

**Human Resource Accounting and Financial Performance of Listed Information
Communication Technology Companies in Nigeria**

**Abimbola Adejoju OLANIYI
LCU/PG/002229**

**Being a thesis submitted to the Department of Management & Accounting, Faculty of
Management & Social Sciences, Lead City University Ibadan, Oyo State, Nigeria**

**In Partial Fulfilment of the Requirements for the Award of the Master of Science
(MSc) Degree in Accounting**

Certification

This is to certify that Abimbola A. OLANIYI with matriculation number LCU/PG/002229 carried out this research work titled “Human Resource Accounting and Financial Performance of Listed Information Communication Technology Companies in Nigeria” in the Department of Management and Accounting, Faculty of Management and Social Sciences, Lead City University, Ibadan, Nigeria, for the award of Master of Science (MSc) Degree in Accounting and that this has not been previously submitted.

Dr. O. J. A. Oladejo
Supervisor

Date

Dr. T. M. Akinbo
Head of Department

Date

Dedication

This research work is dedicated to God Almighty, who made it possible for me to undergo this programme.

Lead City University Ibadan DO NOT COPY

Acknowledgement

The researcher is grateful to the institution, Lead City University, Ibadan, Oyo State.

Sincere appreciation goes to the Vice-Chancellor, Prof. K. A Adeyemo, who is also one of the faculty lecturers, Deputy Vice-Chancellor & Dean, Faculty of Management and Social Sciences, Prof. Omolara Campbell, and the Provost of the Postgraduate College, Prof. A.O. Oredein for her painstaking efforts in moving the entire college to the next level of academic research.

Sincere appreciation also goes to my supervisor- Dr. Olusola J. A. Oladejo for his immense support and encouragement towards the successful completion of the programme. The Head of Department Dr. T M. Akinbo, is indeed appreciated for her immeasurable contribution to academic excellence in the Department. I would also like to thank all my departmental and Faculty lecturers – Professor G.E. Oyedokun, Prof. J. A. Adejuwon, Dr Kayode Longe, Dr O.O. Adepoju, Dr .J. O. Olaleye, Dr A.B. Onamusi, Dr O.O. Adepoju, Dr L.A. Balogun, Dr S.A. Babarinde, Dr F. Igbadumhe, Dr. B.S. Adeleke, Dr. O.T. Oreagba, Dr O. Ibikunle, Dr. M. O. Adewumi and others for their active roles in contributing immensely to this research work.

Finally, I sincerely appreciate my husband and friend Rev. P. O. Olaniyi and the children for their support and encouragement on this journey.

Even though the above institution and persons have assisted in the research process, I alone stand responsible for the errors found in the work, if any.

Olaniyi Abimbola

Abstract

This study examined the relationship between the Human Resource Accounting (HRA) and financial performance of listed Information Communication Technology (ICT) companies in Nigeria using all nine (9) ICT companies listed on the Nigerian Exchange Group as at December 2022 as both population and sample. A descriptive research design was adopted for the study and collection of data was done using secondary sources. The study is supported with three theories: Human capital theory, Resource-based theory, and dynamic capabilities with human capital theory as the anchor. To achieve the objectives of the study, financial reports of ICT companies listed on the Nigerian Exchange Group as of 2022 were collected for the period of ten years (2013-2022). Purposive sampling technique was used to determine the sample size. Quantitative data collected were analyzed using descriptive and inferential statistics. The findings revealed number of employees significantly varies on human capital efficiency ($R = .879$, $R^2 = .772$, $DW = .603$, $F = 298.714$, $B = .077$, $t = 17.283$, $p(0.00) < 0.05$), there is significant variation in organizational profitability due to gross staff costs ($R = .591$, $R^2 = .349$, $DW = 1.408$, $F = 47.195$, $B = .499$, $t = 6.870$, $p(0.00) < 0.05$), HRA-related costs do not influence return on asset ($R = .040$, $R^2 = .002$, $DW = 2.062$, $F = .139$, $B = 6.73E-08$, $t = .373$, $p(0.710) > 0.05$), and HRA-related costs do not influence return on equity ($R = .149$, $R^2 = .022$, $DW = .249$, $F = 2.007$, $B = 5.95E-09$, $t = 1.417$, $p(0.160) > 0.05$). The study recommends that firms in ICT sector in Nigeria should invest more in human resources to enhance their productivity and competitiveness.

Keywords: HRA (Human Resources Accounting), ICT (Information Communication Technology)

Word Count: 286

Table of Contents

Content	Page
Title Page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	x
List of Figure	xiii
Appendices	xiv
Chapter One	1
Introduction	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3. Aim and Objectives of the Study	8
1.4 Research Questions	9
1.5. Hypotheses	9
1.6. Scope of the Study	10
1.7. Significance of the Study	10
1.8 Limitation of the Study	10

1.9 Operationalization of the Research Variables	11
1.10 Operational Definition of Terms	12
Endnotes	13
Chapter Two	15
Literature Review	15
2.1 Conceptual Review	15
2.1.1 Financial Performance	15
2.1.2 Human Capital Efficiency	19
2.1.3 Organisational Profitability	28
2.1.4 Return on Assets	30
2.1.5 Return on Equity	31
2.1.6 Human Resources	33
2.1.7 Human Resource Accounting	36
2.1.7.1 Objectives of Human Resources Accounting	38
2.1.7.2 Classification of Human Resources-Related Costs	39
2.1.7.3 Valuation of Human Assets	40
2.1.8 Gross Staff Cost	45
2.1.9 Number of Employees	46
2.1.10 Development Costs	48
2.1.11 Training Costs.	50
2.1.11.1 Why Training is Needed.	53

2.1.11.2	Types of Training	56
2.1.11.3	Benefits of Training	58
2.1.11.4.	Factors Influencing the Effectiveness of Training	60
2.1.12	Welfare Costs	62
2.1.12.1	Types of Employee Welfare Programmes	70
2.1.12.2	Consequences of Welfare Packages on Workers' Performance	71
2.1.12.3	Difficulties Discouraging the Implementation of Employee's Welfare Package	72
2.1.12.4	Factors That Give Rise to Employees' Low Productivity	73
2.1.12.5	Means of Improving Productivity of Employees.	75
2.1.12.6.	Gains of Employee's Welfare Package	75
2.2	Theoretical Framework	77
2.2.1	Human Capital Theory	77
2.2.2	Resource-Based Theory	81
2.2.3	Dynamic Capabilities Theory	84
2.3	Review of Empirical Studies	93
2.4	Conceptual Model	119
2.5	Summary of Gaps in the Literature Reviewed	120
	Endnotes	121
	Chapter Three	136
	Methodology	136

3.1 Research Design	136
3.2 Population of the Study	136
3.3 Sample and Sampling Technique	137
3.4 Description of Research Instrument(s)	137
3.5 Method of Data Collection	137
3.6 Method of Data Analysis	138
Endnote	139
Chapter Four	140
Results and Discussions of Findings	140
4.1 Presentation of Data	140
4.2 Descriptive Statistics of Variables	141
4.3 Test of Hypotheses	142
4.4 Discussion of Findings	160
Chapter Five	161
Conclusion	161
5.1 Summary of Findings	161
5.2 Conclusion	163
5.3 Recommendations	164
5.4 Contribution to Knowledge	164
5.5 Suggestion for Further Studies	165
Bibliography	165

List of Tables

Table	Title	Page
4.1	Descriptive Statistics	138
4.2	Summary of Regression Model Showing Number of Employees Does Not Have Any Significant Effect on Human Capital Efficiency	140
4.3	ANOVA Table Showing Number of Employees Does Not Have Any Significant Effect on Human Capital Efficiency	140
4.4	Coefficients Showing Number of Employees Does Not Have Any Significant Effect on Human Capital Efficiency	142
4.5	Summary of Regression Model Showing Gross Staff Cost Does Not Influence Organisational Profitability	143
4.6	ANOVA Table Showing Gross Staff Cost Does Not Influence Organisational Profitability	144
4.7	Coefficients Showing Gross Staff Cost Does Not Influence Organisational Profitability	145
4.8	Summary of Regression Model Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return on Assets	147

4.9	ANOVA Table Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return On Assets	147
4.10	Coefficients Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return On Assets	149
4.11	Summary of Regression Model Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return on Equity	150
4.12	ANOVA Table Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return On Equity	151
4.13	Coefficients Showing Human Resources Accounting Related Costs (Training, Development & Welfare Costs) Do Not Influence Return On Equity	152
4.14	Summary of Regression Model of Joint Influence of Human Resource Accounting on Financial Performance	154
4.15	ANOVA Table of Joint Influence of Human Resource Accounting On Financial Performance	154

4.16 Coefficients Table of Joint Influence of Human Resource Accounting

On Financial Performance

156

Lead City University Ibadan DO NOT COPY

List of Figure

Figure	Title	Page
2.1	Conceptual Model	117

Lead City University Ibadan DO NOT COPY

Appendices

Appendix 1	179
Appendix 2	180
Appendix 3	181
Appendix 4	182
Appendix 5	183
Appendix 6	184
Appendix 7	185
Appendix 8	186
Appendix 9	187

Lead City University Ibadan DO NOT COPY

Lead City University Ibadan DO NOT COPY

Chapter One

Introduction

1.1 Background to the Study

Financial performance involves measuring a firm's activities and policies in monetary terms. The measurement should provide relevant information which is important for effective decision-making in an organisation. Considering the costs incurred and corresponding benefits accruing from all physical assets and human resources in the financial reports will, therefore, go a long way in assisting management and other interested parties in evaluating the success and future of the business. Most firms measure and disclose in their financial reports, costs incurred by the organisation with the corresponding benefits on physical assets only, while human resources-related costs-acquisition costs, training, and development costs, and welfare costs are poorly accounted for thereby, concealing the value or contribution of the human resources to the organisation. Eyes are always on the costs incurred on human resources like salaries, training and development, and welfare costs to keep them as low as possible. Reduction in costs and increase in profit may be achieved in the short run but, the impact in the long run on the motivation of the employees has been ignored.

Globally, with the conventional accounting practice, financial reports of organisations show all expenditures on human capital as charges against the revenue of the period. In financial reports of some organisations, only disclosure of wages and salaries serves as direct evidence of people in the organization. Human resources are necessary substance of an organisation¹.

Every organisation has people working in it. Organisations function well if their human resource is efficient but, people as resources of an organisation are not well accounted for thereby, concealing the value or contribution to the organisation.

An asset is a resource managed by the institution because of previous activities and from which subsequent economic benefits are anticipated to come to the entity². So, if an asset can generate benefits beyond the current financial year, then, expenses committed to training and developing employees ought to be acknowledged as an asset in the books of records. However, if Human resources are disclaimed as an asset in the financial statement of an organisation, it means the financial statement is not giving a true reflection of the situation of the organisation and could be misleading to users as a decision-making tool³.

Traditionally, any expense incurred on human capital is taken as an expense against the revenue of the period thereby reducing the profit of the period and, sub-optimising the financial report but the growing trends involve accounting for the cost incurred on the human resource as it yields benefits measurable in financial terms. This concept is human resource accounting, it is not a new concept in accounting but, contentious⁴.

Human resources accounting has been defined as a process of identifying, measuring, and communicating information about human resources to relevant users⁵. It emphasises using human resources as assets that generate income rather than as costs that reduce profits. It also involves calculating the financial contribution that each employee makes to the company⁶. Very few developed and emerging countries like Canada, the United States, Mexico, and India have implemented human resources accounting. Still, there is a need for global recognition and standardisation of the concept³. The recognition of human resources accounting is difficult since there is no accounting standard to guide the consideration of various dimensions of human resources in financial statements⁷.

Human resources accounting refers to the ways the human resources potentials are represented in monetary values in the financial reports⁸. Around the 1980s, due to the allegations of behavioural scientists on traditional accounting systems for failure to value the human resources of companies along with other material resources, there was a renewal of interest in human resources accounting and developed countries realised the necessity of human resources for survival, growth and profit of companies were shifting from manufacturing economies to service economies⁹. Acknowledging the importance of human resources, accountants, economists, and human resources managers all over the world became conscious of human resources valuation. This led to the development and implementation of human resources accounting in their annual reports⁸. Some industries in developed and developing countries like India gradually embraced human resources accounting and few organisations disclose related information in their annual reports. Examples of such companies are Bharat Heavy Electricals Ltd (BHEL), National Indian Information Technology (NIIT), and Infosys and Reliance Industries. The nature of human resources accounting disclosed in India are profiles of human assets, the compensation pattern, training and development, human asset productivity, human asset value and the total wealth of the organisation⁹.

It has been observed that human resources accounting is a developing research area in Nigeria¹⁰. Lately, there has been a surge in academic study worldwide focusing on financial performance. Additionally, there has been a notable rise in studies related to human resource accounting across many sectors. Research has also been conducted to examine the effects of human resource accounting on the performance of firms in several sectors in and outside Nigeria, including insurance, manufacturing (both listed and non-listed), banking, and oil & gas. However, additional research has been suggested into the relationship between human resource accounting and financial performance to enhance the

understanding of the benefits that organizations might derive from employing the human resources accounting approach. Also, further investigation has also been suggested to establish measurement practices regarding the human resource accounting, since lack of precision about the criteria regarding the measurement of human resource accounting has led researchers to use different alternatives, ultimately leading to varied results⁷. These are the gaps this study is trying to fill.

Currently, information communication technologies are exerting a significant impact on all aspects of human existence. They have significant functions in various domains such as workplaces, business, education, and entertainment. They act as catalysts for transforming working circumstances, managing information, enhancing learning methods, conducting scientific research, and facilitating access to information¹¹.

The information communication technology sector has been chosen for this study due to the cut-throat competition in such a high-technology industry. This mandates the need for an extended paradigm to guide firms in gaining distinctive advantages. Also, very few studies have been done on human resource accounting in Nigeria in that context. The aim of this study, therefore, is to investigate the human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria. Financial performance as the dependent variable is measured with the following variables: Human capital efficiency, organisational profitability, return on assets and return on equity while, Human resource accounting which is the independent variable will be measured with number of employees, gross staff cost and HRA-related costs (training, development, and welfare costs).

1.2 Statement of the Problem

Business enterprises must make a decision regarding whether to classify human resource costs as capital or as expenses that are deducted from the revenue for a specified time period. The challenge stems from the requirement to improve the presentation of human resources in the organization's financial statement.

Amidst the current global challenges faced by business organizations, are issues like ineffective communication of employee value and unfair performance appraisal practices that diminish employee motivation, extensive research has been conducted both in Nigeria and internationally to explore the topic of human resource accounting and its influence on organizational performance in various contexts.

A research was conducted in Nigeria to analyze the financial performance and accounting of human resources in different firms. A study examining insurance companies investigated the influence of the human resources accounting disclosure index on the financial performance of these organizations. The index encompasses various factors, such as training expenses, employee headcount, and salary increases. The study specifically focused on the impact of these factors on the return on assets and return on equity of the insurance firms. The results suggest that revealing the expenses associated with employees, known as human resource accounting, has a noteworthy influence on both the return on assets and the return on equity. Nevertheless, the quantity of individuals and the rise in staff have an adverse impact on return on assets. However, this is relevant to the specific situation of insurance companies that are quoted¹².

An independent research conducted in Nigeria investigated the influence of human resource accounting on the financial performance of specific food and beverage companies in the country. The study's findings validated that investing resources in staff training, development expenses, and employee welfare outlays had a significant favorable effect on

business performance. However, the expenditures allocated to ensure employee safety did not yield a substantial impact on the overall success of the company. Throughout the study, the selected food and beverage companies had a substantial decline in their return on assets due to their expenditures on recruitment. However, this pertains specifically to a specific range of food and beverages in Nigeria⁶.

An investigation was carried out in Nigeria to assess the influence of Human Resources Accounting Disclosures on the Financial Performance of Manufacturing Companies in Nigeria. The analysis employed secondary data obtained from the published annual reports of five purposively chosen manufacturing companies spanning from 2015 to 2019. The analysis utilized multiple regression. The findings revealed that both the expenditures related to training and developing personnel, as well as the expenses of compensating personnel, significantly affect the financial performance of manufacturing companies in Nigeria. The study also discovered that achieving financial success depends on certain individual performances that contribute to the disclosure of Human Resources Accounting¹³.

Furthermore, a study was carried out in Nigeria specifically targeting the oil and gas sector to evaluate the influence of human resource accounting on performance. The study examined the influence of training and development on the organization's profitability and overall performance. The analysis revealed a substantial correlation, consistent with prior research. A study was done to evaluate the impact of health and safety expenditures on performance. Nevertheless, the findings indicated that there was no significant correlation between these expenses and performance. A recent independent study has found that creating a positive and secure work environment might enhance labor productivity. Nevertheless, this emphasizes a disparity that necessitates additional scrutiny³.

Research has been carried out on both manufacturing and non-manufacturing companies that are listed on the Nigerian Exchange Group. Nevertheless, it seems that the information communication technology business has been neglected.

A research study was conducted in Saudi Arabia to investigate the impact of human resource accounting on the overall performance of small and medium-sized firms (SMEs) in the country. The study aimed to examine human capital efficiency, organizational profitability, return on assets, and return on equity as measurement for organizational performance. A considerable number of small and medium-sized enterprises in Saudi Arabia have realized the importance of human resource accounting and have recognized the necessity of investing in their workforce. Nevertheless, they did not witness a substantial increase in return on assets as a result of human resource accounting. Nevertheless, the results suggested that additional research is required to enhance understanding of the benefits that organizations might derive from employing the human resource accounting approach. Furthermore, based on the discovered negative relationship between human resource accounting and return on assets, it was recommended to carry out additional research⁷.

This research seeks to conduct a thorough analysis of the existing literature on the relationship between human resources accounting and the overall performance of firms. It is widely recognized that extensive research has consistently shown the significant impact of human resource accounting on organizational success. This study also found that the lack of precision in current measurement practices regarding what should be recorded on human resource accounting or what meets the criteria for human resource accounting has led researchers to use different alternatives for human resource accounting, ultimately leading to varied results. Therefore, this study proposes the need for more investigation in this area to fill the current gap in the existing body of knowledge. Human Resource

Accounting is defined in the study as the systematic procedure of evaluating and reporting the expenses and worth of humans inside a business. This branch of accounting is essential since a business cannot accomplish significant progress without the participation of its personnel, even if other elements of production are present. Hence, it is imperative to consider accounting for human resources¹⁴.

Most of the studies conducted in Nigeria on the relationship between human resource accounting and financial performance with very few on the information communication technology sector. This study is therefore aimed at bridging the gap by examining the relationship between human resource accounting and the financial performance of the organisation in the context of listed information communication technology companies on the Nigeria Exchange Group considering human capital efficiency, organisational profitability, return on assets and return on equity as indicators for measuring the financial performance and training, development and welfare costs, number of employees and gross staff cost as indicators for measuring human resource accounting.

1.3. Aim and Objectives of the Study

The study aims to investigate the link between human resource accounting and the financial performance of listed Information Communication Technology Companies in Nigeria.

