is the treatment of

employees cost as asset instead of operating expenses in the income statement.

A major difference between financial statement with human asset values and those without is in the treatment of employees cost. This is treated as asset in the balance sheet instead of as expenses in the income statement. We therefore put the question to our respondents to decide which classification of employees cost best suit their opinion.

QUESTION 3

How will you want the employee's cost to be classified in the financial statement of an enterprise?

Table 4.3.3 CLASSFICATION OF EMPLOYEES COST IN AN ENTERPRISE FINANCIAL STATEMENT

OPTIONS	**RESPONSE**	**%**
Expenses	21	26
Asset	59	74
Liability	0	0
Prepayment	0	0
Total	80	100

SOURCE: Responses from Researcher's Questionnaire.

It is clear from the above responses table 4.3.3, that majority of our respondents are in the support of the treatment of the cost of employees as asset in the financial statement. Seventy four percent of our respondents are in support of the treatment of employees' cost as asset while twenty six percent are in support its treatment as expenses. This result is clear demonstration of support for the application of human asset accounting techniques to Nigerian private sector.

QUESTION 4

Do you support the view that the merits of financial statement with human asset values to users for outweigh those without?

Table 4.3.4 MERITS OF FINANCIAL STATEMENTS WITH HUMAN VALUES OVER THOSE WITHOUT.

OPTION	**RESPONSE**	**%**
Strongly Agree	49	61
Agree	22	27.5
Neutral	7	9
Disagree	2	2.5
Total	80	100

SOURCE: Responses from Researcher's Questionnaire

From the table above, sixty one percent of our respondents are of the view that financial statement with human asset values are by far more valuable and informative to users than those without. They are of the opinion that human asset accounting, which provides a measurable value for human asset, is far better than the present situation of no measure at all. They opined that the acceptance of a formal system of measuring the worth of employees is long overdue.

Our respondents are of the opinion that it is the human asset accounting that can be effectively used to enhance the value of people, make managers aware that attracting and retaining employees has long-term value to the firm. It also encourages manpower-planning, staff training and enhances employee's productivity.

We also wanted to know whether the differences between financial accounting and human asset accounting could be harmonized.

QUESTION5:

Can the differences between financial accounting and human asset accounting be harmonized?

Table 4.3.5 HARMONISING THE DIFFERENCES BETWEEN FINANCIAL ACCOUNTING AND HUMAN ASSET ACCOUNTING.

OPTION	**RESPONSE**	**%**
YES	64	80
NO	16	20
NEUTRAL	0	0
TOTAL	80	100

SOURCE: responses from Researcher's Questionnaire

Eighty percent of our respondents believe that the differences between financial accounting and human asset accounting can be harmonized. While twenty percent are of the opinion that their differences cannot be harmonized. And none expresses a neutral opinion.

Since the human asset accounting is at its exploratory stage, we asked our respondents what impact would its application has on the Nigerian private sector.

QUESTION 6:

Do you support the view that we can use accounting information to bring about progress and development to any society?

Table 4.3.6 THE USE OF ACCOUNTING INFORMATION FOR SOCIETAL PROGRESS.

OPTION	**RESPONSE**	**%**
YES	80	100
NO	0	0
NEUTRAL	0	0
TOTAL	80	100

SOURCE: Responses to researcher's Questionnaire

We now decided narrow the impact of accounting information such as Human asset accounting to societal progress.

QUESTION 7

The application of human asset accounting techniques to Nigerian private sector would impact on the sector as follows (please tick as appropriate from the options below):

1 – Positively

2 – Negatively

3 – Neutral

Table 4.3.7 IMPACT OF THE APPLICATION OF HUMAN ASSET ACCONTING TECHNIQUES TO NIGERIAN PRIVATE SECTOR.

OPTION	**RESPONSES**	**%**
Positively	80	100
Negatively	0	0
Neutral	0	0
Total	80	100

SOURCE: Responses to researcher's Questionnaire

All our respondents are of the opinion that accounting information can be used to bring about progress and development to any society in general. On the impact of the application of human asset accounting techniques to Nigerian private sector, they all agreed that it would impact positively on the socio-economic development of Nigeria.

4.4 USERS AND CONTENTS OF ACCOUNTING INFORMATION:

There are many users of accounting information and their needs seemed by this information differ from one user to another. It is accepted that the principal objective of financial reporting is to give users of those reports useful information about the resources and performance of the reporting entity. The larger an organization becomes, the more influence it is likely to have on the local and national economic environment and it may be expected to disclose more information than a small organization.

The users of financial reports are those individuals or groups who, for one reason or another, have a reasonable right to information about the reporting organization. They include: -

(a) **Existing and potential investors**, who will be interested in the organization's performance, profitability, liquidity, management efficiency, earnings per share and the present and (likely) future prospects (including comparison with other organizations) and the advisability of retaining or increasing their investment;

(b) **Existing and potential loan creditors**, who will be interested in the performance and profitability of the organization (as are shareholders), but in particular are concerned with the ability of the organization to generate sufficient cash to meet interest payment (and capital repayments). They will also wish to be reassured about the security of loans and availability of asset to cover them (in the event of liquidity);

(c) **Employees**, like investors, will be interested in their organization profitability and future prospects, but in particular are concerned with management and ability to provide secure future employment and increase in salaries and wages

(d) **Business contacts, such as suppliers, creditors, customers and others**, who are likely to place trust in the reporting entity to fulfill an implied or explicit responsibility. Suppliers have to be reasonably confident that the organization will be able to meet its commitments, while customers may wish to be reassured about the continued quality, price and reliability of (possible) future purchases;

(e) **The government**, which may be interested in an organization in its capacity as a supplier, customer or investor. As well as normal financial accounting information the government (taxation authorities etc) is able to obtain additional information (tax returns, statistics etc) from the organization,

(f) **Analysts and advisers**, such as stock brokers, economists, journalists, credit rating agencies etc, who need the relevant information (as for shareholders and loan creditors) to enable them to give competent advice to their clients or readers,

(g) **The general public**:(some of whom may be investors, customers or creditors) may be interested in an organization's operation and policies and their effect on the local and national (and possibly international) community.

QUESTION 8

What make a financial statement adequate for users' need?

Table 4.4.1 ADEQUECY OF FINANCIAL STATEMENT FOR USERS' NEEDS.

OPTION	**RESPOPNSE**	**%**
1, Contents	0	0
2, Accuracy of figures	0	0
3,Compliance with accounting standards and legal regulations	0	0
4, All of the above	80	100
TOTAL	80	100

SOURCE: Responses to Researcher's Questionnaire.

All our respondents agreed that the following factors all combined together namely, contents of financial statement, accuracy of the figures therein, and compliance with accounting standards and legal regulations/other requirements to make financial statement adequate for users' needs. This then means that there is no single most important factor, which will make

financial statement adequate for the needs of users. And the interplay of a number of factors makes financial statement adequate for user's needs.

It should be apparent that with such a diversity of interests, each user with possibly different criteria, the framing of a financial report that meets all requirements is a considerable task. And until some standardization of presentation, disclosure and accounting policy can be achieved, the assessment of performance and comparison with other organizations (inter-firm comparison and ratio analysis) is difficult, it not impossible.

In view of the fact that there are many users of accounting information with diverse interests, inclusion of human asset accounting information in Nigerian private sector financial report will definitely serve useful purpose to large spectrum of financial statement users. The presentation of published accounts in Nigeria has evolved piecemeal over many years and it may well be time to define more precisely the aim of financial reporting and clarify the accounting procedures and policies to be adopted. Only when all the interested users reach some form of agreement on the main objectives can there be any prospect of improvement in the essentially unsatisfactory state of affairs.

