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# Human Asset Accounting : Strategic lessons for Quoted Firms in Nigeria

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## Human Asset Accounting : Strategic lessons for Quoted Firms in Nigeria

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### **ABSTRACT**

*This study examines human asset accounting (HAA) treatments in firms quoted on the Nigerian Stock Exchange (NSE). It is intended to strategically determine the effects of passive and constructive HAA practices on the corporate profitability of quoted firms in Nigeria. Drawing from the Nigerian Stock Exchange Fad Book (2006), 207 quoted firms constitute the study population. Research questionnaire was administered on sampled 136 quoted firms, out of which submissions from 100 (73.5%) were timely returned and expediently adopted for analysis. The main decisional statistical index for test of hypotheses is represented by coefficient of determination ( $R^2$ ). The findings clearly indicate that profit, as reported in the accounts of many quoted firms in Nigeria, does not yet ideally (truly and fairly) reflect their accounting positions. This is because, in the balance sheet, only expenditure on machinery, equipment, land acquisition and other fixed assets are treated as investments, while human asset investments are included as expenses in the Profit & Loss (P&L) account. This passive human asset accounting (PHAA) approach undermines the reality that employee-related expenditure portends*

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*substantial long-term benefits to the firms. Although the crucibles on the path to strategic change are glaring, it is recommended that accounting/finance professionals should harness the plausible(s) of process re-engineering, represented by the constructive human asset accounting (CHM) approach, to reinvent the books and holistically redefine the corporate looks of the firms. This is in line with sustainable global best practices.*

**Key Words**

Human assets, Human asset accounting, Human asset investments, Nigerian firms

## **1.0 Introduction**

It has been observed with great concern that many accounting/finance professionals in quoted firms in Nigeria pay so much attention to physical and financial assets of their firms, but are (possibly inadvertently) passive in rightly valuing and accounting for human assets (employees), who are key success factors (KSFs). They are yet to fully come to terms with the reality that the dominance of human intellect over machines and equipment in contributing to industrial value makes the practice of treating human asset investments as expenses passive (Carper, 2002; Chen and Lin, 2003). It further obtains that if the purposes of financial statements are to provide useful information to investors and creditors, and help evaluate firms' resources and claims to resources by creditors and shareholders, then those prepared in the above manner are not fit and proper, as they do not holistically disclose the firms' investment in human assets (knowledge). Seetharaman, Soria and Sara Vanan (2002) also contend that the current accounting and financial reporting practices have been criticised by many financial analysts and corporate executives especially in the high-tech industries, as not keeping pace with changes in the business world.

Since then, human asset accounting (HAA) advocacy has intensified, with people yearning for more information about the factor constituents of the value of firms. Only a constructive (comprehensive) treatment of human asset investments in the books can provide such information. Conceptually, HAA works with four major cost configurations, namely:

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- i. Historical /original acquisition cost,
- ii. Replacement cost,
- iii. Economic value, and
- iv. Non-monetary measures.

*Historical cost* represents the original cost of human asset in the conventional accounting context. It includes such costs as personnel recruitment, training and development. *Replacement cost* is the current Naira (Nigerian currency) measure of the expenditure required for firms to replace existing human assets. *Economic value* represents the appropriately discounted amount of net cash inflows generated by the firms' human assets over their economic service lives. *The non-monetary measures* of human asset range from simple inventory of skills and capabilities of people within the firms, to a list of credentials of key professionals in the firms; with additional application of supportive non-monetary behavioural employee contribution measurement techniques (Carper, 1973). Some perspectives often underscored by contemporary analysts are:

- i. Level of intelligence/aptitudes;
- ii. Quality of leadership;
- iii. Average age of employees/dispersion factor;
- iv. Degree of existing co-ordination;
- v. Degree of ease of communication; and
- vi. Level of education and training.