However, the objectives were to

(i).determine the impact of the number of employees on human capital efficiency in the listed ICT companies:

(ii). determine the impact of gross staff cost on organisational profitability in the listed ICT companies:

(iii).determine the impact of human resources accounting-related costs (training and development, and welfare costs) on return on asset in the listed ICT companies:

(iv).determine the impact of human resources accounting-related costs (training and development, and welfare costs) on return on equity in the listed ICT companies: and

(v). determine the joint influence of human resources accounting on financial performance in the listed ICT companies.

1.4 Research Questions

(i). Does the number of employees have any significant effect on human capital efficiency?

(ii). To what extent does gross staff cost influence organisational profitability?

(iii).To what extent do human resources accounting-related costs (training, development, and welfare costs) influence return on asset?

(iv). To what extent do human resources accounting-related costs (training, development, and welfare costs) influence return on equity?

(v). To what extent do Human resources accounting variables jointly influence financial performance?

1.5. Hypotheses

H₀1: The number of employees does not have any significant effect on human capital efficiency

H₀2: Gross staff cost does not influence organisational profitability.

H₀3: Human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset

H₀4: Human resources accounting-related costs (training, development, and welfare costs) do not influence return on equity.

H₀5: Human resources accounting has no joint significant effect on financial performance

1.6. Scope of the Study

The research focuses on the relationship between human resources accounting and financial performance of Information Communication Technology Companies in Nigeria. This study is limited to the nine companies listed on the Exchange Group¹⁵. Financial performance as the dependent variable was operationalized with the following variables: Human capital efficiency, organisational profitability, return on assets and return on equity. All the same, human resource accounting which is the independent variable was measured with number of employees, gross staff cost and HRA-related costs (training, development, and welfare costs)

1.7. Significance of the Study

This study can create awareness of the human resource accounting concept, providing a source of literature to researchers, students, professionals, companies, and government agencies who perhaps are concerned about knowing more about the concept of Human resource accounting. It can also help organisations in their strategic and policy formulation, encourage managers to implement a well-developed human resource accounting and serve as a guide on how to run an effective human resource accounting system that would propel improved reporting of human resources in the financial reports.

1.8 Limitation of the Study

There were just nine information communication technology companies listed on the Exchange Group and the sample size of the study comprises all the population. Data for the

study was collected from the financial reports of the nine information communication technology companies listed on the Nigeria exchange group for the period of ten years. (2013-2022). Non-probability sampling method was used. Only financial indicators were considered in the study.

1.9 Operationalization of the Research Variables

The study is established on two major constructs namely Human resource accounting and financial performance where:

y = financial performance is the dependent variable, and

x = human resources accounting is the independent variable

Financial performance as the dependent variable is operationalized with the following indicators or sub-variables:

$Y = y_1, y_2, y_3, y_4, y_5$

y_1 = Human capital efficiency

y_2 = Organisational profitability

y_3 = Return on assets

y_4 = Return on equity

y_5 = Sub-variables of Financial Performance

Similarly, Human Resource Accounting which is the independent variable was measured

with $X = x_1, x_2, x_3, x_4, x_5$

x_1 = Number of employees

x_2 = Gross staff cost

x_3 = HRA-related costs (training, development, and welfare costs)

x_4 = HRA-related costs (training, development, and welfare costs)

x_5 =Sub-variables of Human Resource Accounting

1.10 Operational Definition of Terms

Development Costs- this includes costs incurred on various development programmes to enrich the employees.

Financial Performance- measurement of a firm's financial health over some time.

Gross Staff Cost- this is the total sum to be earned by employees in an organisation.

Human Capital Efficiency- measures value added by human capital of the business organisation.

Human Resource – the workforce of an organisation

Human Resource Accounting – accounting for human beings as the most important resource of a business concern

Human Resource-related Costs- training, development, and welfare costs incurred on employees.

Listed Information Communication Technology Companies- These are information communication technology companies that have met the requirements of a security and exchange commission such as the Nigeria Stock Exchange (Nigeria Exchange Group) to sell shares to the public and can trade on the exchange.

Number of Employees- the number of workers working for an employer in an organisation

Organisational Profitability- the ability of a firm to earn profit.

Return on Assets (ROA) - reveals how efficiently a company makes a profit from its assets.

Return on Equity (ROE) - reveals how good a company is generating a return on investment it received from shareholders.

Training Costs- this includes costs of special training made by an organization to employees to provide the expected level of performance.

Welfare Costs - expenses on medical, recreation, canteens, maternity benefits, and occupational safety incurred by an entity to provide a healthy environment to inspire the employee and, enhance his status and as well as his productivity.

Endnotes

1. R. Kutieshat & P. Farmanesh, *The Impact of New Human Resource Management Practices on Innovation Performance During the COVID 19 Crisis: A New Perception on Enhancing the Educational Sector*, **Sustainability**, 14 (2872), 2022, 1-21
2. J. Switter, *FASB Conceptual Framework- Elements*, **Accounting Standards Advisory Forum Meeting Agenda**, 3, 2020, 1-17
3. Y.S Akinjare, M. A.Idowu & T.O Sule. *The Impact of Human Resource Accounting (HRA) on the Performance of Nigerian Firms*, **JABU International Journal of Social and Management Sciences**, 7 (1), 2019, 252-265
4. M. D. Olalere, K.S. Oyegoke, K.J. Olorundare & M. Alao., *Human Resource Accounting and International Financial Reporting Standards (Pros and Cons)*, **International Journal of Management Studies and Social Science Research**, 5 (2), 2023, 111- 117
5. A. Bansal and P. Sharma, *An Empirical Evaluation on Performance of Organisation Through Human Resource Accounting: A Study on Selected Corporate Units of India*, **Indian Journal of Finance and Banking**, 3 (1), 2019, 1-12
6. B. A. Ogunbiyi-Davies, M. E. Alao, P.O. Aremu & M. D. Olalere, *Human Resources Accounting and Financial Performance of Some Food and Beverages in Nigeria*, **Open Access Library Journal**, 10 (8), 2023, 1-17
7. S. Khan, *Impact of Human Resource Accounting on Organisation's Financial Performance in the Context of SMEs*, **Growing Sciences, Accounting**, 7, 2021, 621-628

8. T. Idowu & M. Ajape, *Conceptual Analysis of Policy Challenge of Implementing Human Resource Accounting in Nigeria*, **Journal of Management and Innovation**, 5 (1), 2019, 1-18
9. M. Kumar & U. K Agrawal, *A Study of Human Resource Accounting Practices in India*, **International Journal of Research Publication and Reviews**, 4 (4), 2023, 475-480
10. J.A. Adewole, J.K. Ogunyemi & S.A. Ojo, *Effect of Capitalising Human Resource Cost on Corporate Profitability in Ondo State, Nigeria*, **International Journal of Shariah and Corporate Governance Research**, 2 (1), 2019, 14-33
11. N. Roztock, P. Soja & H. R. Weistroffer, *The Role of Information and Communication Technologies in Socioeconomic Development: Towards A Multi-Dimensional Framework*, **Information Technology for Development**, 25 (2), 2019, 171–183
12. C.O. Onyekwelu & U.I. Ironkwe, *Human Resource Accounting and Corporate Financial Performance of Quoted Insurance Companies in Nigeria*, **Research Journal of Management Practice**, 7 (3), 2021, 20-39
13. A.R. Balogun, O. O. Omotoye, A. M. Oluwoye & A. O. Mojibola., *Human Resource Accounting Disclosures and Financial Performance, Empirical Evidence From Manufacturing Companies in Nigeria*, **Lapai International Journal of Management and Social Sciences**, 12 (2), 2020, 42-51
14. J. A. Ivungu, A. Agbo, & J. T. Bula, *A Review of Literature Regarding the Connection Between Human Resource Accounting and Corporate Performance of Firms*, **The International Journal of Business and Management**, 8 (1), 2020, 146-152
15. **NEG**, *Listed Companies*, Nigerian Exchange Group, 2022, <https://ngxgroup.com/exchange/trade/equities/listed-companies/>

Chapter Two

Literature Review

This Chapter reviews related works of literature. The concepts of human resources, human resources accounting, and financial performance were discussed. Specifically, the indicators of human resource accounting and financial performance were highlighted. The theory used as the anchor for the study was also discussed and empirical studies were reviewed.

2.1 Conceptual Review

The conceptual review attempts to describe the relevant concepts applicable to the study.

2.1.1 Financial Performance

The ability of organisations to create economic value has been described by various financial measures¹. Performance refers to the actions and achievements of an organization over a specific time frame. It can be defined as the achievement of a predetermined task

evaluated according to a predetermined standard of achieving correctness, comprehensiveness, cost-effectiveness, and efficiency². Performance refers to the aptitude of an organization's personnel to effectively accomplish the objectives and priorities set by the organization³. It outlines the process by which an organization carries out its activities, which is evaluated based on the outcome of a task over a specific time frame⁴. Financial information users evaluate performance based on their specific interests. Managers focus on the overall performance of their company, while current and potential investors evaluate performance based on return on investment. Employees are concerned with the stability and profitability of the company, creditors are interested in its solvency, and customers prioritize its stability⁵.

Organizational performance is a comprehensive assessment of an organization's operational, financial, and overall performance in relation to its goals. It takes into account all occurrences that happen in various units and the diverse concerns of the individual concerned⁶.

Firm performance can be assessed by examining its financial performance, which encompasses metrics such as profits, return on assets, and return on investment. Additionally, product market performance indicators, such as sales and market share, can be used to evaluate firm performance. Shareholder return, including total shareholder return, and economic value-added are also important measures to consider. Stakeholders place significant weight on the performance of a firm. A prosperous company enhances stakeholders' confidence and contributes its favorable worth to management⁷.

Organizations hold certain assumptions about their personnel. The assumption can vary between high, moderate, or low levels. This is necessary since the modern era of human resource managers meticulously analyze every aspect of an employee, including goal

setting and their responses to various situations and changes⁸. Performance refers to the extent to which organizational objectives are accomplished, encompassing both actions and results. Due to its dynamic nature, it changes over time, in different locations, and in different work environments. This variability is sometimes influenced by the relationship between input, output, and impact, making it challenging to quantify⁴. The performance of a firm is influenced by various factors including organizational culture, work environment, leadership/managerial practices, and training and development activities⁹. Additionally, factors such as the size of the firm, ownership, capital structure, equity, age of the firm, efficiency, growth in sales, export activity, and the industrial age also play a role in determining its performance especially the profitability¹⁰.

The performance of an organization can be ascertained from financial and non-financial perspectives. Financial performance considers the ability of a firm to achieve its financial objectives². The financial performance of firms defines the competitiveness, business potential, economic interest of the management, and presence of upcoming contractors¹⁰.

It assesses items like the long-term viability, health status, criteria for making investment decisions, management accountability, and predicting the capability to meet expectations of future returns in the form of dividends, Interest, debt, taxes, salaries, and other obligations of an organization¹¹. The financial performance of a firm is about how successfully a firm uses the finances at its disposal to run its operations and maximize the wealth of the shareholders. A firm's financial performance can also be measured by using indices like return on assets, return on investment, profitability, return on equity, earnings per share, and so on^{12, 13}.

Financial performance is an indicator of an organization's overall financial condition within a specific time period. It measures the organization's effectiveness in utilizing its

resources to generate income, taking into account aspects such as capital adequacy, liquidity, leverage, stability, and profitability¹⁴.

Financial performance indexes aid managers and financial specialists in analyzing the firm and assessing progress towards strategic objectives. Diverse businesses employ a wide range of these tools to track their performance and foster expansion.

Historically, the evaluation of companies' financial success has relied on accounting indicators and ratios. There are other accounting measurements, but the most widely used ones include net profit, net profit margin, gross profit margin, return on equity, and return on assets. Accounting metrics and ratios are categorized as financial performance indicators based on the specific type of information they measure.

1. Profitability performance indices, such as gross profit margin and net profit margin.
2. Liquidity performance indices, such as current ratio and quick ratio.
3. Efficiency performance indices, such as inventory turnover and accounts receivable turnover.
4. Valuation performance indices, such as earnings per share and price-to-earnings ratio.
5. Leverage performance indices, such as debt to equity and return on equity¹⁵.

Periodic assessment is necessary to study the many operations of a company organization and evaluate its financial performance in order to achieve its financial goals². Financial performance measures are crucial components of performance evaluation systems in the majority of companies¹⁰. Financial performance cannot operate independently; it is also influenced by non-financial performance metrics². Financial metrics have traditionally been used to assess corporate performance by investors, decision-makers, creditors, and

other stakeholders. These indicators are believed to provide insights into a firm's success. However, in today's context, stakeholders consider factors beyond only financial performance. They are in search of additional information. Firm performance refers to the whole value generated by a firm via its activities, which encompasses the total benefit created for all of the firm's actual stakeholders⁷.

Non-financial performance indicators of a business evaluate long-term success and qualitative areas of a business^{7, 12}. The non-financial performance metrics encompass customer satisfaction, staff growth and development, and internal processes views^{2, 16}. Ensuring client happiness is crucial for delivering efficient service to customers. Organizational performance is assessed by evaluating customer satisfaction and the organization's market share. In today's contemporary and highly competitive business landscape, it is crucial to prioritize meeting customers' requirements and regularly analyze the elements that impact customer satisfaction. Additionally, it is necessary to assess the extent to which customers' involvement contributes to the overall efficiency of the firm².

Employee growth and development focuses on the capability of the organization to educate, train, and develop an individual staff of the organization as necessary resources of an organisation and contributors to the growth of the organization, while the internal processes perspective involves knowing how the internal processes work to achieve the goals of the organization and add the expected value to the organization^{2, 16}.

2.1.2 Human Capital Efficiency

Human capital is a crucial determinant of an organization's growth and development, and it significantly contributes to the effective execution of business strategies^{17, 18}. In the past, most organizations considered plant and equipment to be their primary asset. However, nowadays, human resources are recognized as the true asset of every organization¹⁷.

Human capital is a vital component of intellectual capital. Intellectual capital refers to the intangible assets that an organization holds, which enable it to achieve higher levels of innovation, productivity, and competitiveness. However, these assets are not disclosed in the financial reports¹⁹. Intellectual Capital serves as the primary factor which influences the financial performance of non-financial companies. Companies can improve their financial performance by effectively utilizing their intellectual and physical resources through a strong commitment to them²⁰.

The shift from traditional industrial backgrounds to knowledge-based economic systems for the achievement of business excellence has recently been a necessary issue of discussion²¹. A knowledge economy has been defined as an economy in which fundamental drivers of development and expansion are the generation, production, and utilization of knowledge²⁰.

Intellectual Capital is the knowledge that adds more value to the organization²¹. It has been described as an organizational process which transforms employees' skills, knowledge and expertise into values that are vital to organizational performance²². Around 1980, a change in the world economy from an industrial to a knowledge-based economy led to Intellectual Capital replacing an organization's financial and physical resources. Organizations that better exploit their Intellectual capital and knowledge possessions are more successful in business. Intellectual Capital is the actual driver for corporate performance and sustainable business growth. It leads organizations to survive in the long run by protecting and utilizing knowledge resources²¹.

Historically, intangible assets were primarily characterized by their speculative nature and had a relatively minor impact. The valuation of a company was mostly determined based on its tangible assets. Currently, the significance of physical assets has decreased, while

investments in information and other intangible assets have risen. Executives in businesses now prioritize non-physical assets to create a lasting competitive edge²⁰

Intellectual capital is categorized as a non-monetary asset that possesses value and helps in the development of profit. Generally, it can be classified as assets that can be sold, assets that are focused on human needs, assets related to intellectual property, and assets related to infrastructure. It encompasses the collective expertise and know-how of a company's staff, as well as the established procedures and processes within the organization. Additionally, it takes into account the company's market positioning²³.

Intellectual capital refers to a company's capacity to create new knowledge, share it with its members, and transform it into tangible outcomes such as products, services, and systems. The concept consists of three dimensions: human capital, which pertains to the utilization of abilities; structural capital, which is associated with the internal aspects; and relational capital, which is comprised of the outward components of organizations²⁴. Intellectual capital facilitates the transformation of knowledge into value. It enhances the company competitive advantages that lead to improved firm performance and sustainable growth²¹. The relevance of intellectual capital has grown rapidly because of the rising significance of the knowledge economy²⁰.

Intellectual capital can be described as the combination of organisational processes that incorporate knowledge management, transfer and organizational learning and can turn employees' skills, knowledge and expertise into values that are necessary for organizational performance²². The information revolution, the digital world, and knowledge in the current era have made intellectual capital an important source of wealth creation alongside physical assets. Intellectual capital is a resource that provides a competitive advantage²⁵.

Companies can benefit from the talents, experience, and expertise of their personnel. Human capital refers to the intangible qualities possessed by the workforce, such as knowledge, abilities, expertise, and competences, which have the potential to generate value for the organization²¹. Human capital refers to the intellectual and technical abilities possessed by employees inside an organization. The term can also be defined as the disposition and drive of employees, their expertise, capabilities, ingenuity and originality, past involvement, individual traits, knowledge, and effectiveness. Nevertheless, the presence of these factors is contingent upon the specific sector or organization being analyzed. Human capital is the most crucial kind of intellectual capital, and staff expenses are the most indicative measure of success²².

The valuation of an organization's human capital is determined by the extent to which it allocates resources towards enhancing the educational skills and future growth potential of its employees. An organization can overcome business obstacles by harnessing the collective endeavors of its personnel. Human capital refers to the total combination of an individual's knowledge, skills, and capacities²¹. Human capital refers to knowledge and skills that individuals and groups possess, whether it is explicit (clearly stated) or tacit (understood but not explicitly expressed), and whether it is held by individuals or shared within a social group. This knowledge is valuable for the strategic goals and objectives (mission and vision) of an organization²⁴.

The most important parts of the human capital of an organisation are the skills of the workforce and the depth of their experience. It is the soul of the sources of intellectual capital. The human capital leaves the company at the end of the business day. Human capital includes the skills and abilities of the workforce, their knowledge in the important and necessary fields for the organisation, and their ethics and behaviour²⁶.

Human capital is produced by the employees' acquired knowledge, skills, talents, and competencies. It can be considered a dynamic index and a very important factor for the benefit of the organization today. It is integrated by what people and groups know and learn and whether they share that knowledge with others. Elements such as values, attitudes, and aptitudes can be considered as human capital. Human Capital is a production factor in the organization and is a combination of intelligence, knowledge and skills which provide each organization its special character. Employees are parts of the organization that can learn, think, create, and make different changes. They serve as sources of strategic renewal in organizations. It is the set of explicit and tacit knowledge possessed by personnel in educational institutions which they acquired through formal and informal education and updating processes included in their activities²⁴.

Structural capital on the other hand, encompasses both intangible and tangible elements. Structural Capital refers to the assets and resources that are left within a business when all of its employees have left for the day²¹. It comprises a collection of technologies, inventions, data, publications, strategies, culture, structure, and systems, together with a series of activities and procedures that the organization consolidates²². The intangible parts of the firm include its information technology, customer database, commercial and industrial processes, and strategic plans. Structural capital refers to a company's organizational structure and information systems, which encompass internal processes for distributing, communicating, and managing scientific and technical knowledge, as well as the company's databases, strategies, organizational procedures, and any other activities that have a value beyond tangible assets²¹.