QUESTION 9:

Does the present contents of our financial statement adequately serve the needs of all the users?

Table 4.4.2 CONTENTS OF FINANCIAL STATEMENT

OPTION	**RESPONSE**	**%**
Yes	35	44
No	45	56
Neutral	0	0
Total	80	100

SOURCE: Responses to Researcher's Questionnaire

A majority of our respondents representing fifty six percent agreed that the present contents of our financial statements do not adequately serve all the needs of users. One can therefore suggest that there is the need to expand the contents of our present financial statement in order to adequately serve the needs of users.

Majority of our respondents also agreed that expanding the contents of our present financial statement to include human asset accounting information

would make it more comprehensive and useful to users like employers, employees, potential investors and managers.

QUESTION 10:

Please tick any two of the under listed that we could use the present form of financial report to solve more readily.

Table 4.4.3

	OPTION	**RESPONSE**	**%**
	Un-employment	0	0
	Income inequality	25	31
	Revenue generation	48	60
	Employees' low productivity.	3	4
	Corruption	4	5
	Total	80	100

Source: Reponses to Researchers' Questionnaire From table 4.4.3, sixty

percent of our respondents agreed that our present form of financial report could be used to generate revenue for government, and thirty-one supported the view that it could also be used for income redistribution. Four percent of our respondents also agreed that our present form of financial report could be used to address employees' low productivity, while five percent of them agreed that it could be used to reduce corruption in private and public organizations.

QUESTION 11

Please tick any of the following users of accounting information, which is served most adequately by our present financial accounting information (financial report)

Table 4.4.4

OPTION	**RESPONSE**	**%**
Shareholders	51	64
Investors/Financial Analyst	10	13
Creditors/financial institutions	1	1
Employees	0	0

Management	11	14
Government	1	1
Taxpayers/public	6	7
Total	80	100

SOURCE: Responses to Researcher's questionnaire

Form table 4.4.4, sixty four percent of our respondents agreed that our present form of financial report serve most adequately the interest of shareholders, thirteen percent supported the view that it served the interest of investors/financial analysts, while fourteen percent supported that it served the interest of management.

One percent of our respondents agreed that our present form of financial report served adequately the interest of government, creditors and financial institutions. None of our respondents agreed to the view that our present financial report adequately served the interest of employees.

It is clear from this that the interest of employees are not adequately served by our present form of financial report hence there is the need for additional information to make our financial report employees' friendly.

QUESTION 12:

Do the contents of our present financial statement of public limited liability companies serve the interests of all stakeholders in such companies?

Table 4.4.5

OPTION	RESPONSE	%
Yes	31	39
No	49	61
Total	80	100

SOURCE: Responses to Researcher's questionnaire

From the table 4.4.5, sixty one percent of our respondents supported the view that the contents of our present financial statement do not served the interests of all stakeholders in public limited liability companies. Thirty-nine percent agreed that the contents of our present financial report satisfied the needs of all stakeholders such as (government, society, taxpayers, shareholders, creditors, customers, management, employees, public, financial analyst and so on) in such companies.

4.5 HUMAN ASSET ACCOUNTING TECHNIQUES, INFORMATION, SUITABILITY AND DISCLOSURE

We sought to know from our respondents their knowledge of human asset accounting techniques, its suitability to Nigerian private sector, methods of valuing human asset appropriate to bridge the gap between theory and practice and possible disclosure requirements.

QUESTION 13:

How should the information about employees' cost be disclosed in the financial statement of an enterprise?

Table 4.5.1

OPTION	RESPONSE	%
Stated as salaries and wages and charged as expenses in the profit and loss account.	32	30
Stated as asset in the balance sheet	45	56
Stated as a footnote to	3	4

the accounts.		
Total	80	100

SOURCE: Responses to Researcher's questionnaire

All our respondents agreed that information about employees' cost should be disclosed (see table 4.5.2) in the financial statement. It is the method and manner of disclosure of employees' cost that they differ substantially.

QUESTION 14:

Should information about employees cost be disclosed in financial statement?

Table 4.5.2

OPTION	**RESPONSE**	**%**
Yes	80	100
No	0	0
Total	80	100

SOURCE: Responses to Researcher's questionnaire

From table 4.5.1, fifty six percent of respondents supported the treatment of employees' cost as asset in the balance sheet; forty percent are in support of the treatment by employee's cost as expenses in the profit and loss account.

And four percent agreed that employees' cost should be treated as a footnote to the accounts.

Since majority of our respondents supported the treatment of employees cost as asset in the balance sheet, it invariably means the support of human asset accounting techniques in companies' financial statement. This is because the main thrust of human asset accounting techniques is the treatment of employees' cost as asset instead of expensing their costs in the income statement.

QUESTION 15:

Human asset accounting techniques could easily be applied to which of the following organizations?

Table 4.5.3

OPTION	**RESPONSE**	**%**
1-Manufacturing companies	5	6
2-Professional practice	19	24
3-Sport clubs	28	35

4-Government ministries& parastatals	0	0
5-Trading companies	6	7
6-Banks	22	28
Total	80	100

SOURCE: Responses to researches questionnaire

From the table 4.5.3, majority of our respondents are in the support that human asset accounting techniques could be readily applied to the following organizations, namely, professional practice firms (twenty four percent) sport clubs (thirty five percent) and banks (twenty eight percent). While few of our respondents supported the opinion that human asset accounting techniques could be readily applied in manufacturing companies (six percent) and trading companies (seven percent). None support the opinion that the techniques could be applied in government ministries and parastatals.

On the whole eighty seven percent of our respondents are of the view that human asset accounting techniques could be easily applied in banks, sports clubs and professional practice firms. While thirteen percent are of the opinion that human asset accounting could be readily applied in manufacturing

companies, government parastatals, and tradingcompanies.

QUESTION 16:

Do you support the opinion that human asset appreciate in value?

Table 4.5.4

OPTION	RESPONSE	%
Yes	80	100
No	0	0
Total	80	100

SOURCE: Responses to researcher's questionnaire

QUESTION 17:

Do you support the view that incorporating human asset accounting information into the Nigerian private sector financial statement would address the defects of traditional accounting?

Table 4.5.5

OPTION	RESPONSE	%
Yes	75	94

No	5	6
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.4, all our respondents unanimously agreed that human asset appreciate in value.

From table 4.5.4, ninety four percent of our respondents agreed that incorporating human asset accounting information into Nigerian private sector financial statement would enhance an organization's decision-making capabilities. In their opinion, it will assist greatly in planning employees' expenditures by revealing the strengths and weaknesses in the entire work force. They are also of the view that it will create a more strongly motivated work force and management team.

QUESTION 18:

Does the treatment of employees' value in the financial statement influence management attention to employees?

Table 4.5.6

OPTION	RESPONSE	%
Agree	69	86
Disagree	8	10
Undecided	3	4
Total	80	80

SOURCE: Responses to researcher's questionnaire

Eighty- six percent of our respondents is of the view that management attention to employees' value is strongly influenced by the treatment of their value in the financial statement. While ten percent disagreed with this view, four percent expressed a neutral opinion. Majority of our respondents asserted that human asset accounting technique would make managers aware that attracting and retaining employees is beneficial in the long run to the organization.