The cost measurement models specified above have their respective strengths and weaknesses. However, the replacement cost alternative is regarded by many HAA researchers as the most realistic mechanism, in terms of measuring future service potentials in human assets (Carper, 2002). Furthermore, the relevance of HAA can be deduced from the fact that firms can actually ascertain how much they can earn from an individual; and moreover the human assets of a firm are often worth many times their tangible book value. Human assets also provide expert services such as consulting, financial planning and assurance services, which are valuable and very much in demand. Realising this, many firms in the advanced economies of the world have made HAA a vitally strategic component of the balance

sheet preparation process (Westphalen and Nychas, 1998). Roslender and Fincham (2003) also observe that, in recent times, the much interest in HAA is largely sequel to the recognition of the growing importance of human resources to the long-term value-creation aspiration of firms. The critical issues fundamentally border on the treatment of human asset development (HAD) and human asset value (HAV) in the books of firms.

Against this background, the research objectives are to examine, among other things to what extent:

- i. The passive practice of writing off HAD costs to P&L account relates to the corporate profitability of quoted firms;
- ii. The passive practice of non-reflection of HAV in the balance sheet relates to the corporate profitability of quoted firms;
- iii. The constructive practice of separating HAD costs from P&L account items relates to corporate profitability of quoted firms;
- iv. The constructive practice of including HAV in the balance sheet relates to the corporate profitability of quoted firms; and
- v. The constructive practice of amortizing HAV amortized periodically relate to the corporate profitability of quoted firms?

The elicited hypotheses are:

- Ho1: The passive practice of writing off HAD costs to P&L account has no relationship with the net profit margin of quoted firms;
- Ho2: The passive practice of not reflecting HAV in the balance sheet has no relationship with the net profit margin of quoted firms;
- Ho3: The constructive practice of separating HAD costs from P&L account items has no relationship with the net profit margin of quoted firms;
- Ho4: The constructive practice of including HAV in the balance sheet has no relationship with the net profit margin of quoted firms; and
- HoS: The constructive practice of amortizing HAV periodically has no relationship with the net profit margin of quoted firms.

Following this introductory lid (for meaningful structural precision) are other quintessential parts of this paper, comprising literature review, methods, findings, conclusion and recommendations.

## **2.0 Literature Review**

Many researchers in the United Kingdom in particular, including Wall, Kirk and Martin (2002); Collier (2001); Johnson, Martensson and Skoog (2001); and Mouritsen, Larsen and Buch (2001) have carried out intensive studies on critical aspects of HAA. In one of the studies, it was revealed that The Danish Ministry of Business & Industry, in response to the HAA imperative, issued a directive that, with effect from 2005, all companies registered in Denmark should include in their annual reports, information on customers' processes and human assets. These were to cover a minimum of five measures each, compared with the previous two years' data. The amount invested in human assets was also to be shown and compared with those of previous two years. A narrative was also to accompany each set of figures. Information for investors about human assets was expected to cover at least one-third of the report. Similar reforms have been witnessed in some Asian countries, most especially India, regarding their responsiveness in handling HAI and other strategic HAA issues (Roslender and Fincham, 2003). Paradoxically, HAA has got its crucibles and plausible(s) which should make quoted firms in Nigeria more poised to fully embrace the concept. Many accounting/finance professionals readily attribute the non-inclusion of human assets in the balance sheet to numerous unsuccessful attempts at reforming and re-engineering human capital valuation over the years. Analysts often run into difficulties when pricing such assets (Strassman, 1998).

Now, the constructive conviction is stronger, that the value of human assets is in their use and not in their costs. On the other hand, some practitioners are quick to argue that the cost of acquiring knowledge and the profit generation potentials of such knowledge are unrelated; hence any attempt to include human assets in the balance sheet will be futile (Seetharaman, Soria and Sara-Vanan, 2002). There are glaring crucibles (challenges) in capitalising human assets in corporate financial statements, even with so much uncertainty that surrounds the possibility of realising the assets which

are capitalised at cost (Carper, 2002). Where human assets are capitalised in economic value (discounted future cash flow) terms, other problems still erupt. Prominent amongst these is the subjectivity in cash flow projections, which strongly hinges on interest rate dynamics, inflation and future outlook. Albeit, there are promising exceeding plausible(s) for quoted firms in Nigeria to fully embrace the wind of change in HAA practice.