Structural Capital represents the institutional knowledge created and owned by the organization and stored in databases and manuals. This type of capital includes work processes, organizational norms, technological processes, and know-how. It is a set of

knowledge and intangible assets derived from processes that the organization possesses and remains there when people leave it. This consists of organizational capital which is a set of intangibles of an explicit and implicit nature and technological capital which is made up of a set of intangibles directly linked to the development of the organization's technical system²⁴. It can also be defined as the set of organizational properties that affect both the process and the creation of innovative capital²².

Structural capital combines the information that an organization has internalized, systematized, and processed. This knowledge is incorporated into the company through various routines, strategies, organizational structure, technologies, support processes, and the recruitment of knowledge and innovation processes²⁴. It encompasses all the knowledge assets in the business that are not possessed by humans, such as organizational charts, process execution instructions, strategies, executive plans, and any other valuable information that is important to the organization²⁶.

Relational capital signifies the present and future value that a firm derives from its relationships with customers and external partners. It pertains to the overall collection of a company's interactions with consumers, industry associations, suppliers, and marketplaces.

Customer capital encompasses factors such as comprehension, confidence, as well as the steadfastness and robustness of customer connections. Relational capital refers to the knowledge that a corporation possesses about individuals who are external to the organization, such as consumers. It refers to the collective value of all the resources that a corporation utilizes to establish and oversee its interactions with other entities²¹.

Relational Capital, also known as social capital, encompasses the flows of knowledge that arises from interactions both within and outside the company. They involve the social characteristics that enable the stakeholders to collaborate efficiently in attaining organizational objectives. Relational capital is related to the organizational ties and

conventions that determines the quality and quantity of societal interactions. Relational knowledge refers to the collective information and expertise possessed by an organization and its members. This knowledge is valuable due to the positive interactions that the organization and its members have continually maintained with various market actors and society as a whole²⁴.

Relational Capital has been described as the worth of an organization's brand, its robust connections with customers, and the level of satisfaction experienced by consumers. Relational Capital refers to the capital knowledge that is created via interactions with external stakeholders. The paramount factors within every corporation are the caliber of partnerships and the capacity to enhance consumer happiness²².

Relational Capital encompasses the entirety of the connections between a business and any other entity, such as consumers, intermediaries, employees, suppliers, legal authorities, communities, creditors, and investors, among others.

Relational Capital can be categorized into two broad classifications:

- (i) The formal relationships through contracts and commitment with customers, suppliers, or significant partners
- (ii) The informal relationships²⁶.

Human capital represents the level of dedication, skills, drive, and loyalty that an employee possesses. It highlights the employee's crucial contribution to enhancing efficiency and overall productivity of the company. Structural capital, on the other hand, refers to the physical and organizational elements that support a business, such as infrastructure, procedures, and configurations²⁰. Structural capital refers to the essential architecture, processes, and databases of an organization that facilitate the functioning of human capital and contribute to the generation of valuable monetary assets¹⁹. Companies that possess

robust structural capital offer their employees the chance to leverage their talents and expertise in order to attain a competitive edge²². Relational capital however, refers to the connections and ties that a company has, which contribute to enhancing its external connections. Investments in advertising and selling have a crucial role in generating relational capital. Companies with a significant amount of relational capital tend to establish more partnerships, which enhances their level of autonomy²⁰. Human capital reveals the economic value derived from the education and abilities of workers. The term encompasses various assets, such as education, training, mental acuity, expertise, aptitude, and physical well-being of the workforce. Thus, human capital encompasses all investments and expenditures related to employees, including pay, benefits, education, and training²⁷. Human Capital Efficiency is the measure of how well the human resources of a firm contribute to the process of adding value to the firm²⁸.

The concept of Human Capital Efficiency Value Added Intellectual Coefficient (VAIC) was designed by Ante Pulic for measuring the efficiency of intellectual capital within a company. The analytical tool was developed to enable management, shareholders, and other relevant stakeholders to observe and evaluate the efficiency of the firm's total resources and each major resource component. The model measures value creation efficiency using accounting-based figures. One of the VAIC components is human capital efficiency. Human capital efficiency measures the value added by the human resources of an organization¹⁸.

Several studies have analyzed the influence of human capital efficiency and business performance in developed countries by employing the Value-added intellectual coefficient model^{18, 20}. The computation of the essential indices and coefficients in this system employs easy techniques, which are particularly comprehensible to management and businessmen familiar with standard accounting information. These elements allow the

management to assess the effectiveness of resource use in creating value within the organization. Greater coefficients indicate more effective utilization of the company's potential for value development by management. The Value-added intellectual coefficient model developed by Pulic is widely utilized because of its simplicity, data availability, and comparability, despite the existence of several assessment approaches^{25, 18}.

Human capital performance measurement has become an important issue for companies in today's business world. It can be deduced that for the resource to be effectively managed, it is important to measure it to get the right perspective on human capital²⁹.

A high human capital efficiency indicates that the personnel in an organization is providing significant benefits in relation to the resources invested in salaries, benefits, training, and other employee expenses. A higher level of Human Capital efficiency in an organization leads to a more favorable return on investment in human capital. Enhancing Human Capital efficiency can result in increased revenues and productivity without the need for hiring new employees. It allows for a more precise ability to pay employees, reduces costs through efficient operations, and focuses on training and recruitment to address skill gaps. Additionally, it involves more accurate performance measurement to reward talented workers³⁰.

A proper performance measurement tool could provide the firms with the necessary information for creating an action plan to improve human capital contribution to organizational success. The Value-Added Intellectual Coefficient which was introduced by Pulic can be used to measure the efficiency of intellectual capital within a company²¹.

The Value-Added Intellectual Coefficient model is a widely utilized method for measuring efficiency in three key components: physical capital, human capital, and structure capital.

A multitude of research have employed the Value-Added Intellectual Coefficient model as a means of quantifying intellectual capital²⁵.

The model, initially developed by Ante Pulic as the Value-Added Intellectual Coefficient (VAIC) model, was later improved by Ulum as the modified Value-Added Intellectual Coefficient (MVAIC) model. Its purpose is to assess Intellectual efficiency. The MVAIC model quantifies the efficiency of intellectual capital and its individual components, including human capital efficiency, capital employed efficiency, relational capital efficiency, and structural capital efficiency. Human capital efficiency refers to the importance of evaluating the contribution made by the human capital inside an organization²¹.

To measure Human Capital Efficiency, this study adopted the Pulic formula for measuring Human Capital Value Added.

$$\text{(HCE) Human Capital Efficiency} = \frac{\text{(VA) Value Added}}{\text{(HC) Human Capital}}^{21, 25, 27}.$$

2.1.3 Organisational Profitability

Another indicator that will be considered is the ability of the firm to make a profit.

Business firms consider various objectives for their establishment. The ones that catch attention are classified into economic, social, human, multiple-organic, micro level, national and global objectives but, the first and most important economic objective of any firm is to earn a profit³¹.

Businesses prefer to invest in projects that will yield great profits. In the traditional theory of firms, the main objective of a business is to maximize its profit, that is, make a profit as much as possible^{32, 33}. Profit holds a major position in making decisions by firms due to its simple concept and use. Knowledge of the profitability of your company and projects can be used to drive strategic decisions. Every decision you make impacts on your company's finances³⁴.

While profitability is not a perfect means, it is an efficient and reliable way of measuring the efficiency of a firm. It can also serve as a means of evaluating the performance of a firm, thereby assisting in the efficient allocation of resources in the competitive market³⁵. Profitability is an estimate of the financial status of a company. It has been described as the adept of a firm to make profits from all its activities which are operating, investing, and financing activities. A firm must be able to generate revenue above direct and indirect costs incurred to generate revenue before it can make a profit. Also, maximizing shareholders' wealth means a firm can pay dividends consistently because of the appreciation of the worth of the firm's market share³⁶.

Organizational profitability considers the ability of the firm to properly utilize the investor's money and it depends on the active utilization of every activity and resource available. It is an attribute for measuring efficiency but not an alternative to efficiency since there are other attributes for efficiency like goodwill and trademark¹⁷. In simple terms, efficiency refers to minimizing inputs and maximizing outputs³⁷.

Profitability is extremely important in every business, be it small, medium, or large. The ability of any business organisation to operate effectively depends upon the profit it makes³⁸. Profit acts as a shield for businesses against financial stress. Investors prefer to invest their money in businesses with sound profits, with an expectation of regular income

in the short run and capital appreciation in the long run. Firms with better profits easily raise funds from the market even, at a lesser cost as investors are likely to easily invest with the expectation of less risk on the investment. An adequately profitable business tends to pay its obligations as and when due. If a company can generate profits through the efficient use of its resources, the company will gain the trust of prospective investors to buy its shares³².

The low profit would have a major effect on the dividend distribution decisions of a company. However, higher profit can encourage the company to give higher dividends back to the shareholders who are the owners of the company³⁸. Businesses with large profits are generally discerned as efficient in terms of operations and investment. The more profit a business makes, the better its brand image since profit measures the efficiency of a business. A business with much profit will be able to retain adequate funds to support itself in economic breakdowns or financial stress. The higher the profits (with manageable risk) the higher the firm share resulting in greater prosperity for company owners³². Net profit is a measure of the basic profitability of a business. It is the revenue of the operation less the costs of the business operations. Revenue is the aggregate of the income a business makes through its sales. The proportion of that income that is left after deducting all the organization's expenses which it incurred in the process of making the revenue is the profit

^{39, 40}.

2.1.4 Return on Assets

Return on assets is one of the indicators used in measuring the performance of business organizations. It is the financial ratio that measures how effective an organization is in the proper utilization of its assets¹⁷. The return on assets ratio which can also be referred to as return on investments reveals the extent to which investments that have been invested in a

firm can provide a return of profit. The greater the level of return on assets of a company, the better the financial performance as it indicates a greater return on investment^{41, 42}.

Profit has a positive effect on the ability of an organization to provide investment returns to the owners of the company, so measuring the ability of assets to generate profits is important¹¹. Return on assets is one of the frequently used measures of financial performance to show how well the assets owned by an organization are generating profits. It describes the effectiveness of using assets to earn a profit^{11, 17, 42}.

Large assets do not mean big profits. Good profitability is the ability of a firm to generate large profits with large assets or large profits with not too large assets¹¹. A higher return on assets means a firm is making a higher value from its assets¹⁷. Return on assets being a profit-related tool measures financial performance. It is the ratio between the profit generated in a period and the assets owned by the company to make a profit where the company assets are obtained from the issuance of shares in the capital market or issuance of bonds and or from debts to banks or other parties¹¹. While considering a company's ability to increase profits, return on assets serves as a measurement tool that gives a summary of how assets generate maximum profit in a company⁴¹.

The ability of an organization to provide investment returns to company owners does not rely only upon being measured by profit because high profits do not necessarily mean that the availability of operating cash is also big, although paying dividends is related to cash. This is because of the profit in which there are elements of accrual income and expenses, not only cash incomes and expenses¹¹. Therefore, the return on assets is represented by net profit after taxes divided by the total assets of the firm multiplied by 100¹⁷.

2.1.5 Return on Equity

Return on equity can be used to determine the performance of an organization in using an organisation's capital in providing returns to shareholders. The higher the ratio the better for the shareholders since it provides a greater rate of return to them⁴¹.

Since the return on equity is a measure of the financial performance of a business considering the amount invested into the business, the ordinary shareholders are concerned about the rate of return gained by an organization considering capital invested by equity holders, after deducting the amount committed to other capital suppliers⁴³. Return on equity measures the amount of profit that can be allotted to ordinary shareholders considering the book value of the investment that they have made in a company⁴⁴.

While looking at a company's ability to increase profits, return on equity is a measurement tool that gives a summary of how equity management generates maximum profit in a company. The yearly increase in the return on equity ratio of a firm indicates that there is an increase in the net profit of the firm concerned leading to an increased stock price which also means an increase in the value of the company⁴¹. A higher return on equity means an organization is efficiently using its shareholders' equity to generate income while a low return on equity means the organization makes little income when compared to its shareholders' equity¹⁷.

The company's shareholder's equity or net worth equals total assets minus total liabilities. The ratio of return which is also known as return on equity examines the extent to which a company uses its resources to provide a return on equity and it can be increased by increasing sales without proportionally increasing expenses and costs, reducing the costs of goods sold or operating expenses of the company, increasing sales relatively based on asset value, either by increasing sales or reduce the amount of investment in selling assets,

increasing the use of debt relative to equity to the point that does not jeopardize the financial well-being of the company⁴¹.

Return on equity is one of the means of measuring financial performance. It shows how efficiently a company handles and uses the money shareholders contribute to the company. It can be determined by dividing net income by shareholders' equity. The higher the return on equity, the more efficient the company is in generating income from the equity of the shareholders^{44, 45}.

The return on equity quantifies the profitability of a company in relation to its equity, which is synonymous with net assets or assets minus liabilities. Return on equity quantifies the efficiency with which a corporation utilizes investments to achieve an increase in earnings. Return on equity is a financial measure that allows investors to assess the effectiveness of a company's management in utilizing the funds provided by shareholders. The Return on Equity (ROE) is calculated by dividing the Net Income by the Total Equity³⁸. The return on equity can be expressed as the net profit after tax divided by the shareholder's equity¹⁷.

2.1.6 Human Resources

The human resource is a crucial element of production and the most valuable asset a corporation may possess⁴⁶. The term "workforce" refers to the collective group of individuals employed by an organization⁴⁷. Human resource refers to the persons who make up the workforce of an organization⁴². Human resource has also been described as people who operate an organization and connect the organization and other stakeholders relating to various issues such as compensation, recruitment, work management, and

training to run effectively. The operations of human resources are, however, managed systematically by using pre-determined procedures run by trained and dedicated staff under human resources management⁴⁸. Human Resources are important for the success of any organization in this current dispensation. The development and growth of any organisation without human involvement may not be effective, because human is a means of achieving development⁴⁹.

Human resource is one of the valuable assets supporting organizations in achieving and maintaining a competitive advantage. Human resources involve a varied group of education, employment, industrial expertise, and other types of experiences assisting organizations to deliver superior and distinct performance⁵. Human resources are potentials that are considered non-material or non-financial assets. They function as a wheel for organizations to keep their existence. Human resources play important roles in organizations, not only because they are required but also because they have intellectual competence. The quality of human resources is mostly related to qualifications, competencies, and skills⁴⁸.

Humans are the most helpful asset in any organization. The assets of an organisation could be either tangible or intangible. However, intangible assets could be intellectual and emotional capital. Intellectual capital is of greater importance, as it assists firms in achieving

a competitive advantage and sustainable development. It can be further categorised into capital internal to the firm, external to the firm, and human capital where the human capital refers to employee knowledge, skills, and ability⁵⁰. Simply put, it can be called human capital, manpower, labour, personnel, associates, people, or competence knowledge, training, innovation, and capabilities and skills that an individual possesses⁵¹. It is the

modern management term for the function within an organisation saddled with the responsibility of implementing strategies and policies relating to the management of individuals³². Human capital significantly contributes to the efficiency of organizations in this current competitive world. No machinery can replace its creativity⁵⁰. Human resources are classified as intangible assets. The competencies and proficiencies possessed by a specific collective or individual hold economic worth. The progress of any organization relies on the effectiveness of its personnel⁵².

Human resources capacity has been defined as initiatives to develop human resources and generally seeks the capacity of individuals to carry out their professional and technical responsibilities. Capacity building is the process experienced by individuals, groups, and organizations to improve their competence in carrying out their assignments and achieving the set goals. It involves a series of strategies designed to increase efficiency, effectiveness, and responsiveness of performance. It is a learning process, starting from the flow of the need to experience something, reducing ignorance and uncertainty in life, and then developing the abilities needed to adapt to new changes⁴⁸.

Financial, capital, and technological resources are no longer a source of competitive advantage, as they can be easily duplicated but to have a competitive edge over competitors, firms invest in something which cannot be replicated. So, in this contemporary time, there is a huge demand for skilled labour as human resources are considered a real asset to any organization because they bring profitability. Notwithstanding the technological improvements, the significance of human resources has not been reduced as an asset that contributes to the growth and competitive advantage of an organization⁴⁹.

The following have been described as indicators that can develop or improve the quality of human resources,

(1) Knowledge, which refers to the understanding of business management, products and services, customers, promotion, and marketing.

(2) Skill comprises production skills, communication skills, and teamwork in organization, supervision, finance, administration, and accounting.

(3) Ability entails the capacity to manage the business, make decisions, lead the people, control the business, and make inventions relating to the present state of the business.

(4) Formal education which focuses on equipping learners with basic knowledge, theory, logical thinking, general knowledge, and the development of character and personality.

(5) Work training which aims at developing professional competence and arraying practical experiences over the theoretical framework.

(6) Internship which helps to improve both technical knowledge and working skills by observing other knowledgeable employees, then imitating the skilled work before they could do the job independently and proficiently so that they could find more practical and efficient ways in doing their jobs⁴⁸.

2.1.7 Human Resource Accounting

Human resource accounting is a specialized field of accounting that quantifies the expenses and worth of individuals inside an organization. Under conventional treatment, any costs related to human resources are considered an expense that reduces the revenue for the period. However, the human resources accounting for human resources suggests that expenses related to human resources should be treated as capital expenditures, as they provide long-term benefits. Sir William Petty introduced the concept of human resources

in 1691. Research on human resources accounting was initiated in 1960 by Rensis Likert and other scholars with the objective of establishing a clear definition for the idea of human resource accounting³⁵.

Around 1990, Western society started reporting the worth of human resources. When the service sector started, it was revealed that the main source of revenue is its employees and considers its employees as human assets. Also, in the business sectors like banking and information technology, employees were described as the organisation's main asset because they were responsible for building investors' value. Countries like China and Japan were able to advance technologically due to their high-quality workforce⁵⁰.

To give a better understanding of the concept of human resources accounting, various researchers have defined it from various points of view which include the following:

Human resources accounting has been defined as a process of identifying, measuring, and communicating information about human resources to relevant users. This definition sees human resources accounting as an accounting system recognising human resources⁵³.

Another definition sees it as an information system that provides management with information on transformation occurring to the human resources of a business organisation for a particular period⁵⁴.

Human resources accounting has also been seen as a means of accounting for people as an organizational resource that is, as a means of identifying, measuring, and communicating the potential, abilities, and knowledge of employees in an organization and their cost and value to assist interested parties with important information for human resources decision making. Human resources accounting assists in calculating the human resource capital (as long-term investments of the company) worth of management development and enhances the value of management accounting¹⁹. It also encourages the disclosure of human

resources information in financial reports thereby providing clearer and more useful information to interested users⁵⁰. Human resource accounting attempts to identify the costs incurred on employees concerning recruitment, training, payment of salaries, and other benefits and their contribution to the profitability of the organization¹⁷.