QUESTION 19:

Which of the under listed accounting types can be used to encourage staff training, manpower planning and also increase employee's productivity?

Table 4.5.7

OPTION	**RESPONSE**	**%**
1-Financial accounting	1	1
1-Management accounting	15	19
3-Cost accounting	4	5
4-Human asset accounting	60	75
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.7, seventy five percent of our respondents supported the view that human asset accounting can be used to encourage staff training, manpower planning and also increase employee's productivity. While nineteen percent, five percent and one percent agreed that management

accounting, cost accounting and financial accounting respectively could be used for the same purpose.

QUESTION 20:

Do we need to report human asset values?

Table 4.5.8

OPTION	RESPONSE	%
Yes	74	93
No	6	7
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.8, ninety three percent of our respondents are of the view that human asset values should be reported in our financial statement. While seven percent disagreed with this opinion

QUESTION 21:

Are people measurable assets?

Table 4.5.9

OPTION	RESPONSES	%
Yes	71	89
No	3	4
Neutral	6	7
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.9, eighty nine percent of our respondents agreed that people are measurable asset, four percent disagreed with this view and seven percent expressed a neutral opinion

QUESTION 22:

Are financial statements with human asset accounting compliments more informative report?

Table 4.5.10

OPTION	RESPONSE	TOTAL
Yes	73	91
No	7	9
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.10, ninety one percent of our respondents supported the view that financial statement with human asset accounting compliments are more informative and useful to users than those without, while nine percent disagreed with this viewpoint. This clearly demonstrates support for the application of human asset accounting techniques to private sector. This position, our respondents asserted that would make financial more users' friendly and assist them in making well-informed decisions.

QUESTION 23:

Are those negative effects of measuring human assets?

Table 4.5.11

OPTION	RESPONSE	%
Yes	11	14
No	69	86
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.11, eighty six percent of our respondents agreed that there are no negative effects of measuring human assets, while fourteen percent supported the view that there are negative effects of measuring human asset

QUESTION 24:

There are three major methods of accounting for human asset as listed below, which of them should be used for accounting for human assets?

Table 4.5.12

OPTION	RESPONSE	%
I. Historical /Acquisition cost method	20	25
II-Opportunity cost	17	21
III-Discounted present value method	43	54
Total	80	100

SOURCE: Responses to researcher's questionnaire

From table 4.5.12, fifty four percent of our respondents supported the use of discounted present value method of valuing or accounting for human asset. While twenty five percent supported historical or acquisition cost method and with twenty one percent agreed with the use of opportunity cost approach.

A major advantage claimed by our respondents for the discounted present value method over other method is in its future prospective to valuing

human asset. While respondents who supported historical cost method argued that it is currently accepted in accounting practice. Human asset accounting then would be consisted with other conventional cost based accounting procedures.

QUESTION 25:

There are six-belief statement concerning human asset accounting application to private sector, tick yes if you supported any of the statement and No if you disagree with any of the statement.

Table 4.5.13

BELIEF STATEMENT	**OPTION**	**RESPONSES**	**%**
1-Even though people are not owned by the organization they still can be reported as asset on the balance sheet.	Yes No	72 8	90 10
Total		80	100
2-The valuation of internal human asset without the	Yes No	64 16	80 20

valuation of external human asset, such as customer, goodwill, is meaningful			
Total		80	100
3-The human asset accounting on the balance sheet will reveal whether a company has excessive investments in human asset	Yes No	77 3	80 20
Total		80	100

Table 4.5.13

BELIEF STATEMENT	OPTION	RESPONSE	%
4. Valuing human beings might cause behavioral reactions which would harm organizational efficiency	YES NO	9 71	12 88

		80	100
TOTAL			
5. The condition of human assets in a company can be assessed well by talking to representatives of the company's management than by using human assets financial statements.	YES	3	4
	NO	77	96
		80	100
TOTAL			
6. Reporting human asset accounts on financial statements violates "generally accepted accounting principles".	YES	76	95
	NO	4	5
		80	100
TOTAL			

Source: Response to Researcher's questionnaire.

From Table 4.5.13, the six belief statements concerning human assets accounting were constructed after reviewing human assets accounting literature. The statements are meant to reflect basic beliefs about human asset accounting. Statements 1,2 and 3 were constructed so that a positive answer reflects agreement with human asset accounting, and state 4,5 and 6 were constructed so that a negative answer reflects agreement with human assets accounting.

Question 26: Does human asset accounting information affect stock investment decisions?

Table 4.5.14

OPTION	RESPONSE	%
YES	67	84
NO	10	12

NEUTRAL	3	4
	80	100

Source: Response to Researcher's questionnaire

From Table 4.5.14, eighty-four percent of our respondents agreed that human asset accounting information affects stock investment decisions; twelve percent disagreed with this viewpoint while four percent expressed a neutral position. Majority of our respondents apparently believed that on increased investment in human assets would result in increased profitability over the subsequent years.

PERSONAL INTERVIEW

The researcher was able to gather the understated responses from personal interview conducted for the Heads of Accounts and Finance and Chief Executives of some private companies based in Kaduna:

Question: Are people measurable Asset?

Answer: A definition of assets accepted by many accountants indicates that: Assets represent expected future economic benefits, rights to which have been acquired by the enterprise as a result of some current or past transaction. This requires that assets must (1) have been acquired through a transaction and (2) have future economic benefits.

The first requirement presents a constraint that is surely not met by human assets, since these assets are neither earned nor acquired. On the other hand it may be argued that human assets are quasi-assets since they are in a sense possessed or controlled by the firm.

The accounting definition also requires an asset to possess an expected net future economic benefit (that is, benefit greater than the future cost). Therefore, any definition of human asset values that ignores the possibility of a net human asset value eliminates at least one possible benefit from the reporting of human asset values – decision making for more optional allocation of human assets.

Question: Which aspects of human asset accounting techniques need to be adequately dealt with by those in support of its application to private lecture?

Answer: In order that human asset accounting to progress beyond its present stage, the following must occur: -

(a) The form for presenting human assets information must be standardized. Is traditional accounting framework the proper form? Or, should these data supplement the main statement? My preference is to report supplementary information, such as turn over statistics, result of training programmes, absenteeism rates, classifications of labour by skill levels and other relevant people resource data, some where in the annual report without violating the structure of the traditional financial accounting report.

(b) Ownership: - One characteristic of assets is that they are owned by an organization. Today, employers do not own people. Given this situation, some people belief that the talk of human assets is nonsensical. A reknown writer as Human asset accounting stressed that "people are not assets; the services people are expected to provide to an organization comprise the assets". It could seem, and then that human labour is clearly different from other assets, but that it is possible to develop assets calculations based on the idea that

employees lease their services to an employer amounting to contractual terms.

(c) The problem of measuring human value must be solved. The historical/acquisition cost approach assumes and equality of cost and value. It may be asking too much to expect accountants to place a monetary value on the human system. Instead, companies could be required to assess systematically the state of their employees' morale, commitment and ability to function effectively in teams. These data could be certified by behavioural science professionals specializing in auditing human systems and report to the public.