Moreover, these difficulties have not deterred many firms in other parts of the world from measuring and reporting on their human assets. A research conducted in the UK revealed that methods used to measure human assets depend on the user group the report is meant for. Leadbeater (1999), who was at the helm of that adventure, had cause to explain that internal users of information in firms, especially managers, always require more of such strategic corporate data, to make crucial decisions for sustainable progress and success. This makes it imperative for human assets to be properly captured, managed and featured in the annals of the firm. To this end, a new regime of performance measurement and internal corporate reporting which will functionally link financial performance (such as cash flow) to intangible drivers (such as employee's quality and morale, customer satisfaction, etc) is indeed very expedient. In Nigeria, one major drawback of HAA persists in quoted firms, and this has to do with the difficulty in developing acceptable human asset disclosure mechanism. Chen and Lin (2003) contend that since human asset investments are inputs made by firms in talents and technology, in anticipation of competitive advantage and allied benefits, they should be so recognised. They further posit that only employees possessing rare auspicious qualities qualify to be recognised and treated as human assets in the books of the firms.

By investing in human assets, firms improve on production efficiency, service quality and product differentiation effectiveness; thereby obtaining strategic competitive advantages (Ruchalla, 1997). Human asset uniqueness varies in accordance with different industrial sectors; hence many executives need to be properly guided on how to differentiate between human asset investments and human asset expenses. Some CEOs have had to cut very important human asset investments because of the wrong notion that they are expenses that should not be allowed to exceed the limit permitted b

available funds in the financial year. The contention here is that, if under the *Constructive Human Asset Accounting (CHM)* treatment, the focal items are presented as assets and disclosed in companies' annual reports and categorised as notes to financial statements, the applicability and comprehensiveness of information provided by firms will be enhanced. A firm may lose its competitiveness when making cost-reduction decisions if it cuts down on human asset investments instead of human asset expenses, and such action could lead to depletion in human assets.

From the foregoing, it is quite convincing that the *Passive Human Asset Accounting (PHM)* treatment, which traditionally/conventionally involves relegating and profiling a firm's inputs in human resources as expenses, is very misleading. There is every good reason to separate human asset investments from human asset expenses, as it relates to the long-term value creation aspirations of firms. Wrong accounting for human asset investments and human asset expenses has been found to visibly distort reported corporate profit. These PHAA grey areas/practice gap justify the advocacy for an alternate process which is capable of practically and pragmatically capturing the distinction between human asset investments and human asset costs. This is ultimately with a view to measuring their contributory relevance and prevalence in profitability indices and dynamics of the firms. This is the thrust of the CHAA paradigm shift, which is the high point of this study.

The HAA advocacy, actually began in earnest in the 1990s as a result of the findings on the possible cause of difference between market price and the book price of companies (Gebauer, 2003). Theoretical and practical methods in this regard are geared towards facilitating human asset measurement and reporting. Plausible new approaches are expected to significantly tackle the phobic crucibles associated with previous techniques, which made many to think that human assets cannot be rightly accounted for in organisations. As Roslender and Fincham (2003) observed, if it was easy to identify a simple way of extending well-established accounting calculus to intellectual capital analysis, accounting for intangible assets would have been more clearly mainstreamed. Until this is done, accounting and finance professionals may not deliver so well the much-desired reliable information for use by stakeholders. This is the basis of the ever-increasing interest in the

advancement of HAA and the earnest expectation that contemporary developments will culminate in the emergence of more reliable mechanisms for determining HAVs, quantifying HAD, and accounting for human asset investments (Seetharaman, Soria and Sara-Vanan, 2002; Leadbeater, 1999; Edvinson, 1997). At present, the methods being applied in measuring intellectual capital range from the narrow to the broad; the specific to the general. For example, Perrin (2000) reports that there are firms which use discounted cash flow (DCF) techniques in evaluating intellectual capital while some others use brand-related measures. Notable approaches associated with practitioners in the UK include:

- i. Economic Value Added (EVA);
- ii. European Foundation for Quality Management Model (EFQM); and
- iii. Ethical and Social Auditing.