Human resource accounting which is otherwise known as human asset accounting has also been described as an information system that identifies, captures, measures, and analyses the abilities and values of human resources in an organization and makes information available to the interested parties⁵⁵. It is viewed as the measurement process which discloses the cost and value of employees in the financial statements of an organisation so that the true value of the organization can be ascertained to assist the various users of the financial statements in making their respective decisions⁴².

Based on the definitions provided, this study defines Human Resource Accounting as the systematic measurement and disclosure of the costs and benefits associated with human resources within an organization in the financial reports of the organization, with the aim of accurately reflecting the organization's true value and providing interested parties with the necessary information for informed decision-making.

2.1.7.1 Objectives of Human Resources Accounting

The following are some of the objectives of human resources accounting

- (1). to determine if human resources are making a return on investment of the investors in an organization or not⁴⁵.
- (2). to provide cost and value information on human resources^{45, 54, 57, 58}.

- (3). to provide information for decision-making on acquiring, allocating, training, developing, promoting remuneration, and maintaining human resources and to guide management in achieving cost-effective objectives^{45,54,58,59}.
- (4). to assist in the development of management principles by revealing the financial consequence of various practices⁵⁹.
- (5). to provide a basis for human assets control thereby improving the profitability of the organisation, for example, appreciating or depleting^{54, 59}.
- (6). for effective monitoring of the use of human resources^{45, 58, 59}.
- (7). to provide valuable information on the actual cause of the low return on investment, like underutilisation of physical assets or human resources or both⁴⁵.
- (8). to encourage the provision of information on human resources to potential investors and financiers^{45, 54}.
- (9). to help each employee to know his contribution to the organisation considering the expenditures incurred on him by the organisation and improve their performance and bargaining power when necessary⁵⁸.
- (10). to aid human resources analysis at different levels and development of measures to control them^{45, 58}.

2.1.7.2 Classification of Human Resources-Related Costs

Costs of human resources can be classified as follows:

- Capital expenditure
- Revenue expenditure

Capital expenditure includes costs that can generate returns that will exceed the current financial year. This comprises acquisition costs, recruitment costs, development costs, retention costs, and training and re-training costs. Revenue expenditure includes costs that are used up in the current financial year. This comprises salaries and wages, commission, bonuses, short-term motivation, and allowances. While revenue expenditure is charged to revenue in the statement of comprehensive income. Capital expenditure can be treated as an investment in human assets under intangible assets³⁵.

2.1.7.3 Valuation of Human Assets

In conventional bookkeeping practices, financial transactions are recorded in the book of accounts, whereas human resources are not recognized as assets in the accounts. Several proposed methodologies exist for quantifying the financial worth of human resources, but none have achieved widespread consensus¹⁷.

The methods include

(i). Historical Cost Model /Method.

The historical model or technique was formulated by Brummet Fand, W.C Pyle, and Eric Flamholtz^{54, 60}. The cost encompasses expenses related to the recruiting, selection, hiring, training, and development of staff^{17, 60}.

In this approach, the capital expenditure on the asset is spread out throughout the anticipated lifespan of human assets through the process of amortization^{54, 51}. The costs function as investments and are anticipated to generate returns by leveraging the utilization of the employees^{17, 54}. If an employee departs before their scheduled time, any outstanding amount will be considered a loss and recorded as an expense in the profit and loss account. Nevertheless, determining the precise lifespan of human assets and the rate at which costs

will be amortized is a challenging task. The historical cost of personnel is often regarded as a form of fixed tangible assets¹⁷.

(ii). Replacement Cost Model

This method was developed by R. Likert and E.G. Flamholtz⁶¹. The cost encompasses expenses related to job posting or advertising, recruitment, training, placement, administrative fees for pre-deployment of an employee, travel, and interview costs spent when replacing an employee with someone of equivalent capability^{17, 51}. The approach entails initiating a new company and allocating funds from the beginning to recruit people, in the event that any staff replacements are necessary. This approach relies on appraisals of the present market worth or the expenses that would be required to replace the current personnel with individuals possessing equivalent skills and abilities⁵⁴. This method proposes an existing valuation of human assets⁶⁰. Determining the replacement cost of an employee can be challenging, because this cost does not reflect the employee's level of skill⁵¹. This cost is more reliable as it considers the current value of the firm's human assets in a financial statement. It is proven to be inefficient for the firm to substitute the knowledge competencies of employees¹⁷.

(iii) Opportunity Cost Model or Competitive Bid Price Method

Hekimian and Jones devised the opportunity model⁵¹. This strategy is applicable to human resources that are limited in quantity⁶⁰. This examines the overarching notion of economic opportunity cost. The market value approach is an alternative name for it. The opportunity cost is determined by comparing the job offer of an employee to that of a competitive organization^{17, 54}. In this approach, opportunity costs are regarded as an asset value when they are directed towards an alternative purpose⁵¹. However, quantifying future economic advantages might be difficult in practical terms⁶¹.

(iv). Standard Cost Model

The standard model or method was devised by David Watson⁶². Human assets are categorized into categories depending on their job position and managerial levels. The monetary value is then determined based on the category they belong to¹⁷. In this approach, the predetermined cost of recruiting, training, and developing employees of each grade or category is established and then compared to the actual costs incurred after hiring and replacing them. Any variance is charged to the profit and loss account⁵. An inherent drawback of this strategy is its failure to account for variations in the performance of personnel within the same group.¹⁷

(v). Competitive Bid Price Method

Hekimian and Jones introduced the method of competitive bid pricing⁵¹. This method was devised to surpass the constraints of the replacement costs method⁶⁰. This strategy only considers scarce workers or employees. The individual in question is assigned to the department that has made the highest bid, which must be included in the total investment cost⁵¹.

(vi). Current Purchasing Power Method

Under this method, investment in human assets or workforce is converted into the current purchasing power of money with the help of an index number⁶⁰.

(vii). Economic Value Model

This approach proposes assessing the group's value by quantifying their contribution to the overall economic value of the organization. In this approach, the projected future earnings will be subtracted from the present value of the organization, and a portion of the earnings will be allocated to human resources as compensation for their contributions¹⁷. In this

sense, economic value refers to the present value of the net cash inflows generated by a company's human resources during their economic service life⁶⁰. Certain authors employed the economic value method as a means of determining present value, while others utilized it in conjunction with the opportunity cost approach⁵¹. The payments made to human resources until their retirement are computed and discounted accordingly to determine their current economic worth⁶³.

(viii) Goodwill Model

Hermanson established the goodwill model. The organization places importance on group estimates and attributes its above-average earnings to the undisclosed value of its staff, resulting in additional returns¹⁷.

(ix) Present Value of the Future Earning Model

This model was developed by Lay and Schwartz^{17, 64}. The model defines the human resources of a corporation as the total value of the net present value of expenditures on personnel⁵⁴. It calculates the current worth of the employees' contribution during their tenure at the organization. The current value of an individual employee is defined as the collective future contributions they are expected to make during their tenure in an organization¹⁷.

The human capital embodied in an individual of age "r" refers to the discounted value of their future earnings from employment.

This methodology utilizes the following procedures to ascertain the value of human resources:

- the labor force is categorized into same groups: skilled, unskilled, and semi-skilled.
- calculating the present value of human resources for each group by applying a predetermined discount rate to the average earnings.

- gathering the current worth of several categories, which symbolize the future earnings of the organization that have been converted into capital.

Let " V_r " represent the value of an employee who is r years old. $I(t)$ represents the employee's total annual wages till retirement. t represents the retirement age. The variable " r " represents a discount rate that is specific to the cost of capital for the company⁵⁴. This method is intricate as it is based on certain assumptions, such as the employee's contribution to the firm, the rate at which the amount is discounted to compute the current value, and the estimated duration of the employee's tenure in the organization¹⁷.

(x) Reward Valuation Model

This is an improvement on the present value of the future earnings model⁶⁴. The reward model or method was developed by Lay and Flamholtz^{17, 64}. Its attention is on human resources accounting costs rather than human resources accounting value⁶⁴. It considers that the employee's expected conditional value is equal to the expected reliable value if he is to remain in the service of the organisation throughout his lifetime¹⁷. It takes into consideration the possibility and probability of an employee's movement from one role to another in his career and of his leaving the firm earlier than his death or retirement⁶⁴. The model was also based on the assumption that human resources will generate value as they grow and move hierarchically in the organisational roles providing service to the organisation¹⁷.

Also, under the earning approach, various methods of human resources valuation developed based on present value by different authors are as follows:

- 1) Present value of future earning model developed by Lay and Schwartz in 1971
- 2) Net benefit model developed by Morse in 1973

- 3) Reward valuation method by Lay and Flamholtz in 1971
- 4) Certainty equivalent net benefit method by Pekin Ogan in 1976
- 5) Aggregate Payment approach by S. Chakraborty⁶⁴.

2.1.8 Gross Staff Cost

Staff costs form a major part of an organization's functional costs. Mostly these costs include salary, wages, allowances, contribution to provident fund, training and development expenses, uniform allowance, medical allowance, insurance premium, pension and gratuity paid by the employer on behalf of an employee. It impacts the overall operational profitability of the business due to its running nature. The amount of staff costs incurred by organizations depends on the organizational policy, management's understanding of the welfare of its employees, and several other variables affecting the entity⁶⁵.

Labour costs can arise from

Wages or salary

Overtime payment

Bonuses

Holiday payment

Sick Payment

Payroll taxes

Employee earnings can be considered from the following points of view:

1. The payment of a constant amount weekly or monthly. This is straightforward to calculate: it can be represented as Labour cost = earnings per period multiplied by the number of periods

2. Employee earnings can also be an amount calculated based on hours worked (basis plus overtime)

Many organisations pay wages and salaries under a pay-as-you-earn plan which implies that the employer removes the employees' income tax from the gross wage and pays the amount directly to the tax authority. Only the amount remaining after tax is now paid to the employee.

The amount earned by the employee is the Gross pay. The amount the employer pays to the employee after deducting the income tax and other statutory amounts is the net pay. While the gross amount the employer must bear including the payroll taxes, pension costs comprise the total labour cost to the employer⁶⁶.

2.1.9 Number of Employees

Manpower is essential in any organisation⁶⁷. Manpower influences everything in a business from production to client connections. Without adequate and supportive manpower in an organisation, the organisation is not likely to be successful^{67, 68}. The staff should be well trained on their tasks while managers should know how to lead⁶⁸.

The connection between the operations of a company and manpower is important. Manpower has a corresponding relationship with productivity. A well-managed supply of manpower can improve the efficiency and productivity of an organisation^{67, 68}. With more workers available on a job, the faster the jobs will be completed. However, when a business organisation lacks sufficient manpower, it is hindered from accomplishing tasks. This means a reduction in profit and revenue and in so many cases this means that the

company is not operational and lacks productivity. Lack of productivity reduces profits and affects the reputation of an organisation which may result in business failure. The more staff you have on assignment, the faster the task can be done ⁶⁸.

Manpower for businesses can be outsourced or provided internally⁶⁷. Some companies outsource manpower to have sufficient workers. Workers will not need to work excess hours, the workload assigned will be more suitable because more people are available to handle tasks. Workers will not have stressful times because they have more time to rest. There will be more time to comply with safety policies and regulations since enough workers are at work. Companies can avoid problems like injury and burnout when enough workers are available, also workers' compensation and lawsuit claims can be reduced. A good manpower service gives room to companies to deliver promises made and keep a smooth flow of production ⁶⁸. They contribute to the cost and efficiency of work and ensure that deadlines are met^{67, 68}. Companies that are involved in manpower services can maintain and establish good client relationships. When organisations keep to their promises, it can lead to additional sales and prevent payment of fines and penalties thereby, keeping profits higher⁶⁸. Companies can set up and maintain good relationships with their customers if they can ensure good manpower to keep the production and delivery promises they make. This in turn will generate more sales and more revenue for the company^{67, 68}.

Sometimes employers tend to abuse the power that the employer/employee relationship allows. If there is an adequate amount of manpower in an organisation, employees will be in a better position to come together and lobby for better treatment if they are treated unfairly⁶⁸. Adequate manpower in an organisation opens an organisation to different options in its mode of operation. It allows flexibility in how employees cover shifts. Adequate manpower enables organisations to have people to fill up relevant positions. Companies with more workers have strong teams and employees can share their opinions

and ideas due to diverse kinds of skills, knowledge, and abilities thereby, problems are easily solved ⁶⁷.

2.1.10 Development Costs

Development costs include costs incurred to enable employees to participate in development programmes to enrich their faculties. The programmes can be in the form of ordinary lectures, international conferences, and seminars. The participants can relate with other executives on a national and international level. The costs can include delegate fees, travel costs, loss of output during the development programme and so on which are to be accounted for as a human resource investment⁵¹.

Development is an act of trying to build the ability of an organization to achieve and sustain a new desired state that benefits the organization and its community⁶⁹. The development also involves activities leading to the acquisition of new knowledge or skills for growth. Organizations provide employees with development programmes to enhance their capabilities^{69, 70}. Employee development enables an increase in the market value of an organization. It also increases earning power and job security⁶⁹.

Development helps in planning and preparing employees for upcoming jobs and likely problems⁷⁰. Development involves the introduction of new ideas into the social organisation leading to changes in the patterns of the organization and social structure. It has also been described as a means of increasing the growth of employees along with that of the company so that they can be suitable for available better positions within their ability⁶⁹.

The concepts of training and development are freely used as substitutes. However, one can be differentiated from the other. Training is for specific job purposes while development

goes beyond specific⁷¹. It is a short-term process, utilizing a systematic and organised method by which non-managerial personnel learn technical knowledge and skills for a particular purpose, while development encompasses activities that enhance job performance and the growth of personality. Development is a continuous process. It can be described as a long-term educational process utilizing a systematic and organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose⁷².

Development deals with improving human and interpersonal relations. In the present business environment, employee development is gaining an increasingly critical and strategic command in organizations so, organizations need to invest continually in employee development to maintain employees as well as the organization's achievements⁶⁹.

Training is an organized method by which people learn and acquire knowledge and skills for a current role and a recurring process of helping employees perform at a high level. It also increases human efficiency and provides people with the opportunity to gain specific skills and knowledge necessary for carrying out various specialized tasks in their respective workplaces. Development, on the other hand, is the process of becoming elaborate and distinctive. It prepares employees for future roles and assignments⁷¹.

Individual educational attainments are not only part of an organisation's development but also a part of a community's major assets. In some communities, subsidies for education are mainly based on the assumption that organization investments in employees' education will strengthen the entire organization by enhancing employees' performance. Education affects employees' performance. When education does not build employees, it is simply an expenditure. Education is the process of building employees to get the required knowledge and skills at work⁶⁹. Employee development includes many forms of ongoing education,

mentoring, and professional experiences that help employees grow into future roles and opportunities. If applied correctly, the training on employee performance can often encourage growth within the worker and the organization itself⁷¹.

Training is the procedure which allows an employee to learn to develop the skills, competencies, and knowledge required for a particular job, while development is the process of education that aims at the general growth of the employees⁷². Career development reduces the risk of losing its valuable staff and is concerned with the potential of employees and the situations in which they are now after a lifelong process of raising and nurturing an individual's working life to make the best use of inherent talents, skills, knowledge, and interests for that individual. Workers can grow in their chosen careers, be successful in their careers, or reach the peak of their careers⁶⁹.

2.1.11 Training Costs.

This refers to costs incurred by an employer to enrich the employee with the required skills and knowledge to enable him to provide the expected level of performance⁷³. Some studies have revealed that employee training has a positive effect on organizational performance. It was found that it has a major impact on the execution of an activity and improves performance. Its impact includes an increase in overall employee efficiency, where employers and workers can offer the best of their efforts by educating each other and benefiting from each other⁷⁴.

In this respect, training has recently received great attention from the management of private and public establishments, as it is considered the main element for bringing about development and change that the establishment seeks to reach. It enables workers to carry out their work efficiently and effectively while incurring costs that may be large. However, the returns that can be reaped from the success of training and development programs often

exceed what is spent on them⁷⁵. Employee training is a necessary aspect of a company's activities toward the production of a skilled and dedicated workforce that can differentiate the company from its competitors. It also encourages the habit of continuous learning, improves employee satisfaction and loyalty, and helps the company stay above the competitors. The survival and success of a business in the market depend on proper training as a tool that can help in gaining competitive advantages⁷⁶. Employees with adequate training feel good that the organisation is investing in them and their careers. This motivates them to engage better with colleagues and customers. This may also increase the probability that they will stay. Training has been seen as a process by which employees are recruited selected and motivated within an economic system. Human resources are the most valuable assets of any organization, with the machines, materials, and even the money nothing gets done without manpower⁷⁷.

Training is a systematic development of the knowledge, skills, and attitudes required by employees to perform adequately on a given task⁷⁰. Employee training and development are seen as an important formation of any competent management due to the increasing technological sophistication of this time. Computer technology has made training necessary for organizations to meet changing situations⁷⁸. Human capital development through investments in education, information technology, skills, and productive labour is quite essential for the economic growth of a nation. Training for capacity building is important to sustaining economic growth and development because human capital is the greatest asset of any organization. Capacity building entails investment in human capital, institutions, and practices necessary to enhance human skills, overhaul institutions and improve procedures and systems⁷⁹.

The training proves to be a means of enhancing the ability of the workforce to achieve organizational objectives. A good training program results in the conquering of the

essential goals for the business. Hence, training is significant for giving a dynamic approach to the organization. This is possible only because of improved quality of work life through the implementation of training programs⁸⁰.

Training of staff is significant to the success of an organization. Physical, social, intellectual, and mental training are essential in facilitating not only the level of productivity but also the development of personnel in any organization. As jobs are becoming more complex, it is more important for employers of labour to train their workers than when jobs were simple and little technical knowledge was required from the workers. They need to perform their jobs effectively, take on new responsibilities and adapt to changing conditions⁸¹.

A well-trained and developed staff is always an asset to the company and increases the chances of their efficiency and effectiveness in discharging their duties. Training is a learning experience that can make positive changes and reach the desired objectives of the organization. It enables the employee to perform the job more efficiently. Training and development programs are the necessary structural and functional foundations for the development of employees. These foundations are important for guiding employees through different situations. Training and Development programs are the frameworks for helping employees to develop their personal and professional skills, knowledge, and abilities⁸⁰.

The training seeks a planned, coordinated, and conscious manner to develop in the employees those understanding, skills, and attitude, which will maximize individual's present and future efficiency and effectiveness of the overall company operations. Training is a form of specialized education aimed at giving the trainee a particular or specialized knowledge, skill, and attitude that he must possess to effectively perform in a specific

position. It helps the workforce adapt flawlessly to new technology thereby increasing the efficiency and productivity of individuals and organizations^{82, 83}.

2.1.11.1 Why Training is Needed.

The main aim of the training is to provide and improve the necessary skills to help organizations achieve their goals and create a competitive advantage by adding value to their main managers. Training is a learning action targeted toward the acquisition of specific knowledge and skills for an occupation or task. The need to have efficiency and safety in the operation of a particular machine or equipment or the need for an effective sales force is another goal⁷⁰.