(d) Research is needed to determine the impact of human asset accounting an organizational effectiveness and investment decisions. It cannot be stressed strongly enough that research of this type is needed desperately, for without it human assets accounting will never develop. Despite copious literature on human assets accounting, practical evidence of its benefits and application in private sector is still lacking. The concept of evaluating management on the basis of how well all assets and resources (monetary, physical, human) are utilized is likely to provide the catalyst for more companies to adopt

human asset accounting techniques – especially if human values to an organization can be suitably measured and human asset accounting decision–making benefits can be demonstrated. The measurement problem remains human asset accounting archilles' heel. To William A Paton, "in the business enterprise, a well organized and loyal personnel may be a more important "asset" than a stock of merchandise… At present there seems to be no way of measuring such factors in terms of dollar; hence they cannot be recognized as specific economic assets". From all the energy expended on measuring human assets". From all the energy expended on measuring human assets, more heat than light has been generated. With new emphasis on surrogates as value indices, perhaps the academic, professional, and industrial communities can attain suitable value measures, which will enjoy acceptance. The types of costs to be accumulated should be specified. Procedures for accumulating and allocating costs to individuals should he set out in details.

Question: -

What can be done to the present situation of conflicting methods of accounting for human assets in order to derive an acceptable method?

Answer:

Although the various methods of valuing human assets can result in different valuations, such difference should not lead one to abandon human assets accounting because, provided the methods are understood by readers, appropriate evaluations can be made. I therefore suggest that in drawing human asset accounts, those responsible should show their accounts could be compared with other information relevant to the industry concerned. Besides developing accounting systems that acknowledge trade practices in an occupation or industry, Human asset accounting practitioners should also learn something of the characteristics of the human asset. The danger of importing wholesome conventional accounting methods when undertaking human asset valuation should be properly considered.

Question:

In what ways can human asset accounting be an aid to decision – making?

Answer:

One useful area of human asset accounting for decision-making is the consideration of staff lay-off. For example, firms might be more reluctant to lay off staff if they acknowledged that their labour was an assets rather than an expense, a manager might appreciate the need for training if he were confronted by the relevant human assets accounting information; or given a alternative plans, a manager might choose differently if human asset data were available.

Secondly, to inform those who are tempted to think purely in financial terms that their investment in people is valuable.

Another is to draw managers' attention to the need to curtail their functional or line activities in favour of some change that would better utilize their staff and which was not linked to doing better what they are currently doing. The point here is that most people feel that their work could be done better; what they may not see readily is how to change.

And lastly to draw manager's attention to focus on long term end result rather than short-term end results which lead to organizational malfunction, such as increased labour wastage, low morale and industrial disputes. A manager may also appear to make a profit when in fact is making a loss because no account is taken of the decline in asset value of the human assets.

Question:

Highlight areas where human assets accounting techniques could offer benefits?

Answer:

Professional firms, football clubs and consultancies offer situations where the human assets accounting techniques could be useful on occasions, and where many of the difficulties of regarding humans as assets can be dealt with. Public accounting firms solicitors are ideal organizations to experiment with human assets accounting since their services are derived exclusively and directly from human assets. Public accounting firms have available the expertise to develop complex programmes and systems to account for the costs of human assets. Everyone accepts that the value of the individual is very much linked to his talents and the value society grants to those talents.

Signed on fees paid to footballers are clearly human asset valuations paid to them to secure their skills. It should also be observed that human asset valuations are commonly found in certain occupations.

Question:

Do we apply Human asset accounting techniques wholesomely to private sector?

Answer:

It is too simple to respond by endorsing human asset accounting techniques whole heartily, or to reject it out of hand. What I think is needed is a piecemeal examination of the techniques and applications to see whether they are feasible and desirable. With time, it is likely that many current techniques will be modified, some even completely rejected. What will matter is whether the impetus derived from human assets accounting proves beneficial.

Question:

Enumerate ways in which human asset accounting could be useful as a managerial tool?

Answer:

The information produced by a system of accounting or the costs of developing personnel may assist management to: -

(a) Determine the amount of training costs required and prepare realistic budgets for those costs.

(b) Evaluate the effectiveness of training programme and adjust the programmes, if necessary, to optimize the benefits.

(c) Determine turn over costs and the desirable level of turnover.

(d) Evaluate the cost and effectiveness of recruiting efforts and change those efforts, if necessary, to optimize their effectiveness.

(e) Determine the cost of developing new skills and the expected pay off from those skills, by comparing the cost of development new skills, by comparing the cost of developing new skills with alternative investments in other assets.

(f) Determine return on investment more precisely for both decision-making and management accountability.

(g) Determine net short-term lay off costs - the net savings or net costs from reduced manpower as compared to the loss of experienced employees, rehiring and retraining former employees or hiring and training new employees.

(h) Abundant evidence indicates that failure to measure and report the value of human assets may cause managers to ignore the impact of their decisions on employees. For example, training may be suspended and people mistreated to increase short-term profits because profits are measured and human asset values are not. Human asset data serve the invaluable tool for manpower planning, development and control.

Question:

There are three main methods of valuing and accounting for human assets namely, Historical/acquisition cost, opportunity cost method and discounted present valued method. Which of these method is most appropriate and why?

Answer:

I support the use of discounted present value method of valuing human assets because of its future perspective of valuing assets which accord substantially with economic meaning of asset – that is cost that benefit more than one financial period. I will also rank historical cost second but would have been my first choice except for the under listed limitations: -

(a) People are capable of adding to their skills or productivity, as a result of experiences outside of work. Moreover, these experiences can occur whether or not their employers have spent money on training and development.

(b) Historical/acquisition cost based human asset value mainly on recruiting and training.

(c) An individual may develop a patent or process with for more than the training and recruiting costs would ever reflect.

(d) Two individual experiencing the same training may demonstrate different degrees of ability in implementing this training.

Question:

What are the possible unintended effects of application of human asset accounting to private sector?

Answer:

When human asset accounting is applied to private sector, there will be unintended problems and they are: -

(i) Should individual employees be allowed to earn their imputed values;

(ii) Publicizing human asset data could also have a disastrous impact on the attitudes of employees whose asset values are declining. These employees may leave the organization or suffer loss of self-esteem;

(iii) Knowledge of individual human asset values could also affect employee bargaining power, both outside and within the company;

(iv) Individuals who input values in other will become super being and shall wield so much power.

Question:

What can be done to obviate the afore-mentioned unintended effect of the application of human asset accounting to private sector?

Answer:

Given the afore-mention problems, it might be better to keep human asset data confidential. The control system also should be changed to avoid a situation where a manager may be motivated to fire or transfer his high value human asset just before the end of the accounting period. This is to improve the apparent rate of return, a costly manipulation over the long run. Another possible solution to these problems would be to keep managers from knowing the human assets values assigned to particular subordinates or educate them to look at human asset information differently than they look at physical asset data.

Question:

What pieces of information will be needed to calculate the value to an organization of any particular employee?

Answer:

In order to calculate the value to an organization of any particular employee five pieces of information are required: -

(a) The value of each of service states to the organization;

(b) The mutually exclusive service states that the individual may occupy within the organizational system;

(c) The estimate tenure of the person in the organization;

(d) The discount rate to be applied to future cash flows to determine their present value;

(e) The probability that the individual will occupy each services state at specified future times.

TESTING OF HYPOTHESIS

We intend to test the hypothesis by using chi-square. It is used in the treatment of discrete data and if the variables are independent or not related to one another. It enables a researcher to determine whether or not a significant difference exists between an observed number of cases falling into each category and the expected number of cases, based on the null hypothesis.

Chi-square is applied in the following situations: -

a) When there are two variables drawn from independent samples each of which is categorized in two ways, e.g. Yes and No responses.

b) When the data are non-metric. When the data are expressed in frequencies. In using this statistical technique we begin by stating the null hypothesis that there is no relationship between the two variables, that is, the two variables are independent of each other.