HAA advocacy is fast gaining grounds in firms operating in Anglo-American and Scandinavian terrains, as the renewed emphasis is on sustainable improvement of the information content of corporate annual reports, not only showcasing HAVs but strategically and holistically capturing other vitalities in the total asset structure of the balance sheet, such as customer capital or brand name (Bontis, 2003; Gebauer, 2003). In 1973, a report on accounting for human resources (Lev, 2001) highlighted the main goals of redefining HAV, as:

- i. Development of HAV theory to explain the nature of determinants of the value of people in formal organisations;
- ii. Development of concepts, models and techniques to measure HAV in both monetary and non-monetary terms;
- iii. Test of empirical validity and reliability of possible principal and proximate HAV methods;
- iv. Test of feasibility of *operationalising* HAV methods in organisations and determination of conditions under which different methods are applicable; and

- v. Study of HAA paradigm and associated methods' effects on attitudes and behaviours (decisions) in organisations.

From the foregoing, it is abundantly clear that stakeholders expect contemporary research in HAA to address the crucibles and further underscore the plausible(s) associated with accounting for human asset investments in organizations (Lev and Schwartz, 1971).

### **3.0 Methodology**

This research relates to firms quoted on the Nigerian Stock Exchange (NSE) and their HAA approaches. With financial data covering five years (2002 - 2006), the study examines various treatments of human asset investments and HAD expenses as they impact on corporate profitability of quoted firms. An initial discovery (also admitted by the respondent top finance/accounting officials) was a general lack of standard pattern of disclosing human assets by the focal firms. The traditional PHAA which obtains in most quoted firms obviously did not distinguish human asset investments from other items in the P&L account. Contrariwise, in other developed societies, new performance measures and internal corporate reporting have been put in place in this direction. These measures link financial performance such as cash flow to intangible drivers such as employee's quality and morals, customer satisfaction, etc, and these have made much difference in the consideration of sociological and psychological variables. Since the research examines how firms identify employees with high value and uniqueness and treat them in relation to corporate profitability, the data harnessed have to do with passive and constructive approaches to human asset accounting, herein designated as PHAA and CHAA respectively.

The population of the study comprises 207 quoted firms contained in the Nigerian Stock Exchange Fact Book (2006). As public limited companies (PLCs), they are required by law to publish their financial statements. Availability and accessibility of information on human resources in these organisations were of the essence corporate eligibility for administration of research questionnaire. Since their private sector counterparts are usually hesitant and unwilling to disclose such vital information, they were ruled out

of the field operations. The sample size is 136 (adopting the Taro Yamane approach with 0.05 level of significance). Consequently, 136 copies of questionnaire were administered on the respective respondent top accounting/finance officials of quoted firms in Nigeria. After due follow-up and sufficient waiting time, 100 copies of completed questionnaire were received, admitted and adopted for analysis. This represents a response rate of 73.5% (considered statistically and time-expediently acceptable). For analytical purposes, the focal quoted firms are stratified along five major industrial lines, namely:

- i. Banks and allied firms(BAFs);
- ii. Agric and allied firms (AAFs);
- iii. Manufacturing and allied firms (MAFs);
- iv. Construction and allied firms (CAFs); and
- v. General services firms (GSFs).

The above corporate classifications are enumerated in Table 1:

**Table 1: Industrial Classification of Companies**

<b>Corporate Classification</b>	<b>No. of Quoted Firms</b>	<b>Percentage (%)</b>
BAFs	37	37
AAFs	4	4
MAFs	24	24
CAFs	5	5
GSFs	30	30
Total	100	100

*Source: Data from the field*

As shown in Table 1, 37% of the questionnaire respondents were BAFs, 4% were AAFs, 24% were MAFs, 5% were CAFs, and 30% were GSFs. The officials were required to provide information on the handling of human asset investments in the firms' books. Drawing from Flamholtz (1973), the human asset investment-specific perspectives were:

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- i. *Formation and acquisition costs* at the early stages of development, covering recruitment, selection, hiring and placement;
- ii. *Learning costs* in the middle stages of development, covering training of operative and prospective employees, on-the-job training (OJT), and associated opportunity costs; and
- iii. *Replacement costs* at the final stages of development, covering discharge costs, inefficiency (losses) before discharge, average costs of recruiting, hiring and training personnel to fill in vacancies and other associated losses/ opportunity costs.