Training reduces organizational liability. By ignoring this responsibility, you could face legal repercussions, an increase in workplace accidents, decreased staff morale and an increase in staff absence⁸³. Certain jobs require training and certification for an employee to successfully execute the minimum job requirements related to a position. The proper and accurate documentation of employee development before or during the employee's completion of their job cannot only help follow and develop training but can also limit liability in the case of human error on the part of these employees⁷¹. Influencing an employee's motivation and commitment requires effective training programs as training improves the desired knowledge, skills, and abilities of the employees, to perform well on the job⁷⁰. Apart from supporting the organization, employees might recognize that most types of employee development initiatives provide them with benefits. Employee development programs that range from certification to education reimbursement, also to basic job skills training, mean a certain cost to the organization but, that can easily be considered a benefit to the employee. Such awareness on the part of the employee can also lead to greater loyalty to the organization as well as enhanced job satisfaction⁸⁴.

Employees bear the primary responsibility for the majority of activities that have the potential to impact client satisfaction, product quality, and events. They have the ability to establish or dismantle their organizational reputation and success⁷⁰. It is imperative for employees to consistently upgrade their job skills in order to augment their production. Enhancing employee abilities has a significant impact not just within the workplace but also on a global scale. Training and development play a crucial role in enhancing the personal growth of employees and fostering the socioeconomic progress of the nation. Consequently, contented employees yield favorable business outcomes, such as heightened productivity for the corporation. Contented employees may exhibit higher levels of productivity, but, employees who are more productive tend to experience greater levels of happiness^{83, 85}.

Currently, the advancement of global trade and frequent technological advancements have resulted in a rise in the degree of rivalry among enterprises. Consequently, there is a pressing requirement for firms to provide thorough training to their personnel, equipping them with the necessary education and skills to ensure safety and enhance production. Inadequately trained personnel are prone to have a sense of being undervalued, leading to a decrease in workplace productivity, loyalty, and engagement⁸³. The rapid evolution of technology in both manufacturing facilities and corporate workplaces has necessitated the acquisition of skilled labor, therefore making it imperative to provide training for their personnel^{83, 84}. Training is essential in situations involving transfer, promotion, changes in work schedules, job delegation, job enlargement, and staff rotation⁸⁴.

As the workforce becomes more trained, the business will be more equipped to respond to changes in the domestic and worldwide economy, specifically in the demand for its products and services. Employees may be hesitant to embrace change due to the inherent uncertainty it brings. Therefore, it is crucial to enhance the skills of the workforce and

allocate more resources to education and training in the labor market^{83, 84}. Training becomes imperative when scientific advancements lead to the development of new products and equipment. Scientists and inventors need increasingly extensive training to reach the forefront of their respective industries⁸⁶. Training is necessary when there is a discrepancy between the current performance of an individual or a team of employees and the desired performance. Employers require their employees to consistently acquire new skills to enhance their capital. Organizations often allocate significant funds towards improving their facilities and machinery. However, without providing personnel with ongoing training, the utilization of state-of-the-art equipment will not be optimized⁸⁴.

Enhancing the abilities of graduates to be employable is regarded as a fundamental obligation within the firm. The talents that businesses and the market are looking for in graduates vary among employers and countries⁸⁷. Many new employees are regarded to be unprepared to perform the job they may confront in their workplace, regardless of their technical or professional educational qualifications. Hence, it is imperative to provide training and retraining programs for workers to effectively perform new tasks and adapt to evolving technology. In order for a business to successfully accomplish its goals, it is necessary to consistently evaluate the training of its workforce to ensure their efficiency and effectiveness across the entire organization⁷⁰.

Training contributes to the reduction of operational expenses in businesses. Organizations that allocate resources to enhance their employees' skills and abilities tend to experience reduced expenses related to hiring and staffing, as well as lower overall general and administrative costs⁸⁸. Employees that undergo training aligned with their specific individual or organizational objectives are anticipated to exhibit enhanced efficiency in their work. Organizations should evaluate the favorable impact of training on employee performance and view employee development as a strategic investment in enhancing the

capabilities of workers. Specifically, organizations should prioritize training programs that equip employees to become trainers of skills that can yield significant advantages for the organization. This training encompasses a wide range of topics, including improving employees' job performance and preparing them to take on leadership roles in lieu of their supervisors. Furthermore, employees who assume the role of trainers may be more motivated to remain with the firm, perhaps leading to a decrease in employee turnover⁸⁴.

2.1.11.2 Types of Training

There are various types of training the two major ones are:

- (i). on-the-job training,
- (ii). off-the-job training⁸⁹.

Engaging in on-the-job training would enhance the acquisition of job-specific skills and information, hence augmenting the probability of fostering creativity⁹⁰. Recently hired employees may undergo on-the-job training to familiarize themselves with job expectations and acquire the essential skills for their new position⁸⁴.

On-the-job training encompasses the activities conducted within an individual's workplace to cultivate job-specific knowledge and abilities necessary for employees to effectively carry out their assigned tasks. It utilizes the standard tools, machinery, records, equipment, information, and abilities necessary for an individual to acquire in order to proficiently carry out their job. A colleague who possesses comprehensive expertise in a certain task can instruct his other colleagues on that duty. However, in certain cases, an external trainer may be required to provide on-the-job training when working with specialist equipment. The primary objective of on-the-job training is to impart workplace skills and instill workplace culture and performance expectations in the newly hired employee⁸⁹. On-the-job training can enhance the likelihood of success for recent graduates during job interviews

and enable them to effectively fulfill their assigned responsibilities. Additionally, it provides increased chances for individuals lacking the requisite skills to be hired and receive on-the-job training⁸⁷.

On-the-job training serves as a source of motivation for new employees, encouraging them to engage in their work. Several research have indicated that individuals acquire knowledge effectively when they learn through direct experience. The majority of employee learning is primarily achieved through a meticulously crafted on-the-job training program, which includes:

- Coaching is a form of on-the-job training where learners are assigned to a specific supervisor who guides, evaluates, and offers feedback to the trainee.
- Mentoring: This entails a one-on-one engagement between a more experienced employee and a junior employee. It focuses on the development of one's mindset.
- Job rotation refers to the practice of providing employees with training in various job assignments, allowing them to acquire diverse job abilities.
- Job instructional training entails the trainer providing the learner with detailed instructions in a sequential manner.
- Apprenticeship: This is a structured approach that combines classroom instruction with hands-on training, closely supervised and monitored.
- Understudy: This entails a subordinate acquiring knowledge and skills through firsthand experience and observation under the guidance of a superior by actively participating in daily operations⁸⁹.

On-the-job training is given at the workplace, whereas off-the-job training is delivered outside of the work environment. This minimizes work-related stress and dissatisfaction while improving focus solely on learning. Off-the-job training refers to a specific sort of

training that takes place at a location separate from the regular work environment for a designated duration. Off-the-job training encompasses several methods such as lectures, seminars, and cinematic role-playing⁹¹.

2.1.11.3 Benefits of Training

The training imparts knowledge to the employees for the proper execution of the programs of the organization for the development of a profitable, adaptable as well and efficient organization and productive and contented employees. It helps to improve employee performance in the present Job⁸⁴. Training influences quality. It provides employees with skills that improve their performance. As human performance improves, business performance also expands. Training improves the job knowledge and skills at all levels of the organization and provides information for future needs^{84, 92}.

Training is cost-saving. The level of turnover is reduced due to employee training. Investment in employee development lowers recruitment and staffing costs leading to an overall decrease in general and administrative cost⁸⁸.

Training leads to an increase in the quality of goods and services. As a result of potentially fewer mistakes, accuracy, effectiveness, good work, safety practices, and good customer service can be anticipated⁸⁴. An intelligent and well-trained workforce is central to both productivity and the success of an organization as training enhances productivity and quality of work⁹³. Training aids in developing leadership skills, motivation, loyalty, better attitudes, and other aspects that successful workers and managers usually display. It helps individuals make better decisions for effective problem-solving. It leads to improved

profitability, customer valuation and or more positive attitudes towards profit orientation and improves the morale of the workforce⁸⁴.

It helps to increase the morale, confidence, job satisfaction, and recognition of trainees thereby moving a person towards personal goals while improving interaction skills. It also provides trainees with an avenue for growth in his/her future careers Training helps to reduce fear in attempting new challenges or risks and aids development for promotion from within^{84,94}.

It also helps to reduce operational problems such as accidents, high labour turnover, poor customer service, waste, and maintenance costs. Well-trained workers need little supervision – they need not be told what to do in every situation⁸⁴. Training introduces employees to new ideas and techniques, improves customer service and enhances the image of the organization. Training helps organisations to meet needs for certain types of skills without going out to recruit since training improves the standard of performance, quality of workmanship, and morale of workers, and helps to increase the production and profits of the organization^{84,93}.

A highly skilled and motivated workforce is created when an organization conducts training and development programs and applies them. Training is used to get a distinguished place among rivals. Training reduces the difference between the current performance of employees and the performance desired. Employees who take part in training programs are highly functional and their performances are improved as compared to those who show no or little interest in training and development programs. With the changing world, employee satisfaction and expectancy are also changing. If the employees are satisfied with their job in the company, they will make efforts to bring some innovation

and creativity through good performance which will give the company significant developments in these changing market conditions⁷⁰.

Investing in training and development is necessary for any organization, which will certainly realise a return on investment. Any business organisation that ignores this part of human resource management is bound to face the consequences⁸³. Investing in employee training and education is important in today's competitive marketplace. Companies that fall behind in the development of their human resources are likely to fall behind in countless other ways as well. Changes occur very often in organizations, in tasks, and in the way they are performed. Nowadays, managers need to help people grow in confidence and develop new skills to cope and adapt to the challenges of change. Workers are necessary assets to an organization and should therefore be treated as human capital. The implications of more investment in the employees would raise expectations from them in terms of performance. Human resources represent the human factor in the organisation. Their improved skills and behaviour will lead the organization to its competitive edge⁹⁵. The combined intelligence, skills and expertise of employees give the organisation its distinctive characteristics. The human elements of the organization are those that are capable of learning; striving for change, innovation, and creativity, which if properly nurtured will ensure the long-term survival of the organization. Manpower training and development are interrelated processes whose importance cannot be overemphasized in strategic human resource management as this relates to a series of activities, an enterprise needs to engage in to enhance the quality of its managerial capital⁹⁶

2.1.11.4. Factors Influencing the Effectiveness of Training

Several factors impact the efficacy of training. Management's opinion of training is a crucial determinant of job training. Managers are responsible for creating a favorable

environment for learning and training, devising effective training strategies, and overseeing training situations⁹⁷. Valid training needs are another aspect that influences the effectiveness of training. Training is necessary when there is a discrepancy between the skills needed for a job and the skills currently possessed by an employee. Whether the training will be applied to the job relies on the extent to which the training content, objectives, and techniques are deemed necessary for effective training. If a training topic is genuinely a training requirement, learners will demonstrate active participation and a willingness to acquire and apply the new subject matter in their professional environment⁹⁸.

In order for training to be successful, a trainer must possess the ability to communicate proficiently, facilitate effectively to ensure the learners' goals and expectations are fulfilled, deliver material in a clear and compelling manner, and make the knowledge engaging. In order to be effective, a trainer must provide a secure and captivating learning atmosphere, ensuring that learners remain engaged and making appropriate adjustments as needed⁹⁷. Learning objectives are crucial for ensuring effective training. Well-written and unambiguous learning objectives facilitate the instructor in guiding discussions and aiding students in comprehending their expected tasks. Students who possess a clear comprehension of the expectations are more engaged and demonstrate a willingness to exert effort in the pursuit of an objective. A learning objective must clearly define the specific actions or achievements that learners are expected to demonstrate upon completion of the program. In order for effectiveness to be determined, there needs to be a quantifiable standard and specific performance requirements⁹⁸.

In order to undergo successful training, a learner needs possess both readiness and willingness to acquire new skill. Adult learners are particularly renowned for their inclination to inquire about the rationale behind acquiring knowledge. They consistently display a strong desire to witness the instant advantages of utilizing the newly acquired

abilities, resulting in heightened emotional commitment and degree of involvement. It is necessary for them to maintain an emotional attachment to past experiences that are relevant to new information⁹⁷.

Training refers to the deliberate and systematic process of modifying behavior through learning events, activities, and programs. The ultimate goal of training is to enable trainees to acquire the necessary information, skills, competencies, and abilities to effectively perform their work⁷⁰. In order to facilitate the successful transmission of knowledge, learners must possess both the capacity and the drive to excel. It is essential to provide learners with ample opportunity to apply the training, and they must comprehend the advantages and credibility of the instruction. Learners must perceive that a modification in behavior will result in a highly regarded consequence or an enhancement in their job⁹⁷.

Organizations should prioritize the variables that enhance employee performance, as it is a crucial component of an organization. The employee is a crucial element of the firm, and its success or failure hinges on the performance of the employees. Individuals employed within an organization contribute to the formation of a workforce, which must possess sufficient expertise to successfully fulfill the objectives of the business. Training and development programs are implemented to cultivate and enhance the skills of the workforce, enabling them to function at a high level of proficiency⁷⁰.

2.1.12 Welfare Costs

Employees are individuals who have willingly entered into a contractual agreement to provide their services in exchange for compensation⁷¹. Compensation in a service agreement typically encompasses remuneration, such as wages, salary, commission, and piece rates. Employee welfare in modern times encompasses the various initiatives undertaken by employers to offer additional amenities and services to their employees, in

addition to their regular compensation. Welfare facilities are crucial for the well-being of the company since they have a direct impact on the efficiency of the workforce³⁹. Research has shown that providing employee welfare benefits can increase employee engagement and promote staff motivation and performance in many firms⁴.

Research has shown that implementing welfare practices can improve employee performance, leading to the success of the firm. Welfare is defined as the endeavors to ensure that the lives of employees are bearable. Employers provide a range of services, perks, and amenities to employees, enhancing their quality of life⁷². The employer has the responsibility to create a favorable environment for the employees to carry out their tasks. It is essential for optimal health and strong morale. The cost encompasses the expenditures borne by the employer for the provision of welfare amenities like as canteens, washing and restroom facilities, drinking water, medical facilities, recreational facilities, leave travel facilities, and so on³⁹. The well-being of employees is a crucial element of human resource management, as it plays a significant role in shaping their dedication towards achieving goals in both private and public service organizations⁹⁹.

Dedicated employees are valuable to a business due to their helpful nature and higher productivity compared to employees that lack commitment¹⁰⁰. Employee welfare encompasses the evaluation and supervision of the work environment and factors that can impact the physical and emotional well-being of employees. The success of a business is determined by its productivity and profitability. Therefore, a business can be considered successful if it prioritizes providing its employees with a favorable work environment, healthcare benefits, sufficient food, and paid holidays⁴. Employees' welfare encompasses all non-monetary benefits and initiatives undertaken by an organization to enhance the well-being and convenience of its employees, outside their salaries¹⁰¹. Ensuring the well-being of employees is crucial for maintaining their high morale and motivation, which in

turn promotes employee retention over an extended length of time¹⁰². The welfare initiatives might take various forms. They can be expressed in either financial or non-financial terms¹⁰¹. Employees' welfare encompasses the establishment or development of healthcare facilities, as well as insurance coverage for workers and their families in the event of accidents or illnesses. Employees currently associate good companies and jobs with stable employment, competitive earnings, salary bonuses, favorable working conditions, and the potential for comprehensive welfare and benefits. Failure to provide these factors is likely to undermine their dedication to their responsibilities⁹⁹.

Welfare practices refer to the systematic efforts made by organizations to provide employees with a sense of comfort and well-being. It is also known as the quantity of social and intellectual practices or policies implemented by the firm to enhance employee performance⁴. The following benefits have contributed to increased employee engagement in many firms, resulting in improved employee motivation and performance¹⁰¹. Various facilities, services, and amenities are provided to enhance the well-being of the workforce. Welfare policies have been found to establish industrial relations and provide insurance for workers, ensuring a safe working environment and protecting people from diseases, unemployment, and accidents¹⁰². An individual who experiences happiness within their team tends to have a strong dedication and concentration towards their work, resulting in high levels of productivity⁸⁵.

These welfare programs were discovered to be advantageous for the families of the employees, offering them improved financial assistance despite their modest income. The financial advantages granted also include post-retirement financial compensation for employees. This facilitates employees to sustain long-term employment in these organizations, resulting in an observed increase in their level of engagement. Companies that offer limited benefits in terms of pension and healthcare services tend to have

employees who are less committed and have greater rates of absenteeism. An employee is more likely to experience job satisfaction when they are provided with a favorable working environment and comprehensive health and safety measures in their firm. Employee welfare is a fluid term that has the potential to enhance an organization's productivity⁴.

It is vital for employees to comprehend that they are encompassed by social welfare and possess a legal entitlement to acquire a certain type of social assistance. These advantages should be distributed without any discrimination or injustice¹⁰³. Implementing employee welfare measures enhances organizational productivity, fosters motivation, and cultivates positive relationships inside the organization. This, in turn, helps to preserve industrial harmony and reduce staff turnover, resulting in longer employee retention¹⁰².

A well-managed and regulated workforce facilitates firms in attaining their goals. Employees who are sufficiently motivated comply with company regulations and procedures to ensure the efficient operation of businesses. When employees experience high levels of satisfaction and actively contribute to the productivity of the business, this will have a favorable effect on the financial performance of the organization. The implementation of employee welfare practices can function as a catalyst for attaining a predetermined objective. The management of an organization is making attempts to address the demands of their workforce in order to enhance their productive capability⁸⁶. Employee welfare practice is a strategic approach aimed at attaining organizational objectives while simultaneously meeting the needs of employees. There are effective factors that inspire employees to enhance their performance, and welfare packages are seen as a significant incentive for improved performance. It may take the form of supplementary remuneration for employees. Employee welfare refers to the systematic recognition and appreciation of employees' societal position, as well as the implementation of strategies to enhance employee motivation and retention. The traditional objective of employee welfare

services was primarily to mitigate absenteeism and sick leave. However, contemporary workplace employee welfare encompasses a broader scope, encompassing all facets of employee well-being, as well as personal and professional growth⁴.

Additionally, it manages many tasks such as maternity benefits, social insurance, gratuity, pension, rehabilitation, family planning, employee child welfare, housing, and more. The scope of this initiative encompasses the surveillance of working conditions, the establishment of health infrastructure, the promotion of industrial harmony, the provision of insurance packages, and collaboration on diverse services, facilities, and amenities to enhance the well-being of employees¹⁰⁴.