The following formula is used in computing the chi-square value for the data: -

$$X^2 = \sum_{I=1}^{nr} \sum_{j=1}^{nc} \frac{(oij - Eij)2}{Eij}$$

Where oij = observed frequency

Eij = expected frequency

In actual fact, there are two types of X^2 test. One is the chi-square (X^2) test of independence and homogeneity and the other is the chi-square (X2)

goodness of fit test. In each case the test procedure involves comparing observed frequencies into some expected frequencies.

Assumptions:

There are two essential assumption of this test:

(i) The data are drawn randomly from a population of interest.

(ii) Two criteria are used to cross-classify the observations and each observation must belong to only one criterion. This results into n - contingency table.

The cell entries are called 'observed cell frequencies' designated oij; where oij; = nij and oij is the joint occurrence in the sample subjects of the ith level of first criterion with the jth level of the second criterion of the classification. The hypothesis that results is stated in a form similar to the one below:

Ho: The two criteria of classification are independent of each other.

Hi: The two criteria of classification are not independent of each other.

Observed and expected frequencies

In the test of chi-square related hypothesis we compare the observed cell frequencies into the expected frequencies.

The expected cell frequency is computed for the ith cell by multiplying the row total in which that cell appears by the **column total** in which that cell also appears, and dividing by the total number of observation in the entire contingency table. That is to say,

$$Eij = \frac{ni \times nj}{n.} = \frac{ninj}{n}$$

Thus, form the observed and expected frequencies we compute the test statistic, x^2 which is

$$X^2 = \sum_{i=1}^{nr} \sum_{j=1}^{nc} \frac{(oij - Eij)^2}{Eij}$$

Decision Rule

The null hypothesis of independence may be rejected at the X level of significance if the computed value of X^2 exceeds the critical value of X^2 for (r-1)(c-1) degree of freedom.

TEST D SIGNIFICANCE

The significance of the obtained X^2 value can be evaluated by consulting a table of critical value X^2. The table of critical X^2 values indicates the value that the obtained X^2 must equal or exceed to be significant at the 0.10 level, the 0.05 level and the 0.01 level.

To be able to use the table of critical values of X^2 as well as most other statistical tables, you must understand the concept of degrees of freedom (df). The critical value of X^2 for any given study depends on the degrees of freedom. Degrees of freedom refer to the number of scores that are free to vary. In the table of categories for a chi- square test, the number of freedom is the number of cells in which the frequencies are free to vary once we know the row totals and the column totals. The degree of freedom for chi-square is easily calculated: -

Df = (R-1) (C-1) where

R = is the number of rows in the table and

C= is the number of columns

Where there are 2 rows and 2columns, there are 2 degrees of freedom. In a study with 3 rows and 3 columns, there are 4 degrees of freedom, and so on. In order to use the table of critical value, find the correct degrees of freedom and then determine the critical value of X^2 necessary to reject the null hypothesis at the chosen significance level. With 2 degrees of freedom, the obtained X^2 values must be equal or greater than the critical value of 5.991 in order to be significant at the 0.05 level. There is only a 0.05 probability that a X^2 of 5.991 should occur if only random error is operating.

Table 4.5.15

Hypothesis 1

Options	There is significant difference between financial statements with Human asset values and	Human asset accounting techniques is applicable to Nigerian private sector	**Total**

	those without.		
Yes	76	78	154
No	4	2	6
Total	80	80	160

Source: ***Response from Researcher's Questionnaire***

The formula for computing Chi-square is

$$X^2 = \Sigma(0-\varepsilon)^2/\varepsilon$$

Where

0 = Is the observed frequency in each cell,

ε = Is the expected frequency in each cell and this symbol ∑ refers to summing overall cells

$e_{1,1} = (R1 \times C1)/G$

$= (154 \times 80)/160$

$= 77$

$e_{1,2} = (R1 \times C2)/G$

$= (154 \times 80)/160$

$= 77$

e 2, 1 = (R2 x C1)/G

= (6 x 80)/160

= 3

e 2, 1 = (R2 x C2)/G

= (6 x 80)/160

= 3

Table 4.5.16

Expected Value

77	77	154
3	3	6
80	80	160

$\therefore X^2 = ((0-e)/e)^2$

$\therefore X^2 = ((76 - 77)/77)^2+((78 - 77)/77)^2+((4 - 3)/3)^2+((2 - 3)/3)^2$

= 0.000168+0.000168+0.11+0.11

= 0.22

X^2 cal = 0.22

Degree of freedom

R = 2, C = 2

= (2-1)(2-1)

= 1 x 1

= 1

Level of significance = 99% or 0.01

$\therefore X^2 = 0.01,1$

$\therefore X^2 = 6.635$ Rejected

There is only 0.5 probability than a X^2 of 5.991 should occur if only random error is operating. Because the obtained X^2 from our hypothesis is 6.635 we can reject the 6.635 null hypotheses that "there is no significant difference between financial statement with human asset values and the one without.

Hypothesis 2

Table 4.5. 17

Options	The merits of financial statement with human asset	The present contents of our statement without human asset	Total

	values outweigh the one without	values serve the needs of all stakeholders.	
YES	71	31	102
NO	9	49	58
TOTAL	80	80	160

SOURCE: Responses from researchers' s questionnaire

e 1,1 = R1XC1/G = 102X80/160 =51

e 1,2 = R1XC2/G = 102X80/160 =51

e 2,1= R2XC1/G = 58X80/160 =29

e 2,2 =R2XC1/G = 58X80/160 =29

Table 4.5.18 Expected value

51	51	102
29	29	58

80	80	160

$\therefore X^2 = (0-\varepsilon)/\varepsilon)^2$

$= ((71-51)/51)^2 + ((31-51)/51)^2 + ((9-29)/29)^2 + ((49-29)/29)^2$

$=0.15 + 0.15 + 0.47 + 0.47 = 1.24$

Degree of freedom = (r-1)(c-1)

$=(2-1)(2-1)\ 1x1 = 1$

Level of significance = 95% or 0.05

$\therefore X2 = 0.05,1$

$\therefore X2 = 3.841$

Because the obtained X^2 from our hypothesis is 3.841 we can reject the 3.841 null hypotheses that "there is no significance increase in value of financial statement with human asset compliments.

Hypothesis

Table 4.5.19

Option	We need to	Financial	Total

	report human asset values	statements with human asset value are more informative and useful to users of financial report.	
Yes	74	73	147
No	6	7	13
Total	80	80	160

SOURCE: Responses to Researcher's questionnaire

e 1,1 = R1XC1/G = 147X80/160 = 73.5

e 1,2 = R1XC2/G = 147X80/160 = 73.5

e 2,1 = R2XC1/G = 13X80/160 = 6.5

e 2,2 = R2XC2/G = 13X30/160 = 6.5

Table 4.5.20 Expected value

73.5	73.5	147
6.5	6.5	13

80	80	160

$\therefore x^2 = (0-\varepsilon)^2/\varepsilon$

$\therefore ((74-73.5)/73.5)^2 + ((73-73.5)/73.5))^2 + ((6-6.5)/6.5)^2 + ((7-6.5)/6.5)^2$

$= 0.000046 + 0.000046 + 0.0059 + 0.0059$

$= 0.011$

Degree of freedom = (r-1)(c-1)

$=(2-1)(2-1) = 1x1\ 1$

$\therefore X^2 = 0.01,1$

$= 6.635$

Because the obtained x^2 from our hypothesis is 6.635, it is a further confirmation that we can reject the 6.635 null hypotheses that "there is no significance increase in value of financial statement with human asset compliments. We conclude that there is significance increase in value of financial statement with human asset compliments.