The required HAA items pertaining to the above three stages of development include:

- i. Expenditure paid to personnel responsible for recruitment;
- ii. Advertisement expenses during recruitment;
- iii. Reasonable and necessary travelling and settling expenses for applicants and new employees;
- iv. Administrative expenses relating to recruitment;
- v. Expenditure paid to new employees during the trial periods;
- vi. Training costs;
- vii. Discharge costs;
- viii. Opportunity costs associated with new employees' placement and outstanding vacancies; and
- ix. Costs incurred as a result of inefficiency (losses) before discharge.

The constructive approach basically captures expenses made on employees with high value and high uniqueness on the one hand, those of high value and low uniqueness on the other hand, as well as learning costs at the middle stage of development for both categories. The replacement costs at the final stage of development in the former category are treated as human asset investments, and as such, are expected to be disclosed by the firms (Chen and Lin, 2003). The fundamental analytical metrics for considering the passive and constructive practices critically relate to:

- i. Human asset valuation;
- ii. Human asset investment;

- iii. Human asset depletion; and
- iv. Net profit margin (as criterion variable).

For accounting process analysis in this study, the practice of writing off HAD expenses to the P&L accounts and non-reflection of *HAV* in the balance sheet relates to *PHAA*; while the practice of separating HAD expenses from other items in the P&L account, including *HAV* in the balance sheet and periodically amortising the *HAV* relates to *CHAA*. The computation of regression index of coefficient of determination ( $R^2$ ) was facilitated by statistical package for social science (SPSS).

#### 4.0 Findings

The results of data analysis are herein represented by tabulated submissions, statistical computations and subsequent interpretations. The extent to which passive practice of non-reflection of *HAV* in the balance sheet (herein designated as PHAA-1) prevails in quoted firms and the impact the has on their corporate profitability, is analytically presented in Table 2:

**Table 2: Prevalence of PHAA-I**

Particulars	Frequencies					Total
	5	4	3	2	1	
Practice visibility	35	35	22	8	0	100
Impact severity	5	43	30	21	1	100

Source: Data from the field

Key: Non-affirmative (1-2); Affirmative (3); Strongly affirmative (4-5)

From Table 2, 70% (clear majority) of the respondents *strongly affirmed* that the passive practice of non-reflection of *HAV* in the balance sheet (PHAA-1) is prevalent; while 48% (relative majority) *strongly affirmed* that the impact on corporate profitability is *severe*. Concerning the extent to which the constructive practice of separating HAD expenses from other items in the P&L account (herein designated as CHAA-1) is desirable in quoted firms and the impact it will *have* on corporate profitability, the data are presented in Table 3:

**Table 3: Desirability and Materiality of CHAA-1**

Particulars	Frequencies					Total
	5	4	3	2	1	
Practice desirability	35	44	25	8	2	100
Impact materiality	5	43	30	22	1	100

Source: Data from the field

Key: Non-affirmative (1-2); Affirmative (3); Strongly affirmative (4-5)

From Table 3, 79% (clear majority) of the respondents *strongly affirmed* that the constructive practice of separating HAD expenses from other items in the P&L account (CHAA-1) is desirable in quoted firms; while 49% (relative majority) *strongly affirmed* that appreciable impact on corporate profitability is anticipated. Concerning the extent to which the constructive practice of including HAV in the balance sheet (herein designated as CHAA-2) is desirable in quoted firms and the impact it will have on corporate profitability, the data are presented in Table 4:

**Table 4: Desirability and Materiality of CHAA-2**

Particulars	Frequencies					Total
	5	4	3	2	1	
Practice desirability	22	44	26	8	2	100
Impact materiality	2	32	49	17	1	100

Source: Data from the field

Key: Non-affirmative (1-2); Affirmative (3); Strongly affirmative (4-5)