Welfare is distinct from employees' standard salaries, lawful financial advantages, and group negotiations. Employee welfare is to enhance and cultivate highly efficient and productive employees. It plays a crucial role in promoting social well-being by harmonizing job, family responsibilities, and social interactions. The health of employees is strongly correlated with their work performance and the productivity of the firm. Employers can enhance employees' well-being by implementing health protection measures and offering comprehensive medical benefits programs. Employees should have the right to receive remuneration for sick leave, which can be accrued and utilized in the event of a severe sickness. While several firms permit this practice, others offer alternative incentives for unused sick leave, such as providing financial compensation to employees who do not utilize sick leave and granting additional remuneration for refraining from using sick leave. The provision of welfare services has a direct impact on the productivity and efficiency of a workforce, and the workforce itself has significant importance. Providing proper care to employees can enhance a company's overall effectiveness. Employers have the obligation to ensure the well-being of their employees⁵. Employee wellbeing is essential since it enhances productivity and motivates employees to strive for

company objectives. Given that employees serve as the catalysts for job performance, it is imperative to prioritize the well-being of each individual⁴.

There is a discovered correlation between health and working productivity¹⁰⁵. Workplace accidents can result in decreased production as wounded employees require time off to recuperate, particularly when the injured employee has a crucial position within the organization. In addition, other colleagues may be required to assume additional responsibilities, resulting in heightened workloads and the possibility of experiencing burnout. It substantially increases the expenses for employers, resulting in a major decrease in organizational productivity¹⁰⁶. Sickness absence in affluent nations incurs significant annual costs, excluding the additional expenses related to lost productivity and healthcare expenditures¹⁰⁷. Due to the exorbitant expenses associated with hospitalization, surgical procedures, and maternity care, it is necessary to establish a Medical Insurance plan to safeguard employees against these expenditures. This is a substantial advantage that considerably facilitates staff retention in a company. Medical Coverage encompasses a wide range of services including general medical care, eye care, substance addiction treatment, alcoholism treatment, and mental disease treatment. Employers who offer health insurance are beneficial for several reasons. Consequently, employees who possess medical insurance are more inclined to experience job satisfaction¹⁰⁸.

Medical insurance provides support to individuals who are unable to work due to illness, helping them recuperate and eventually return to their job. Compensation is a strategic approach aimed at enticing, retaining, and enhancing the productivity of personnel. Employee compensation is a means of remunerating individuals by providing them with more than just monetary remuneration. The objective is to motivate employees to increase their efforts and contribute to the development of a competitive work environment. Compensation management is to create and sustain a fair and balanced system for

determining wages, salaries, and overall costs. It involves the distribution of profits, management of payroll expenses, conducting compensation surveys, and other related activities. An organization's compensation plan might have both monetary and non-monetary significance. Given the significance of motivation in employee performance, firms must develop comprehensive compensation schemes to ensure the well-being of their employees¹⁰⁵. An effective remuneration system is crucial for acknowledging employees' efforts, as it specifically targets the resolution of long-term concerns regarding the evaluation and treatment of employees. Compensation mostly focuses on the non-monetary advantages that employees receive in exchange for their work. Compensation refers to any concrete services and benefits that are received as a result of being in an employment relationship¹⁰⁶. It include remuneration, gratuities, incentives, commissions, other types of compensation, and insurance. Compensation is employed as a means to allure and retain personnel, encompassing all remuneration owed to an employee as stipulated in the employee-employer contract. The technique is intricate and necessitates meticulousness and exactitude. Compensation is intended to incentivize individuals to exhibit greater determination in their work. Compensation enables a business to meet the needs of its employees in order to achieve efficiency, while also offering chances for employee advancement⁴.

Providing staff welfare packages fulfills the demands of the employees, resulting in job satisfaction and dedication, which in turn leads to increased production. As productivity rises, there is a corresponding gain in profit, market share, and dividends for shareholders. As a result of these factors, organizational performance¹⁰⁸.

It is crucial to guarantee that all the grievances and requirements of employees are adequately addressed. Employees are the foundation of every organization or firm, and their production level is determined by their contentment¹⁰⁹. An employee that is content

with their work is more likely to be motivated, and a motivated employee tends to be highly productive. Management must devise strategies to incentivize and gratify its personnel through meticulously planned and methodical welfare programs in order to attain a superior level of performance. Organizations should individually and jointly determine the most effective ways to inspire their employees, as their contentment with their work is crucial. These welfare packages can take various forms⁴.

Individuals are driven by their expectations that taking a certain action would likely result in the attainment of a desired objective and a valuable incentive that fulfills their requirements. Highly motivated individuals are characterized by their well-defined objectives and proactive approach in pursuing actions that they believe will lead to the desired outcomes. The firm must ensure that it creates an environment that promotes high levels of motivation by offering incentives and rewards for fulfilling work and opportunities for learning and personal development⁸.

There is a perceived correlation between labor productivity and employee welfare benefits. It is believed that a low standard of living, poor health, limited education, inadequate housing, inefficient transportation to and from work, and unfavorable working conditions all contribute to a decrease in worker productivity. Conversely, low productivity hinders society's ability to enhance working conditions, particularly in terms of housing, transportation, food, and healthcare, which could significantly boost worker productivity. Every firm must choose the most effective method of enhancing production by comprehending the incentives provided to employees through welfare packages^{108, 109}.

Organizational career development has an impact on employee satisfaction, which in turn contributes to the improvement of organizational effectiveness. Implementing individual career planning strategies can significantly enhance company performance. Employees dedicate their whole range of abilities to their firm in order to advance their careers, and

the company benefits from their endeavors. Employee retention is a significant obstacle for companies, but, the task of keeping valuable employees can be accomplished through the implementation of career development initiatives¹¹⁰.

2.1.12.1 Types of Employee Welfare Programmes

Employee welfare programs are numerous, differ from one organization to another and have varying names. They have been summarized into five categories

- Additional leisure and income benefits
- Personal identification and participation benefits
- Employment security benefits
- Health protection benefits

(i). Additional leisure and income advantages: This category encompasses various benefits such as a decrease in regular working hours, paid time off for holidays, paid breaks for rest, designated time off for illness or the death of a family member, and other similar benefits. It is also feasible to negotiate extra pay for the second and third consecutive paid holidays, as well as for collation and rest periods. Employee perks in this category are associated with employee union policy. All of these constitute compensation for hours not done. However, the way they measure things varies from one organization to another.

(ii) Personal identification and participation benefits - This category encompasses programs that foster relationships, housing and transformation initiatives, professional services, financial support from the company, and food services. Managers often take the initiative to establish rewards with the aim of fostering a sense of friendliness and personal improvement among employees, ultimately benefiting the firm.

(iii) Employee security benefits: This group encompasses severance compensation, dismissal pay, unemployment insurance, and retraining. The primary purpose of these benefits is to alleviate employees' concerns and worries over employment, job security, and income stability. Employee benefits in this category are determined by policy and aim to provide employees with a stable and predictable income from their labour.

(iv). Health and welfare benefits: This category includes remuneration for occupational injuries, work-related illnesses, and other types of insurance schemes. Employers are obligated to offer various benefits to protect the financial well-being of their employees and their department, which is a matter of policy⁸.

Also, it is believed that a worker will put in more effort and produce more goods and services if he knows that he will be paid more for his efforts. This is however regular among junior workers in the industry. A combination of welfare benefits could however positively affect labour productivity in the long run¹⁰⁸.

2.1.12.2 Consequences of Welfare Packages on Workers' Performance

Over time, it has been noted that one policy a business may use to inspire employees, improve performance, and ultimately boost the organization's creative potential is offering competitive compensation¹⁰⁹. Given the current state of the economy, the majority of employers are well aware that employee performance plays a critical role in deciding the success of their business and must be improved upon in order for it to compete favorably. Conversely, employee performance within a business is critical to the organization's expansion as well as the personal development of each employee. An organization has to be aware of its best employees, or those who are working exceptionally well; it also needs to know which employees require further training and which employees are not helping the firm or organization reach its objectives. At every stage of employment, including

individual choices about promotions, work rotation, job enrichment, and so forth, performance on the job can be assessed. Such an evaluation is predicated in certain systems on methodical and objective standards, encompassing elements pertinent to the individual's work performance. Therefore, the primary goal of performance evaluations is to provide a precise assessment of an individual's level of accomplishment in carrying out the task or job that has been assigned to them. A choice that will impact each employee's future is made using this information. This indicates that an employee's shortcomings or inadequacies in a particular work skill, area of expertise, or area where encouragement is needed can be found through a thorough performance review. These shortcomings can be addressed by giving the required incentives or by providing more training after they have been discovered. Although management has frequently tried to boost productivity by making such offers and has frequently credited production increases to them, the belief that a particular reward will stimulate an increase in production has not always been replaced⁸.

2.1.12.3 Difficulties Discouraging the Implementation of Employee's Welfare Package

Employees may be included in the benefit package planning process, thus it is crucial for businesses to review their welfare program and compare it to the age and status of their workforce. This will help the company or organization achieve the objectives of improved organizational performance and create a welfare package that will be very beneficial to the workers¹⁰⁸.

Intra-organizational inequity, shaky valence, erroneous contemptuous assumptions, and poor benefit management are obstacles to the adoption of welfare programs for workers. An employee is typically unmoved by an advantage that he is unaware of. One of the goals driving management's attitude toward employee welfare programs is that they should view fringe benefits as a gesture from their employers to which they should return the favor. Employees however, believe their employers benefit far more from their labor than they do

and are unaware of the welfare package's existence. Any incentive must be appealing to potential receivers in order to inspire personnel; the intrinsic worth of a prize is irrelevant. It is crucial to increase labor productivity through employee welfare programs for the benefit of management, the workforce, and society at large. Nevertheless, some organizations' management takes advantage of employees' ignorance of welfare benefits at work by refusing to adopt these kinds of programs⁸.

Welfare programs may be dispersed disproportionately between supervisors and subordinates, or between senior and junior employees. This fails the equity theory of motivation test, which argues that welfare benefits should be awarded to staff members in proportion to their level of involvement into the company in order to motivate them to put in more effort. Notably, seniority and occupational level do not equate to more input. This implies that if the welfare package is allocated according to seniority, the concept of equity must have been disregarded, and employees' job dissatisfaction will persist¹⁰⁸. Employees may become frustrated when benefits are poorly managed or when the majority of their desired benefits are mishandled. This mishandling may be the result of the dispensing officer's dubious character, as benefits that should be granted to employees as legal entitlements are occasionally treated as privileges. An excellent illustration that is especially relevant at this time is the distribution of official cars among production and non-production employees. While many senior production department employees are not allowed to use government automobiles, their non-production administration department counterparts have access to plenty of them^{8, 109}.

2.1.12.4 Factors That Give Rise to Employees' Low Productivity

Low productivity can be caused by technological, sociological, managerial, or economic issues.

i). Economic factor: This typically occurs when an organization does not place a high priority on its employee incentive program or when there is no connection between an employee's efforts and their compensation. An employee will inevitably become less productive when he sees a significant and persistent discrepancy between his efforts and the compensation he receives.

ii). Sociological factor: Workers value their worth and will always be grateful for the opportunity to feel a part of the company they work for. However, it must be noted that treating people like a mere expense of production will be a bad circumstance. They become reluctant to give it their all as a result. It is undeniable that a large number of employees, both public and private, lack a sense of belonging at work and, as a result, seem disconnected from the actual production process. In light of this exchange, all they can do is pretend to be sincere in their commitment to the organization's goals in an effort to avoid losing their employment. In a riot count when workers believe they are not being sufficiently acknowledged for their contributions, they are less likely to have a complete impact or show their whole devotion.

iii). Management factor: No employee can ever be persuaded to boost productivity by ineffective and irresponsible management. Furthermore, indolent organizational administrators frequently employ indolent employees. Since it is believed that a manager who supports and tolerates subpar performance from their staff—where high standards are expected—is inadvertently fostering low productivity, managerial effects play a significant role in enhancing employees' potential for productivity. As a result, managers who are moral, creative, emotionally healthy, and equitable could discourage low output.

iv). Technological component: This factor refers to an organization's incapacity to stay abreast of inventions and bring fresh concepts into the workforce during the technological revolution, when production has reached supersonic levels. Employees need to be

knowledgeable to avoid being outdated. As a result, companies need to adapt constantly to stay up to date with the technology that power their business. This is required because the goal of raising output needs to be backed by suitable technology that can both meet and exceed such aspirations in terms of quantity and quality. If the organization wants to continue being productive, the human capital department must take the lead in any training and development aimed at updating performance expertise⁸.

2.1.12.5 Means of Improving Productivity of Employees.

Several actions have been found to increase productivity,

- (i) Implement productivity metrics for every department in the company. For the purpose of administering and regulating activities, accurate measurement is essential.
- (ii) Examine the organization's overall structure to determine which processes are crucial.
- (iii) Apply the analysis of the bottleneck operation. The concept recognizes that the system is fed by multiple operations, which need to be queued up. Where the output rate at the bottleneck and the output rate of the activities feeding it are equal, improving the bottleneck will promote higher productivity.
- (iv).Outline strategies for increasing productivity. Worker ideas (from teams, engineers, and managers) could also be beneficial.
- (v) Look into how other businesses raised output to create a benchmark.
- (vi). Establish realistic objectives for development. To win people over and promote increased productivity, be sure your goals are clear. Take into account incentives to recognize contributions, track progress, and make them public.
- (vii) Don't confuse efficiency with productivity.

2.1.12.6. Gains of Employee's Welfare Package

The goal of the welfare program is to provide the corporate organization with a productive, healthy, devoted, and contented workforce. These amenities are offered to employees in an effort to improve their working conditions and level of living. Welfare programs give workers better physical and mental health. Thus, this encourages a wholesome workplace. Employee welfare programs improve an organization's productivity and foster positive working relationships, which foster a calm workplace atmosphere. To raise the standard of living for workers' families, medical benefits, housing programs, educational opportunities, and recreational resources are provided. Thus, employees are able to work hard and become more productive. Employee productivity is impacted by an organization's general and motivating packages. In light of this, it is imperative to state that motivated employees are content employees, and content employees are productive and efficient employees. Thus, an organization's productivity level may be impacted by its employee welfare program.

Since employee welfare encompasses a range of services, benefits, and facilities that employers offer to their workforce to help them live better lives, it has the power to alter the perception of the company. Although it may result in higher costs for the company, employee wellness benefits the company in many ways. Investing in staff members yields increased loyalty and productivity¹⁰⁹.

Improving the lives of the working class will make workers better employees and happier citizens, which is the main goal of the employee welfare package. Employee welfare programs help retain employees' motivation and strong morale so that they can work for extended periods of time. It also entails keeping an eye on working conditions and fostering industrial harmony through the provision of health, unemployment, and accident insurance, as well as infrastructure for industrial relations and workers' families. As a result of employee commitment, an organization creates the ideal environment for all of its

members to work hard every day, be dedicated to its objectives and core values, and feel more motivated to contribute to its success overall. There are two aspects to labor welfare: the good and the negative. On the negative side, it is concerned with counteracting the harmful result of large industrialization on the personal family and social life of the worker, while on the other and positive side, it takes care of the provision of opportunities for the workers and their families for a socially and personally good life⁸.

2.2 Theoretical Framework

Monetary theories often used to support research on human resources accounting include Human capital theory, Resource-based theory, and dynamic capabilities theory. But, for the sake of this study, human capital theory is adopted as the anchor.

2.2.1 Human Capital Theory

Human capital was first introduced by the 18th-century Scottish Economist, Adam Smith as an improvement in human capability that is necessary for productivity. The human capital theory was re-introduced by Theodore Schultz in 1961. But, in 1964, the human capital theory was extensively developed by Gary Becker¹¹.

Becker highlighted a key similarity between what we normally consider capital and human capital. He highlighted that traditional 'capital' such as stocks, steel plants, or assembly lines produce a yield – they are an investment that produces further income, and this principle could also be utilised for human capital such as education or on-the-job training. Both increase the economic output of the individual so act similarly to a new steel plant. So, the more education an individual has, the more they can produce an earning, thereby increasing their worth to the firm¹².

The theory of human capital suggests the improvement of human productivity and efficiency through education and training; the proponents believed that education and

training were investments that could add to productivity^{111, 113}. The theory asserts that skills, experience, and knowledge add economic value to the organisation since they enable the human capital to be productive and adaptable¹¹⁴. Human capital refers to the educational attainment, knowledge, experience, and skills of an employee⁵¹. It is the economic benefit of a worker's experience and skills or the productive capabilities of people. It is believed that companies with high human capital funding in terms of training, salary and other benefits are likely to perform better than their contemporaries⁷⁵. Human capital encompasses assets like health, education, training, intelligence skills, loyalty, punctuality and the like that employers can value. It is an intangible asset that is not listed on a company's balance sheet¹¹⁴.

The human capital theory also contemplates factors such as medical care, migration, and information on prices, as human capital. The reasoning for such is that goods such as healthcare can prolong life or reduce the length of sickness, thereby allowing the recipient more time to work. For instance, an illness that may last a week could be reduced to only one day through antibiotics. That's four additional workdays gained, thereby increasing the economic output achieved¹¹².

The Human capital theory assumes that education is important to improve the productivity of a population. It suggests that education increases the productivity and efficiency capacity of employees by increasing the level of cognitive stock of economically productive human capability that is, the natural abilities and investment in human being¹¹⁵.

Human capital refers to the skills and expertise that allow the individual to do their task more productively, this includes education, experience, and judgement. It helps workers to be more productive which in turn, helps increase economic output and the overall well-being of a nation. Human capital is neither visible nor is its value quantifiable nevertheless,

it is necessary for a business's long-term success. For instance, computing skills are classed as part of human capital because a worker who has never used a computer before is unlikely to be as efficient in an office job as someone who has. So, a business may want to invest in bringing such a worker up to speed with the necessary training¹¹².

The theorists believed that different levels of education and training contribute to different levels of wages and salaries. The more knowledge, skills, and ability the more likely to get a better job. The theory argues that organisations invest in human capital as a physical means of production through education, training, and health¹¹⁶. Human resource theorists emphasize that an educated population is a productive population, and the proponents see formal education as an investment in human capital which is equal to or even more necessary than physical capital¹¹⁷.

Although Human capital theory has its positive sides, it is not without critique. The theory of human capital has been criticised by many people who work in education and training. The theory was criticised for legitimizing bourgeois individualism, which was seen as selfish and exploitative. The bourgeois class of people comprised those of the middle class who were believed to exploit those of the working class. The theory was also believed to blame people for any defects that happened in the system and for making capitalists out of workers¹¹⁴.

Some economists disagree that human capital directly increases productivity. It was argued that human capital should not be considered as a factor of production since it only acted as a pointer to talent and ability; real productivity comes later through training, motivation, and capital equipment¹¹⁸.

Human capital theory assumes greater education will always bring about higher income. Although this has been supported by some studies, the theory is not comprehensive. While

higher education can lead to higher levels of income it is not the only variable in the equation. Human capital theory considers factors such as health, skills, and experience, yet it does not consider other factors such as the role of status, network, or societal infrastructure. Even though a greater level of academic education may result in higher wages, it may still be below the potential wage an individual could receive¹¹². Some studies that claim to find a link between income and productivity did so by using circular logic that when we restrict ourselves to the objective measurement of productivity, we find that individual productivity differences are too small to account for levels of income inequality¹¹⁹.