Hypothesis 1 Table 4.5.21

Options	Human asset	Incorporating	Total

	accounting information affect stock investment decision	human asset accounting information to the Nigerian private sector financial statement would address the defects of traditional accounting	
Yes	67	75	142
No	13	5	18
Total	80		160

SOURCE: Responses to researcher's questionnaire

e 1,1 = R1XC1/G = 142X80/160 = 71

e 1,2 = R1XC2/G = 142X80/160 = 71

e 2,1 = R2XC1/G = 18X80/160 = 9

e 2,2 = R2XC2/G = 18X80/160 = 9

Table 4.5.22 Expected value

71	71	142
9	9	18
80	80	160

$\therefore X^2 = (0-\varepsilon)^2/\varepsilon$

$\therefore ((67-71)/71)^2 + ((75-71)/71)^2 + ((13-9)/9)^2 + ((5-9)/9)^2$

$= 0.0031 + 0.0031 + 0.19 + 0.19$

$= 0.38$

Degree of freedom = (r-1)(c-1)

$\therefore X^2 = 0.01,1$

$\therefore X^2 = 6.635$

Because the obtained X^2 from our hypothesis is 6.635 we can reject the 6.635 null hypotheses that "there is no significant difference between financial statements with human asset values and the ones without. We can conclude that there is significant difference between financial statements with human asset value and those without.

4.6 FINDINGS

We discovered that human asset accounting techniques is not new to most accountants and that only its general practical application that is not common among accounting practitioners. We have seen that from the data collected that human asset accounting techniques though at its exploratory stage, its prospect for applicability to Nigerian private sector is very high.

On the merits of human asset accounting compared to the demerits, our findings revealed that the strengths of human asset accounting far outweighed its weaknesses. This is more so now that we are in knowledge economy era where the human capital is the key growth factor. Another argument for human asset accounting is more glaring in a service-oriented company. As humans become the key elements in service organizations, failure to measure their value and account for their cost will lessen organizational effectiveness. Our respondents agreed that with the knowledge economy in place, human asset value should be recognized as asset rather than being treated as expenses in the income statement. When this is in place, greater importance will be attached to human capital by enterprise Managers and Investors. Management attention to employees' value is therefore strongly influenced by the treatment accorded its cost in the financial statement of an enterprise.

We discovered that those who opposed capitalizing humans based this on the definition of an asset. Assets represent expected future economic benefits, rights to which have been acquired by the enterprise as a result of some current or past transaction. They emphasized the moral taboo attached to valuing an individual in monetary terms. They argued that traditionally, assets are owned, employers couldn't legally own personnel except in professional sports, therefore, they would not qualify as assets. Our respondents who are proponents of capitalizing humans counter this by saying that human assets can be accounted for and the information used for management purposes of motivation and control without using such information for external financial reporting.

Since our respondents believe that the strengths of human asset accounting far outweighed its weaknesses, they therefore opined that its application to Nigerian private sector would contribute immensely to the socio-economic development of our country positively.

We gathered that some of the benefits of application of human asset accounting to Nigerian private sector include but not limited to the followings:

(i) Effective manpower planning and development;

(ii) It will bring about more dignity to employees because something of value is better than something of no value at all;

(iii) It will bring about increased productivity in employees and reduced weaknesses in an organisation workforce;

(iv) Our respondents are of the opinion that human asset accounting has a particular role to play as regards the concept of corporate social responsibility. Social effectiveness of an organization is reflected in the quality of social relationships, therefore any improvement in those social relationships should be reflected in benefits accruing both to the organization and to its members. They argued that from the organizations own point of view, it is evident that the financial value of human asset depends to a considerable extent on the quality of industrial relations;

(v) It is an aid to management decision-making such as consideration of staff layoff. It draws manager's attention to focus on long-term end results rather

than short-term end results that lead to organizational malfunction and low morale;

(vi) Determine the cost effectiveness of developing new skills with the alternative investments in other assets;

(vii) Determine turnover costs and the desirable level of turnover.

There is a general consensus among our respondents about significant differences between financial statements with human asset values and those without. The differences are more evident from the treatment of employees' cost and conflict with generally accepted accounting principles amongst others.

Our respondents are of the view that the major differences between traditional accounting and human asset accounting could be resolved through harmonization, accounting research and efforts of International accounting standard board. They opined that when this is done, the results would be more comprehensive, informative and users' friendly financial statements.

A number of factors have been advanced to combine together to make financial statement adequate for users' needs. They include but not limited to the contents of the financial statement, accuracy of the figures therein and compliance with accounting standards and legal regulations.

Our respondents agreed that human asset can be valued and that human asset appreciates in value due to training and recruitment. When requested to make a choice among the three major methods of valuing/ accounting for human asset namely: Historical/ Acquisition method, opportunity cost method and discounted present value method, the latter was highly favoured by our respondents.

A number of factors combined together to make financial statement adequate for users' needs. They include but not limited to the contents of the financial statement, accuracy of the figures therein and compliance with accounting standards and legal regulations.

Our respondents agreed that accounting information could be used to bring about progress to any society. Some of the problems which they pointed out have not been adequately addressed by accounting information include are

unemployment, and low productivity in employees. It is their believe that another accounting type such as human asset accounting could readily be used to solve these problems. They also agreed that the present contents of our financial statement without human asset values compliments do not adequately serve the needs of all users.

Our respondents agreed that human asset accounting can be valued, appreciate in value due to training and human asset value should be reported. They agreed that human asset accounting techniques is applicable to Nigerian private sector. Most of our respondents want the cost of employees classified as asset in an enterprise balance sheet.

Our respondents enumerated the following organizations as those where human asset accounting techniques could easily be applied namely: Banks, Professional Practice Firms and Sports Clubs.

When requested to make a choice among the three major methods of valuing/accounting for human assets namely: Historical/Acquisition method, Opportunity cost method and Discounted present reduce method, the latter was highly favoured by our respondents because of its future perspective to

valuing human assets. They suggested that Historical cost would have been appropriate since it accords substantially with conventional accounting except for these drawbacks:

i. Historical/Acquisition cost based human assets value mainly on recruiting and training;
ii. Two individuals experiencing the same training may demonstrate different degree of ability in implementing this training;
iii. An individual may develop a patent or process with far more than the training and recruiting costs would ever reflect;
iv. People are capable of adding to their skills or productivity, as a result of experiences outside of work. More over, these experiences can occur whether or not their employers have spent money on training and development.

Our respondents agreed that incorporating human asset accounting into traditional accounting could ratify its present defects and become more comprehensive and users' friendly, easy to understand and more objective position of an enterprise financial statement would be available to all spectrum of users.

4.7 SUMMARY OF THE CHAPTER

We have gathered together in this chapter, the results of the survey conducted through personal interview, questionnaires and library studies. These were geared towards finding answers to the thrust of our study " an assessment of human asset accounting techniques and its application to Nigerian private sector".

We discovered that human asset accounting is still at its exploratory stage in Nigerian private sector. The prospect for its effective application to Nigerian private sector is very high.