From Table 4, 66% (clear majority) of the respondents *strongly affirmed* that the constructive practice of including HAV in the balance sheet (herein designated as CHAA-2) is desirable in quoted firms; while 49% (relative majority) *affirmed* that appreciable impact on corporate profitability is anticipated. To further mainstream the dynamics of the analytical variables, the SPSS facility was deployed to meaningfully arrive at (adjusted) R<sup>2</sup> of 0.681, as shown in Table 5:

**Table 5: Composite Regression Manifest**

<b>Model</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R<sup>2</sup></b>	<b>Standard Error</b>
1	0.829 <sup>a</sup>	0.687	0.681	0.684.89

Source: Data from the field (SPSS Output)

From Table 5, 68.1% (greater magnitude) of the dynamics/variability of quoted firms' corporate profitability relative to HAA, in composite terms, is linked to prevailing HAA practice in the firms. Essentially, in the light of all the foregoing, there are significant indications/revelations that:

- i. The passive practice of writing off HAD expenses to P&L account is prevalent in quoted firms and the impact on their corporate profitability severe;
- ii. The passive practice of not reflecting HAV in the balance sheet is prevalent in quoted firms and the impact on their corporate profitability is severe;
- iii. The constructive practice of separating HAD expenses from other items in the P&L account is desirable in quoted firms and material impact on their corporate profitability is anticipated; and
- iv. The constructive practice of including HAV in the balance sheet is desirable in quoted firms and material impact on their corporate profitability is anticipated.

## **5.0 Conclusion**

Based on the findings of this study, it is conclusively established that the CHAA approach more auspiciously relates to corporate profitability of quoted firms in Nigeria than the PHAA approach. The severe inauspiciousness of the PHAA practices, particularly as manifested in distorted P&L account and balance sheet profiles of firms, had been a source of great concern to accounting/finance professionals in Nigeria and allied countries for quite sometime now. Contemporary research, including the present endeavour, has therefore been designed to intensify re-engineering advocacy and further consolidate the cross-over bridge to the much-desired CHAA dispensation. Pragmatically, the firms are expected to identify the HAD expenses which

have direct bearing on the strategic goals of the firm and classify them as human asset investments. By so doing, the HAD would be excluded from their P&L account, thereby avoiding the distortion often associated with the determination of the actual value of the firm. The firms will also more meaningfully take long-term decisions having to do with HAD expenses, whether to regard them as expenses or as assets, and subsequently amortise the assets (in line with the CHAA advocacy) rather than writing them off at the end of the financial year as it is currently done under PHAA regime. By the CHAA approach therefore, it is more feasible to project or conjecture the realistic corporate profitability of the firm.

Furthermore, the theoretic implication is that accounting/finance scholars in transiting from PHAA practice to the CHAA new order would have succeeded in developing better performance measurements and internal corporate reporting standards to significantly enhance teaching, learning and practice of HAA in this part of the world. Although the hurdles and crucibles are no less characteristic of any strategic re-engineering process, the plausible(s) associated with clear recognition of the link of financial performance items (such as cash flow) to intangible drivers like employee quality and morale cannot be overemphasised (Seetharaman, Soria and Sara-Vanan, 2002; Chen and Lin, 2003).

## **6.0 Recommendations**

In view of the landmark conclusion of this study, it is highly recommended, for the strategic financial repositioning of quoted firms in Nigeria, that accounting/finance professionals should:

- i. Adopt the unique approach of classifying HAD expenses based on value and uniqueness of employees in relation to strategic goals. This will help the firms prevent loss of competitive advantage in the comity of corporate enterprises;
- ii. Include HAV in the balance sheet of quoted firms to accord more realistic looks to their books; and
- iii. Treat HAD expenses in the CHAA way. This will ultimately address age-long distortions associated with corporate financial reporting in quoted

firms and desirably provide enhanced *true and fair view* of their corporate earnings and net worth in Nigeria.

Furthermore, to fast-track the realisation of these imperative advocacy dreams, management of the quoted firms should quickly and sustainably redesign the policy framework and create a holistic enabling environment for all PHAA grey areas to be addressed so that CHAA novel perspectives could be well strategised and institutionalised.

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