Modern economists however seem to agree that education and health play important roles in improving human capital which in turn increases the economic outputs of a nation. In the new global economy, investing in hard tangible assets may not be as important as investing in human capital. The theorists state that people and education are vital to a nation's economic success. Education has recently been re-theorized under human capital theory as an economic device. It is seen as the main important determinant of economic performance⁴⁷. The human capital theory emphasizes the importance of education and training to the new global economy, and in support of the human capital theory, organization of economic cooperation and development argued that overall economic organization of economic cooperation and development countries increase more directly based on their knowledge stock and their learning capabilities.

Some research also supports human capital theory based on the following arguments that

- i. The new generation must be given the appropriate parts of the knowledge already gathered by the previous generation

ii. New generations need to be enlightened on how already acquired knowledge can be used to develop new products, processes methods, and services.

iii There is the need to support people to develop purely new ideas, products, processes, and methods. Modern economists, in addition, agreed that not the capital nor material resources of a nation that determine the character and pace of its economic and social development but its human resources⁷⁸. Recent research supports the fact that human capital is a key contributor to productivity, that is employees with more education and skills tend to produce more output¹²⁰.

Human capital is related to economic growth since investment tends to enhance productivity. The process of educating a workforce is a type of investment, but instead of capital investment such as equipment, the investment is in human capital¹²¹.

2.2.2 Resource-Based Theory

This theory was proposed by Birger Wernerfelt in 1984 and was later developed by Jay B. Barney and other scholars in 1991^{122,123}. The theory states that competitive advantage is a function of the strategic resources and capability of the firm¹²⁴. Value, rarity, imperfect imitability, and lack of substitutability were listed as the four characteristics of strategic resources that can give rise to firms' competitive advantage¹²⁵. The resource-based view sees resources as a link to superior firm performance. If a resource displays valuable, rare, imitability, non-substitutable attributes, the resource enables the firm to obtain and sustain competitive advantage¹²⁶.

i. Valuable –Strategic resources and capabilities are termed as valuable if they are costly and allow an organization to exploit opportunities and counter threats thereby enabling the organization to meet the needs in its environment essential to improving its efficiency and effectiveness.

ii Rarity- This characteristic relates to the number of competitors that possess the valuable resource. If a reasonable number of competitors possess a valuable resource, then it may not be a source of competitive advantage.

iii. Imitability: This pertains to the likelihood of competitors imitating a valuable and rare resource possessed by an organization. Some resources are protected by copyrights and trademarks that prevent them from being imitated¹²⁷.

iv. Non-substitutable: This is when rival companies do not have alternative means of gaining the benefits that a resource produces¹²⁸.

The core concept within the Resource-Based View is strategic resources which are distinguished from general resources like cash due to the possession of specific attributes such as valuable, rare, inimitable, and non-substitutable. Assets that can represent strategic resources include patented technology, a unique organizational culture, and a strong brand name. Firms that possess such can take the advantage to enjoy sustained competitive advantages above competitors and increase profitability level¹²⁹.

Resource-based view proponents believe that it is more reasonable to utilize external opportunities using existing resources in a new way than trying to acquire new skills for each different opportunity. In the Resource-Based View model, resources possess an important role in helping companies achieve higher organizational performance¹²⁶.

The theory suggested two types of resources in an organization:

i. Tangible Assets - Tangible assets include assets like land, machinery, buildings equipment, and capital¹³⁰. Tangible assets are physical resources that can easily be bought in the market so they confer little advantage to the companies in the long run because rivals can soon acquire identical assets¹²⁶.

ii Intangible Assets- Intangible assets are everything else that does not physically exist but can still be possessed by the company. Intangible assets of a company include brand reputation, trademarks, and intellectual property¹³⁰. They are not physical assets, but the organization possesses them. They include goodwill and intellectual property. In contrast to physical resources, brand reputation is built over a long time and is anything that other companies cannot buy from the market. Intangible resources usually stay within a company and are the main source of sustainable competitive advantage¹²⁶.

The proponents of the Resource-based view argue that for resources to hold potential as sources of sustainable competitive advantage, they should be valuable, rare, imperfectly imitable, and not substitutable¹³¹. The importance of acquiring and utilizing intangible resources has been stressed since they are difficult to imitate and substitute¹³².

Assumptions of the Resource-based theory are two. They are

i. All the resources of the organization should be heterogeneous, that is vary in capabilities and skills from one organization to another. Therefore, Resource-based theory assumes that companies achieve a competitive advantage by using their different bundles of resources. The skills, capabilities, and other resources that organizations possess differ from one company to another, if business organizations possess the same combination of resources, they could not employ different strategies to surpass each other¹²⁶.

ii. All the resources of the organization should be immobile. This suggests that such resources cannot move from one organization to another in the short run, so, it is not easy for an organization to copy similar strategies used by their rivals and implement them. Such resources are intangible assets like brand equity.

This immobility makes it difficult for companies to replicate rivals' resources and implement the same strategies. Brand equity, knowledge, processes, and intellectual property are examples of Intangible resources that are immobile.

The theory is however not without critiques which are as follows

Resource-based theory holds that sustained competitive advantage can be achieved more easily by engaging internal rather than external factors. This may be right to some extent, but there is no specific method of strategic management that is more important. The best method is to combine both external and internal factors to achieve and sustain competitive advantage.

Resource-Based View presumes a sustained competitive advantage can be reached if resources meet the valuable, rare, imitability and non-substitutable criteria. However, in a rapidly changing environment, the competitive advantages will be interim,

Resource-based view is based on the diversity of firms and composing a similar sample is hard or even impossible resulting in the inability to do an empirical study on measuring performance.

Furthermore, the Resource-based view focuses on the internal organization of a firm and does not consider external factors such as the demand side of the market. This might mean that even if a firm has the resources and the capabilities to gain a competitive advantage, there may be no demand, because the model does not consider the customer, and perhaps should not be used exclusively in planning¹³⁰.

2.2.3 Dynamic Capabilities Theory

The notion of dynamic capabilities was initiated by Teece, Pisano and Shuen in 1990, issued in 1994 and amplified in 1997¹³³. In the explanation of the proponents, it was

described as the firm's ability to absorb, strengthen, and renew internal and external competencies to deal with rapidly transforming environments¹³⁴.

The efforts to explain the dissimilarities in the performance of companies within the same industries have been a reason to explore the theory of dynamic capabilities proposed by Teece, Pisano and Shuen. The theory's proponents examined the capabilities that are involved in reshaping the resource base to adjust to changing settings. So, the Dynamic Capabilities approach focuses on the organisation from both the internal perspective and the external perspective to fit into a dynamically changing environment¹³⁵.

The theory of dynamic capabilities presumes that an organization's current resources and capabilities may be fit to the current environmental conditions, and not likely be relevant under future conditions. Adjustment in technologies, policies, and tastes requires a continuous change of needs and wants. It is therefore necessary for organisations to prepare to respond to the changes. It is essential for organisations to continually sense new opportunities and transform their capabilities as required to grab new opportunities. The theory believes that the competitive advantage of firms originates from dynamic capabilities embedded in high-performance routines functioning in the firm, enclosed in the firm's processes, and determined by its history¹³⁶. The theory agrees that core or basic competencies should be used to change or create short-term competitive positions that can be used to build or develop longer-term competitive advantage¹³⁴.

Dynamic capabilities theory is an add-on to resource-based theory¹³⁷. Resource-based view is regarded as static in nature and inadequate to explain the competitive advantage of the firm in changing market settings and firms in similar industries perform differently because they have different kinds of resources and capabilities¹³⁸. An organizational capability relates to the capacity of an organization to utilize organizational resources successfully

and adopt a set of tasks to attain organizational objectives¹³⁹. While the process of maintaining competitive advantage is limitless and dynamic, the resource-based view of the firm is looking at the unique, rare, and imitable resources that the firm has that create competitive advantage and firm growth. It has therefore been proposed by scholars that for the firm to remain competitive in the market, the firm needs to develop specific capabilities and incessant learning. The lack of dynamic capabilities will hinder the firm from maintaining its competitive advantage, especially in the unstable environment¹³⁸.

Organizational capabilities are of two types. One is operational, or ordinary capabilities which assists firms in converting inputs to outputs. However, these capabilities are fixed and cannot change on their own unless they are acted by other capabilities¹⁴⁰.

Dynamic capabilities are organizational abilities that can accommodate alterations in the environment and from within the organization¹³⁶.

The resource-based view of the firm stresses sustainable advantage while the dynamic capability focuses more on competitive survival in addressing rapidly changing contemporary business conditions. Dynamic capabilities and ordinary capabilities are both organisational capabilities. They are connected but have distinctive qualities. Dynamic capabilities are always used in multiple forms. It emphasises the ability to react adequately and timely to external changes with the use of a combination of or multiple capabilities¹⁴¹.

Competitive advantage refers to the capability of a company to exceed its competitors as regards superior products and services. Competitiveness has been described as a state of addressing dynamism in the external environment and consistently providing products that are better than the products offered by other firms within the industry. Engaging the strategic capabilities of organisations effectively and efficiently is believed to assist the organisations in achieving competitive advantage¹⁴². Both theories presume that valuable,

rare and hard-to-imitate or substitute resources and capabilities are the premises for a firm's competitive advantage. The resource-based theory of the firm is however of the opinion that these strategic resources could lead to sustained competitive advantage while the dynamic capability theory presumes that the value of strategic resources will erode over time as competition catches up. The only competitive advantage that will last over time is the ability to develop, re-configure and divest the firm's capabilities in a more effective way than its competitors¹⁴³. Resource-based view explains the firm competitive advantage through the uniqueness, rare and imitable resources that the firm produces that lead to the growth of the firm. This is however a limitation, especially in the fast and unstable market settings. Alternatively, the theory of dynamic capability describes the firm competitive advantage from the point of view of a dynamic and fast-moving environment and has received much attention from scholars since its introduction¹³⁸. For a dynamic capability to achieve the expected benefits and provide a basis for building a sustainable competitive advantage, it must be properly targeted and implemented, which indicates the importance of the dynamic capability process¹³⁵.

The resource-based view is a well-known theory in research, but it is not without limitations, especially in describing the dynamic development process¹³⁸. For a firm to be constantly relevant in the market, the firm needs to be proactive towards the dynamic and unpredictable environment¹⁴⁴. As a result of the changing and rapidly developing business nature, it is important to adapt to the changing environment by looking at a dynamic perspective. So, the dynamic capabilities justify the firm competitive advantage in the dynamic environment¹³⁸.

The idea of Dynamic Capabilities postulates that the competitive advantage emanates from the firm's ability to handle its internal capabilities and resources in the face of a rapid and unforeseeable change¹⁴⁵. Dynamic capabilities enable organizations to immediately

respond in new and declining situations. They have been described as the heart of a firm's strategy and value creation¹⁴⁶. These support the company's capacity to blend, transform, renew, and rebuild its competencies and resources¹⁴³. They sustain the performance of organisations during turbulent times¹⁴⁷. So, an organization needs to exploit new resources and at the same time renew existing capabilities and resources to respond to changing market conditions and maintain an edge in the market¹⁴⁸.

Three of that kinds of dynamic capabilities regarded as important at the industry level are, absorptive, adaptive, and innovative capabilities to compete with rivals and maintain competitive advantage^{142, 149}. Absorptive capability connotes the ability of a firm to identify, acquire and apply external knowledge to the advantage of the firm. It is a function of a firm's existing stock of knowledge which can be reset into products and processes of a firm. Absorptiveness implies integration of external information into the knowledge base of the firm¹⁵⁰. This can further be divided into knowledge acquisition, knowledge absorption, knowledge transfer, and knowledge exploitation¹⁴⁹.

Adaptive capability relates to the capability of a firm to rapidly coordinate and reconfigure resources in response to unanticipated environmental development while keeping the previous level of performance to maintain competitive advantage¹⁴². It relates to the capacity of an organization to recognise opportunities emerging in the market and grab them to make the resources and capabilities of a firm more aligned with environmental changes¹⁵¹. Innovative capability on the other hand relates to the capacity of a firm to bring new products and services to the market or to enter new markets, by adjusting strategic orientation with organizational processes leading to competitive advantage¹⁴².

All companies struggle to build the internal capabilities that afford them a competitive advantage. Ordinary capabilities are the routines or standard operating procedures that an

organization employs to sell the same product, on the same level, to the same customers. Ordinary capabilities can be taught and can be easily copied by competitors. Dynamic capabilities, on the other hand, tend to extend, alter, or create ordinary capabilities. Dynamic capabilities tend to change the product, the production process, the scale, or the customers served. It is however important for companies to understand the difference between ordinary capabilities and dynamic capabilities to sustain that competitive edge¹⁴⁵. Capabilities deal with how a firm optimises and adjusts to environmental changes to make a competitive advantage. It reflects an organisation's capability to assess changes in market trends and at the same time share resources. Competitive advantage is therefore believed to stem from competitive behaviour and relies on strategic resources and capabilities owned and controlled by a firm¹⁵².

The development of dynamic capabilities relies on these three major activities – sensing, seizing, and transforming¹⁵³.

Sensing capability means the capacity of firms to constantly scan, spot, and explore opportunities within technologies and markets mainly outside the firm^{154, 155}. In a rapidly changing environment, new information and knowledge can create avenues for new things. Sensing involves investment in research and development. Research activities are believed to promote a firm's knowledge¹⁵⁵. Seizing activities involve employing resources to acquire value from new opportunities while transforming activities involve renewing company processes and maintaining their relevance to consumers^{145, 153}.

The above-mentioned activities are three managerial operations that can assist in the continuous renewal of the firm's capacity or make a capacity dynamic¹⁴⁵. Dynamic capabilities include the sensing, seizing, and transforming capabilities that are needed to design, implement, and innovate the business model¹⁴³.

Firms must adjust quickly and accurately to modifications in the marketplace or changes in technology. Dynamic capabilities are the routines and processes that assist companies in transforming and evolving themselves with whatever situation. Developing dynamic capabilities goes beyond ordinary strategic capabilities, they place the firm in a good position to achieve a long-lasting competitive advantage. Firms that take the time to develop and sharpen their sensing, seizing, and transforming capabilities will discover that they are better able to innovate and create new business models¹⁴⁵.

Another "dynamic capabilities" idea is co-specialization¹⁴¹. Over time, a firm's assets may become uniquely valuable in combination, that is, co-specialized¹⁵⁶. Having developed together over time, the physical assets, human assets, and intellectual property of a company are more reasonable in a mix than singly and have a sustainable competitive advantage¹⁴¹.

This indicates that in an optimal configuration of assets, the whole is more valuable than the sum of the parts¹⁵⁶. The presence of underlying trade-offs between types and levels of dynamic capabilities leads us back to the traditional need to make choices among different strategies. Dynamic capabilities do not allow companies to effectively satisfy all potential customer needs in all possible states of the world¹⁵⁷. The dynamic capabilities approach emphasizes the importance of capabilities in responding to changes in the environment, it is however not without criticism. Dynamic capabilities are essential in resource allocation, but in a high-velocity setting, their role in creating an organization's adaptability is not critical. The discussion on the essence of dynamic capabilities and their participation in strategic adaptation capabilities is still open¹³⁵.

Also, like any other strategic choice, building a particular dynamic capability involves trade-offs with another type of dynamic capability and with lower-level capabilities. So,

companies must note that whichever capability they choose will have inherent limitations. Also, a dynamic capability cannot solve all problems at a time¹⁵⁷. Several scholars think that the dynamic capability theory is vague and tautological. This is an important issue. The theory is admitted being very useful when addressing how to respond to the business-changing environment but refuses to describe how. Also, the capabilities of the theory are difficult to identify, and, in some instances, core capability can lead to core rigidity. Therefore, the use of the theory in its current state is difficult without being able to further specify, develop, and identify those capabilities¹⁴¹.

Some Dynamic capabilities researchers believe dynamic capabilities can be derived from learning processes: the accumulation of experience, the articulation of knowledge and the codification of knowledge, and that they relate to specific and identifiable processes related to the integration, reconfiguration, acquisition, and release of resources¹³⁵. Dynamic capabilities have also been perceived to solve inflexibility in capabilities, and how to utilize and make use of the knowledge. Some researchers even agreed that dynamic capabilities can explain how firms respond to change, especially from the environmental context. Apart from that, how the different dynamic capabilities of the firm can influence the performance has been identified by some studies, and they have stated that even small differences in dynamic capabilities between the firm, can significantly create divergence in firm performance. From an international business perspective, it was discovered that the use of dynamic capabilities can increase firm expansion in the international market and simultaneously increase firm performance¹³⁸.

The theory of dynamic capability has been used elaborately to discuss the competitive advantage in a dynamic setting, particularly in international business. When the firm decides to expand the business outside the home country, the firm needs to be adaptable to the changes and willing to make a change for the sustainability of the firm. Hence, this is

where the theory of dynamic capabilities comes into the picture in explaining the dynamic environment in international business¹⁴⁵.

Dynamic capabilities enable the development of strategies for senior managers of successful companies to adjust to dynamic changes while maintaining minimum capability standards to ensure competitive survival¹⁴¹.

Dynamic capabilities, in addition to strategy, allow firms to transform and seek strategic objectives. Incumbent firms across industries, thereby building their dynamic capabilities to achieve digital business model innovation or digital transformation. They modify their internal and external resources to meet emerging technologies, respond to switching consumer behaviours, and exceed competitors. Investing in dynamic capabilities will bring about long-lasting value for a company, the industry, or types of transformation notwithstanding. The dynamic capabilities framework assists leaders in thinking strategically about the future of their organizations and identifying, strengthening, and incorporating into business models, strategic investments, and long-term strategic visions. Capabilities allow firms to respond promptly to changes in the external environment. Developing and building dynamic capabilities enable firms to transform and extend their competitive advantage. Criticism of the ambiguity of the definition and the complexity of the construction of dynamic capabilities is countered not only by broad theoretical considerations, but also by a differentiated research approach to the issue of dynamic capabilities, and a conclusion has emerged that dynamic capabilities enable the creation of new, exceptional, valuable and difficult to follow configurations of resources and organizational changes, to which an organization has a chance to adapt to changing operating conditions¹⁴⁵.

In addition, the direct relationship between firm performance and dynamic capabilities has been identified. It has also been emphasized that if the firm has no dynamic capability in the changing setting, the superiority and survival of the firm will remain temporary. This agrees with the ideas of the proponents of dynamic capabilities theory that the development of dynamic capabilities helps to identify the origins of a firm's competitive advantage at the enterprise level, which can be ascertained by the firm success or failure. The issue of developing dynamic capabilities has been considered necessary because developing and embedding dynamic capabilities in a company's management processes can identify and prevent harmful forms of path dependence, avoid blockages, and maintain levels of competence building and organizational changes adequate in terms of market evolution or management¹³⁵.