A high percentage of our respondents are of the view that there are major differences between financial statements with human asset values and the one without. They opined there are more benefits derivable by users of financial statements with human asset accounting compliments than those without. They agreed that the application of human asset accounting to Nigerian private sector would contribute immensely towards the socio-economic development of Nigeria.

We also discovered that out of the three major methods of accounting/valuing human asset, majority of our respondents supported the use of discounted present value method.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION:

This is the last chapter of this study, which captures explicitly the results of our efforts in this research study. We shall present our findings from which conclusions shall be drawn.

We also included in this chapter problems encountered by us in the course of this study. Suggested areas for further research, which is related to this study, but could not be covered by us, shall also be put forward for consideration by would be researchers.

We shall also put forward our recommendations.

5.2 SUMMARY OF THE STUDY

Management is a process of attaining the objectives of an organisation through people. The importance of human capital in an organization cannot be over emphasized since they are the active agents of an organizational growth.

We discovered that human asset accounting has around since the 1960s. On the definition of human asset accounting, we discovered that the definition by Flamholtz (1974) was generally quoted by most of our respondents. He defined human asset accounting as " *accounting for people as an organizational resource. This involves ascertaining the costs incurred by an organization to recruit, select, hire, train and develop its workforce. It also involves measuring the economic value of people to organisation."*

We discovered that the objective of human asset accounting is to reflect in an organization balance sheet the most valuable asset- the human capital. This is because a company is a person or group of persons associating with other, associations of persons for trade. We discovered that accounting for human asset would lead to better management of human asset in an organization because what get measured gets managed.

We discovered other objectives of human asset accounting to include: determination of the value of individuals to organizations, making mangers to take long-term outlook toward the value of human assets. It also includes making better decision about people, enabling planning and development of

human assets, to focus on employees as asset and to attract future employees. Others include overcoming the difficulties in providing sufficient information to investors in traditional balance sheet and assisting in identifying the most appropriate persons for particular tasks.

We also discovered that human asset accounting would make managers aware that attracting and retaining employees has long-term value to the firm. It also assists in planning the use of financial and physical resources.

Other areas human asset value could be used as discovered in this study include:

(I) Valuing business, where the human asset values becomes a relevant factor in mergers and take over decisions;

(II) Preparing organization and personal profile, so as to plan the desired amount and disposition of human assets;

(III) Measuring the return on capital employed, on total organizational assets, including the value of human assets;

(IV) To provide information to investors and potential investors about the capabilities of the organization;

(V) Revealing gaps in skills and competence in the organization;

(VI) To improve the human resources management;

(VII) To profile the enterprise and improve its image and;

(VII) To retain qualified labour force.

We discovered a number of advantages for the application of human asset accounting techniques to Nigerian private sector. It was stressed that it is better to have a measurement criterion than the present situation of no measurement at all. Since " what get measured get managed," according to a popular axiom. There is also increase in value of financial statement with human asset compliment than the one without.

Further to the advantages earlier mentioned about human asset accounting, a number of drawbacks were also discovered. They include:

(I) Human asset accounting is not yet in the realm of generally accepted accounting principles. Since it reports employees' current values rather than historical costs, hence regarded as a cumbersome accounting practice.

(II) The cultural aspect of living that forbids human beings to be owned by other because slavery no longer exists. It is because of this reason

we discovered that the notion of valuing an individual; in monetary terms will be unacceptable to some people.

(III) There is also the problem among Accounting Practitioners of developing a measurement method of valuing human asset that is simple and acceptable to all.

(IV) We also discovered that attaching values to individuals in an organization would lead to manipulation of them by managers. For instance, Managers might decrease the naira worth of an employee as punishment or transfer some people at year-end to make her company balance sheet look healthier.

On comparing the merits of financial statement with human asset value compliments and the one without, our respondents supported the application of human asset accounting to Nigerian private sector. They opined that the merits far outweighed the demerits, and that there is a significant difference between financial statement with human asset values and the one without.

Although we found out that human asset accounting is still at its exploratory stage in Nigeria. Our respondents believed that the prospect of its application to Nigerian private sector is very high.

We found out that there are three major methods of determining the value of the workforce in an organization. They are historical cost method, opportunity costs method and discounted or present value method. The method that is recommended for use to

Accounting practitioners by our respondents is the discounted or present value method because of its future approach to valuing human asset.

5.3 FRONTIER FOR FURTHER RESEARCH

The human capital would become more of a resource or capital when we accept its application to Nigerian private sector after solving its present perceived weaknesses.

Any careful management of an organization must take care of its assets and try to maximize the return on them. One area where further research work would be required is in the area of ways to maximize the use of human asset in a corporation

5.4 LIMITATIONS OF THE STUDY

This research study was mainly an empirical study. In carrying out this empirical study alot of problems were met. It therefore suffers from the usual limitations in that the level of education, understanding and interest influences both the responses and published data, on which it is based.

Secondly, the scope of this study is Kaduna state. Consequently, we have used whenever necessary secondary data and whatever limitations the secondary data have, the same limitations have also been inherited in this study.

Human asset accounting is still at its exploratory stage; therefore most of our respondents were not practically involved in its application in their various organizations. This affected the level of understanding displayed by them and depth of knowledge of the concepts and its benefits.

In spite of all these limitations, the study has been successful, conclusions drawn and recommendations made which would be invaluable to the development of accounting profession in particular and Nigeria in general.

5.5 CONCLUSION

We have come to the under listed conclusions from this study namely:

1. On a global perspective, human asset accounting has been around since 1960s and it is concerned with quantification of human assets' values in an enterprise's balance sheet as assets. In Nigeria the concept is still at its exploratory stage.

2. The perceived weaknesses of human asset accounting could be attributable to the clash with generally accepted accounting principles and accounting definition of an asset. People are of the opinion that attaching values to human assets is better than the present situation of no value. This they say has become more imperative where human capital is the key growth factor in new economy called the knowledge economy.

3. That there are differences between the financial statement with human asset value compliments and the one without. There is also increase in the value of financial statement with human asset value than the one without.

4. That human asset accounting though has some drawbacks; its merits far outweighed its perceived weaknesses. Its application to Nigerian private sector would assist users of accounting information especially employees and investors in decision-making.

5. That the concept of human asset accounting could be more easily implemented and rewarding in labour intensive organizations rather than those of capital intensive. Organizations who will benefits more from its application are professional practice firms, Sports Clubs and Banks.

6. That the application of human asset accounting to Nigerian private sector would contribute greatly to the development of accounting profession, proper planning, development of human resources and enhancing rapid development of Human capital in Nigeria.

7. That the difference between the accounting treatments of human asset versus tangible assets can influence managerial, behaviour as well. The fact that training expenditure is not capitalized and carried as an asset in the balance sheet means that such expenditure is not subject to the same kind of board and / or shareholders scrutiny as tangible

assets (in the calculation of financial ratios such as return on assets or investment). This therefore weakens the incentive to manage training resources well.

8. That human asset accounting can contribute towards increase in employees' productivity, effective manpower planning and development. This is because; the disclosure of human asset accounting information to employees and their Trade unions is of critical importance to good industrial relations. The attitude of employees would be determined in part by what they know about the organization that employs them. And conversely, the attitude of management would be influenced by how much they know about their employees. Human asset accounting attempts to make managers more aware of the importance of people as valuable resource and to hold them more accountable for these resources.

9. It is generally agreed that there are three main methods of valuing human assets. They are Historical /acquisition cost approach, opportunity cost approach, and discounted or present value method.

5.6 RECOMMERNDATIONS

It is our candid opinion that human asset accounting will be meaningless, and infact of no use, if it is not adopted and applied to practical situations. In view of the present stage of its development, we wish to recommend that for convenient sake, the following organizations can readily apply it, namely: Sports Clubs, Professional Practice Firms such as management consultancy/ Accounting Firms, Legal Firms, and Banks.

Our recommendation is that Lev and Schwartz method of accounting for human asset with some modification should be used. Therefore, to compute the value of human capital, multiply the number of employees by their salaries, multiplied by the average length of tenure per employee; multiplied by the average increase in wages per year; all discounted back to year one. The resulting figure represents the human assets value of the firm.

It is recommended that accounting standard committees in various countries such as Nigeria Accounting standard board, accounting Practitioners and Lecturers should intensify more research on the concept of human asset accounting. This would assist to address human asset accounting present conflicts with generally accepted accounting principles and her other

perceived weaknesses. They should come up with simplified and generally accepted methods of accounting for human asset. We hope that when this is done an organization should adopt a method and use it consistently to allow for comparative analysis over time and between firms.

We wish to also recommend that in view of its present conflict with generally accepted accounting principles; firms in Nigeria should include human asset accounting information in their financial statement as an additional statement unaudited as presently being practiced by twelve Indian companies. Nigeria government can bring this about through appropriate legislation in companies and allied matters Act 1990 as amended.

We also recommended further research by accounting practitioners and academics on human asset accounting towards ensuring its general application to the private sector. We are in a changing environment; the task of defining the various socio-economic goals for which human asset accounting techniques may be useful presents another exciting research challenge. There should also be research on the clarification of the concepts and measures used by human asset accounting to make its methodology and measures less controversial.

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QUESTIONNAIRE

TOPIC: - AN ASSESSMENT OF HUMAN ASSET ACCOUNTING TECHNIQUES AND ITS APPLICATION TO NIGERIAN PRIVATE SECTOR

Profession: ----------

Age: ----------

Sex……..

Introduction.

This is a postgraduate student research project on an" assessment of Human asset accounting techniques and its application to Nigerian Private sector." This questionnaire is meant to help us in assessing the Human asset accounting techniques and its application to Nigerian private sector.

Please do complete this questionnaire as soon as possible. This will contribute immensely to the success of this study.

Please do give us the benefit of having your true feeling. We want to assure you that information provided will be treated as strictly confidential, and shall be used solely for the purpose of this study.

Thanks and God bless you for sparing time to contribute to this research project.

Yours faithfully,

Lawal Itopa Lamidi

Msc/Admin/25793/2000-2001

QUESTIONS:

SECTION A (Please tick as appropriate).

1.Do you support the opinion that a human asset accounting technique is applicable to Nigerian private sector?

Yes( ) No ( )

2. Are there any significant differences between financial statements with human asset values and those without?

Yes ( ) No ( )

3. How will you want the employees' cost to be classified in the financial statement of an enterprise?

Options

a. Expenses
b. Asset
c. Liability
d. Prepayment

4. Do you support the view that the merits of financial statement with human asset values to users far outweigh those without?

Options:

a. Strongly Agree
b. Agree
c. Neutral
d. Disagree

5. Can the differences between financial accounting and human asset accounting be harmonized?

Yes ( ) No ( )

6. Do you support the idea that we can use accounting information to bring about progress and development to any society?

Yes ( ) No ( ).

7.Application of Human asset accounting techniques to Nigerian private sector will impact on the sector as follows: -

(a) Positively

(b) Negatively

(c) Neutral

8. What make a financial statement adequate for users' needs?

(a). Contents.

(b). Accuracy of the figures.

(c). Compliance with accounting standards and legal regulations.

(d). All of the above.

9.Does the present contents of our financial statements adequately serve the needs of all users.

Yes () No ( )

10.Please tick any two of the under listed that we can use the present accounting information to solve more readily.

(a) Unemployment

(b) Income in equality

(c) Generation of revenue by government

(d) Low productivity in employees

(e) Corruption.

11.Please tick any of the following users of accounting information that is served most adequately by our present financial accounting information.

(a) Shareholders.

(b) Investors financial Analysts

(c) Creditors/Financial institutions.

(d) Employees

(e) Management

(f) Government

(g) Tax payers/public.

12. Do the contents of our present financial statement of public limited liability companies serve the interests of all stakeholders in such companies?

Yes () No ( )

13. How should the information about employees cost be recorded in the financial statement

(a) Stated as salaries & wages in the profit & loss account

(b) Stated as assets in the Balance sheet.

(c) Stated as a footnote to the accounts.

14. Should information about employees' cost be disclosed in the financial statement?

Yes ( ) No ( )

15. Which of the following organizations can readily apply the concept of Human asset accounting

(a) Professional practice firms: accounting, legal & consulting

(b) Manufacturing companies

(c) Government parastatals

(d) Trading companies

(e) Sports clubs

(f) Banks

16. Do you support the opinion that human asset appreciate in value?

Yes ( ) No ( )

17. Do you support the view that incorporating human asset accounting information into the Nigerian private sector financial statement would address the defects of traditional accounting?

Yes ( ) No ( )

18.Does the treatment of employees' value in the financial statement influence management attention to employees?

Agree ( ) Disagree ( ) Undecided ( )

19. Which of the following Accounting types can be used to encourage staff training, manpower planning and also increase employees' productivity?

(a)Financial accounting

(b)Management accounting

(c)Cost accounting

(d)Human asset accounting

20. Do we need to report human asset values?

Yes ( ) No ( )

21. Are people measurable assets?

Yes ( ) No ( )

22. Are financial statements with human asset accounting compliment more informative and useful to users of financial report than those without?

Yes ( ) No ( )

23. Are there negative effects of measuring human assets?

Yes ( ) No ( )

24. There are three major methods of accounting for human asset as listed below, which of them should be used for accounting for human assets?

(a) Historical/Acquisition cost method

(b) Opportunity cost method

(c) Discounted present value method

25. There are six belief statements concerning human asset accounting application to private, tick yes if you support any of the statement and No if you disagree with any of the statement.

Belief Statement

Option

1. Even though people are not owned by the Organization they still can be reported as asset on the balance sheet. Yes ( ) No ( )
2. The valuation of internal human asset without the Valuation of external human asset, such as customer Goodwill is meaningful. Yes ( ) No ( )
3. The human asset accounting on the balance sheet will reveal whether a company has excessive investments in human asset. Yes ( ) No ( )
4. Valuing human beings might cause behavioral reactions which would harm organizational efficiency

   Yes ( ) No ( )

5. The condition of human assets in a company can be assessed well by taking to representatives of the company's management than by using human asset financial statements. Yes ( )
No ( )

6. Reporting human asset accounts on financial statements violates " generally accepted accounting principles." Yes ( )
No ( )

26. Does human asset accounting information affect stock investment decisions?

Yes ( ) No ( ) Neutral ( )

SECTION B.

(1) Please define Human asset accounting in your own way

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(2) There are three main methods of accounting for Human asset, which of the following should be adopted: -

(a) Historical Acquisition cost method.

(b) Opportunity cost method.

(c) Discounted present value method.

(3) Please give reasons, for your choice above.

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(4) Which of the following users of accounting information will be better served by Human asset accounting.

(a) Investors

(b) Creditors

(c) Shareholders

(d) Government

(e) Financial analysts

(f) Employees

(g) Management.

(5) Please give reason(s) for your choice(s) above.

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