It has been discovered that some firms which have gathered a series of priceless technology assets need functional capabilities to exploit them. A firm's competitive advantage may be eroded over a period. Some factors result in the diminishment of competitive advantage. The two major causes are:

Replicability due to the expansion of the organization internally

Imitability due to replication by the competitors

Firms in this contemporary time need to be fast, flexible, and innovative in addressing technological and market changes. They must reinvent themselves and grow through transformation. Dynamic capabilities are the specific capabilities that assist firms to adhere to rapidly changing environments and hold on to their competitive advantage. They are essential to a firm's long-term success. Strategists consider dynamic capabilities to be the key to competitive advantage¹⁴⁵.

2.3 Review of Empirical Studies

Accounting for an organization's human resources falls within the purview of human resources accounting. It is important to take into account its connection to the financial performance, just like with other assets.

A study looked at how traditional human asset management affected net profit. It ascertained the impact of human resources capitalization on a company's earnings as well as its influence on share values. The study used a survey research design, and 100 employees of particular companies in the Central Senatorial District of Ondo State were purposefully given a well-structured questionnaire. ANOVA and regression analysis were used to gather and examine the data. The findings showed that allowing for creative accounting, not having accounting standards to support the traditional approach to human resources, and bias in financial reporting are all indicators of how the traditional approach to human resources affects net profit. Additionally, it was discovered that a firm's network is greatly impacted by enhancing investor trust, making it simple to estimate future prospective earnings, participating in the capital formation decision-making process, and maintaining a sustainable equity position. Furthermore, it demonstrates how a firm's share price has been greatly impacted by growth, expansion, and increased profitability. As a result, the study came to the conclusion that some of the significant effects that capitalizing human resources has on a company's share price are increases in profitability, firm size, and growth. It also suggested educating financial statement preparers and users to improve the financial statement's reporting of human resources costs³⁵.

Another study looked at the impact of human resource accounting procedures on the financial performance of listed industrial companies in Nigeria, both in the short and long term. Out of the 63 quoted manufacturing businesses on the Nigerian stock exchange as of 2015, a random sample of 37 was chosen. The study made use of secondary data that was taken from the sampled companies' 16-year financial statements. The results showed a

positive significant relationship between human resource accounting practices and the financial performance of the selected companies in both the short and long term, leading to the conclusion that these practices have a positive impact on the financial performance of Nigerian quoted manufacturing companies⁴⁶.

Another investigation was carried out to find out how Human Resources Accounting affected the performance of Nigerian businesses. The results demonstrate a positive and significant impact of gross staff costs and training and development costs on the performance of oil and gas firms in Nigeria. These findings were obtained with the use of secondary data gathered from ten purposefully selected annual reports of oil and gas companies from 2012 to 2016. On the other hand, the study found no evidence of a substantial correlation between organizational performance and health and safety expenses⁵¹.

A study looked at the factors that contributed to the absence of human resources accounting from the statement of financial condition of businesses listed on the Ghana Stock Exchange. According to the study, human resources are a crucial asset for any company, even though they are not shown in the financial statements. The study looked at the connection between accounting for human resources and business performance. Primary and secondary data were utilized in a regression model to determine the impact of human resource accounting on a firm's performance. The secondary data came from all of the listed companies' 2015–2018 published annual financial statements on the Ghana Stock Exchange. The study's findings indicate that the absence of human resources from the financial statement may be due to various factors, including the lack of clear guidelines for estimating the costs and value of human resources, the uncertainty surrounding the resources' existence, the lack of a widely accepted method for valuing human resources, the absence of an active market for human resources, and the potential misdirection of the

business's financial position. The study also shows that human resources have a favorable impact on a company's financial growth, despite the challenges associated with include HR in financial statements. This demonstrated that Return on Equity (ROE) was positively impacted. Based on the study's findings, it is therefore advised that the International Accounting Standard Board (IASB) and other regulatory organizations talk about the opposition to human resource inclusions and take that into consideration before adding it to the Statement of Financial Position¹⁵⁸.

The necessity, advantages, and difficulties of human resource accounting are highlighted by a study on the function and significance of HRM in relation to corporate competitiveness. According to this definition, human resource accounting refers to the systems, procedures, and accounting methods that, in addition to specific expertise and knowledge, help personnel managers assess employees' knowledge, skills, and motivation both within and between organizations. It states that the purpose of the Human Resource Audit is to examine the organization's human resource management strategies, policies, procedures, documentation, structure, systems, and practices. It is an official process that is ordered and formal. According to the report, management can discover and measure data as well as audit human resource capital with the aid of human resource accounting and auditing. According to the study, an organization's human resources are its employees. Policies, processes, and other actions necessary for a company to calculate the cost and value of its human resources are provided by human resource accounting. It calculates the expenses businesses incur in finding, vetting, hiring, onboarding, and developing new hires as well as their financial worth to the company. In contrast, a human resource audit is a methodical, formal process that examines individuals and the procedures that support them in order to ensure that the system is operating effectively. Nonetheless, human resource accounting and auditing are not inherently legally enforceable¹⁵⁹.

Using the Multiple Linear Regression test used OLS (Ordinary Least Square) model to analyze research data, a study examined the influence of village governance duality and the implementation of accounting for human resources on the success of village fund management. The study also used the classical assumption test which includes the multicollinearity test, heteroscedasticity test, and normality test. The population in this study were villages that received village funds in the Bali Province which numbered 87 people and the research design in this study is a survey method using a questionnaire. According to the study, the implementation of accounting for human resources and synergy between village governments has a significant influence on the success of village fund management¹⁶⁰.

A study looked at how the organization's top- and bottom-line growth was affected by human resource accounting. Five firms with a significant workforce that are implementing HR accounting systems were taken into consideration for the study. The study employed secondary data from 2013–14 to 2018–19. The bivariate correlation was the statistical method used in the investigation. The findings suggested that there is a connection between human resource accounting and both the top-line and bottom-line growth metrics. The application of the ordinary least square method yielded results that indicate a considerable influence of both the top-line and bottom-line growth indicators⁴⁷.

Additionally, personnel development and cost were used as a proxy for human resource accounting, and profit after tax (PAT), return on equity (ROE), earnings per share (EPS), and return on assets (ROA) were used as proxies for financial performance in a study that evaluated the human resources accounting and financial performance of deposit money banks listed on the Nigerian stock exchange. Using the audited financial reports of ten (10) banks that were listed on the Nigerian Stock Exchange between 2012 and 2016, descriptive statistics, Pearson correlation, and ordinary least square (OLS) regression were utilized to

gather and analyze the data. The study found that HRA is statistically significant and contributes 69.7% to any favorable changes in PAT. Thus, it follows that investing in human resources accounting could have a significant positive impact on deposit money banks' financial performance in Nigeria. The analysis concludes that the existing methods significantly undervalued businesses and suggests treating investments in human capital as assets that should be amortized over the course of their expected useful lives. Additionally, it suggests that pertinent regulatory organizations like the Stock Exchange Commission, Financial Reporting Council of Nigeria, and International Accounting Standard Board pass legislation requiring quoted companies to include Human Resources Accounting in their financial reports on a mandatory basis¹⁶¹.

A study looked at the connection between certain Nigerian banks' human resource accounting disclosure and corporate determinants. The impact of listing age, business size, and profitability on human resource accounting disclosure was also investigated in this study. The annual reports and corporate websites of the chosen banks provided the data for the study for the years 2014 through 2018. In order to analyze the data and assess the research hypotheses, panel least square regression was used in the study. The results of the study showed a strong positive correlation between business size, profitability, and accounting disclosure related to human resources. Listing age did not, however, indicate a connection to accounting disclosure in human resources. Based on the results, it was proposed that in order to improve their social standing and lower the likelihood of agency expenses, Nigeria's listed banks be required to provide human resource accounting information. Additionally, by highlighting particular characteristics that gauge the factors influencing the human resource accounting disclosure of Nigerian listed banks, the study enhanced the already-existing models¹⁶².

A study was conducted to investigate the impact of Human Resource Accounting (HRA) methods on managerial decision-making. Since the accounting, audit, and internal control staff members of 16 listed firms in the Nigerian financial services sector were thought to be the relevant departments for this study, a structured questionnaire on a 5-Point Likert Scale was carefully used to collect data for the study. A basic regression analysis model was used to analyze the surveys that were sent out and received back. According to the study, HRA significantly influences management decision-making within firms. As a result, it is advised that organizations utilize HRA more proactively to improve decision-making. To promote fair financial reporting and improve appropriate decision-making in business organizations, necessary and pertinent guidelines on the recognition of human resource costs in organizations' financial reports should also be provided¹⁶³.

The impact of block chain technology on HRA disclosure procedures, which are embraced by several Indian corporate sectors, including IT, has been examined by the authors of a study article. Block chain has been referred to as an innovation in bookkeeping and accounting technology. It all comes down to assigning responsibilities and maintaining accurate financial records. Interactions between organizations lead to a type of "fourfold section accounting," in which each organization completes its two passages, which are essentially equal in value. Block chain has the potential to generously modify this model. An organization's ability to guarantee that the right person is hired for the right job is essential to its success and sustainability. To that end, the best manpower inventory should be established, which can be achieved by using human resource accounting correctly and effectively. By becoming familiar with Block chain technology, this might be achievable. This is a norm rather than a single innovation. It's a way to document conversations¹⁶⁴.

A study looked at how human capital accounting affected the Earnings per Share (EPS) of Nigerian deposit money banks. We used secondary data from the annual reports of the

sixteen deposit money banks that were listed between 2006 and 2017 on the Nigerian Stock Exchange. In order to investigate the relationship between human capital accounting and EPS of deposit money institutions in Nigeria, the study used static panel data with fixed and random variables. To ascertain the most reliable and accurate estimator, a post-estimation test known as the Hausman Test was also performed. To accomplish the specified goal, the random effect was selected. Pensions and training and development have a strong positive correlation with EPS, according to the random effect result. Conversely, wages and salaries exhibit a negligible positive correlation with EPS, with the exception of the directors' compensation, which exhibits a negligible negative correlation. This means that pensions and training and development are important aspects of human capital accounting that can be used to raise bank performance and earnings per share. The study suggests that the management of banks prioritize the payment of pensions and utilize ongoing staff training and development in order to enhance the EPS, based on these findings¹⁶⁵.

The impact of human resource accounting on the caliber of financial reporting from Nigerian oil and gas firms that are publicly traded was examined. Ex-post facto research strategy was used in the study, and proxies for earnings quality, persistence, smoothness, and accounting conservatism were used. Purposive sampling was used as the research technique, and 12 oil and gas businesses in Nigeria make up the study's population. Twelve oil and gas companies with ten years' worth of secondary data between 2004 and 2018 were taken into consideration. The empirical results showed that improvements in oil and gas enterprises were primarily based on human capital. Thus, it can be concluded that the quality of financial reporting by Nigerian oil and gas businesses that are quoted is significantly impacted by human resource accounting. According to the report, regulatory organizations should work to penalize businesses that withhold pertinent and useful

information from interested parties and to compensate businesses that adhere to regulatory norms¹⁶⁶.

Human capital was looked at as the basis for corporate profitability in a study on human capital accounting and firms' performance in Nigeria's oil and gas industry. The research design of the study was ex-facto, and the population of the study consists of nine (9) downstream oil and gas companies that are listed as of 2018 on the Nigeria Stock Exchange (NSE). The results demonstrated the positive and statistical significance of market share and compensation cost. Additionally, it was discovered that the association between human capital accounting and financial performance is not moderated by the moderator variable business size. Therefore, the report suggests the 3 Rs for Nigerian oil and gas businesses' human resources¹⁶⁷.

The effect of human resource capital on organizational performance with reference to Nigerian banks was also examined in this study. The study used auxiliary data from 2010 to 2019 and an ex post facto research design. Five Deposit Money Banks that are listed on the Nigerian Stock Exchange provided data for the study, and descriptive and inferential statistics were used in the analysis. The study found that the kind of people who comprise an organization affects the financial transactions associated to that organization. The analysis also showed that certain banks' ability to turn a profit is positively and significantly impacted by the earnings and salaries of its employees. But in order for banks to become more profitable and remain profitable, management needs to recognize and appreciate the role that workers play in helping the company achieve its objectives. Nonetheless, the study found a substantial relationship between profit after taxes and intellectual capital, and it recommended that data on human resources be considered when making management decisions. As a result, regulatory accounting bodies were advised to establish suitable, uniform guidelines and models for the disclosure of an organization's

human resource value in its financial statements, and that its people should be acknowledged as its most important asset, driving its other resources¹⁶⁸.

A study that examines the effects of human resource accounting on the overall performance of small and medium-sized businesses in Saudi Arabia also identifies certain financial aspects of these businesses, such as return on equity, profitability, and human capital efficiency. The study used linear regression to analyze data from 268 responses provided by small- and medium-sized business finance and human resource departments. The results of the ANOVA and coefficient values showed that the profitability of the organization, return on equity, and human capital efficiency are all positively and significantly impacted by human resources accounting. This indicates that Saudi Arabia's SME businesses are aware of the advantages that HR accounting offers to the company, but they also need to implement HR accounting quickly, which is feasible given widespread awareness in the country. On return on assets, however, human resources accounting has no discernible impact¹⁷.

An explanation of the purpose, significance, and various approaches of human resource accounting is provided by a research. It characterizes the field of human resource accounting as being relatively new. The modern perspective holds that costs incurred on any assets, including human resources, should be capitalized because they yield benefits that can be measured in monetary terms. The traditional concept views all expenditures on human capital as a charge against the period's revenue because they do not create any physical assets. The study emphasizes how critical it is to monitor personnel costs, including those associated with hiring, training, and development, as well as the value of the workforce. The American Accounting Association's definition of HRA, which reads, "The process of identifying and measuring data about Human Resource and communication of this information to interested parties," was selected for the study⁵⁷.

The impact of human resource accounting on organizational profitability was examined in a Nigerian study. The impact of human resource costs on the profits of seven agro-allied businesses was examined. The company's financial reports from 2015 to 2019 provided data on the expenses of human assets, which were analyzed using the ordinary least square approximation. At the five percent significance level, the analysis's findings showed a positive but negligible correlation between organizational profitability and human resource costs. According to the study's findings, investing in human resources is beneficial, productive, and has no negative impact on the organization's profitability¹⁶⁹.

Additionally, an assessment of the impact of human resource accounting on profitability was conducted using an ex-post facto research approach on a subset of companies listed on the Nigerian stock exchange. Annual reports from the Nigerian Stock Exchange Fact Book 2020 provided the data for the study. 116 businesses that fall under the non-financial services sector make up the population. Of the total population, 76 enterprises with secondary data spanning a decade, from 2010 to 2020, were taken into consideration. Regression analysis and hypothesis testing were carried out using linear structural relations LISREL 8.80 student edition, and a purposive sampling strategy was used. The results of using profitability measures showed that, for the non-financial service firms that were quoted, staff training and development costs had a considerable positive impact on EBITDA but not on ROCE. Additionally, an increase in staff has a favorable and considerable impact on the ROCE of the listed non-financial service organizations but no discernible positive effect on EBITDA. The study concludes with recommendations that staff training and development should be a consistent program both on-the-job and off-the-job to cover the identified skills and attitude gaps in the organization. This is because Human Resource Accounting affects the corporate performance of non-financial service

firms quoted on the Nigerian Stock Exchange. Furthermore, the study suggests increasing staffing levels in order to positively impact ROCE¹⁷⁰.

A quantitative research methodology was used in another study on tertiary students' knowledge of human resource accounting in the Greater Accra Region of Ghana. Out of the 37 excellent and well regarded tertiary institutions in Ghana, 20 were chosen using a practical sample technique. Out of the 300 students from the sampled tertiary institutions, 200 submitted the questionnaires, and only 180 were deemed valid for additional study. Using the statistical program Statistical Product and Service Solutions (SPSS, 20.0), the study used inferential statistics to analyze the data. According to the findings, 83% of tertiary students in Ghana's Greater Accra Region were aware with human resource accounting. Thus, the study suggested that Human Resource Accounting be included in the curricula of the various tertiary institutions' programs in Commerce, Management Studies, and other Finance-related fields¹⁷¹.

The relationship between human resource accounting and the financial standing of Nigerian microfinance banks was also investigated in this study. The study employed an ex post facto research design and analyzed data spanning seven years (2011 to 2017) and nine years (2011 to 2019) from the publicly available financial statements of the two microfinance banks listed on the Nigeria Stock Exchange. After Fortis Microfinance Bank was delisted in 2018, the data for the first seven years was analyzed from both banks, and for the latter two years, totaling nine years, only data from Nigeria Police Force Microfinance Bank was collected. The data was analyzed using the method of simple linear regression analysis. The results indicate that while return on assets has little correlation with net profit margin and return on equity, staff costs have a substantial impact on both microfinance banks. The results of additional research done in 2019 utilizing only NPFMFB show that human cost has no discernible impact on any of the variables. The

paper then suggests that relevant legislative and accounting organizations create a standard methodology for reporting and measuring human resources. Furthermore, accounting guidelines for the amortization of investments in human resources made by microfinance banks and other organizations should be created¹⁷².

Based on sixteen criteria from earlier studies, a study that described the HRAD practices of the top-ranked corporations on the ASEAN Corporate Governance Scorecard—which comprises Indonesia, Malaysia, Vietnam, Philippines, Thailand, and Singapore—assessed the HRAD procedures. According to the report, human resource accounting transparency is a crucial component of good corporate governance that ensures organizational sustainability. Nonetheless, human resource accounting disclosure (HRAD) policies are not required in many Asian nations. Furthermore, it's unclear how much the businesses have acknowledged their accounting for human resources. The study examined the annual reports of 195 organizations for the years 2014 and 2015. The findings showed that Indonesia had the highest percentage of HRAD practices (71%), followed by Thailand (66%), Vietnam (65%), Malaysia (59%), Singapore (43%), and the Philippines (40%). Furthermore, the results indicate that, with the exception of a small number of businesses in Malaysia and the Philippines, distinct HRAD is essentially nonexistent. This suggests that in order to improve governance in ASEAN nations, HRAD procedures should be institutionalized¹⁷³.

The impact of human resources accounting methods on the performance of consumer goods companies in Nigeria was investigated through a study. Thirty (30) publicly traded consumer goods firms in Nigeria make up the study's population. Twenty-four (24) of the thirty companies were sampled using filter criteria. The study's secondary data came from the annual reports of a few chosen companies throughout a six-year period, from 2013 to 2018. Multiple regression analysis was used in the collection and analysis of the data. The

study found that the performance of Nigeria's publicly traded consumer goods companies is positively correlated with the number of people working during the time and overall assets. Furthermore, the analysis demonstrates that the performance of Nigerian listed consumer products companies is unrelated to leverage or the age of the company.

Furthermore, the outcome demonstrates that the performance of publicly traded consumer products companies in Nigeria is not significantly impacted by staff expansion or government (VAT). Based on the study's findings, management of publicly traded consumer goods companies is advised to take workforce size into account when making hiring decisions. This is because a company with a larger workforce will operate more profitably and efficiently. Furthermore, it is imperative for management of publicly traded consumer goods companies to prioritize the provision of enough total assets, as this fosters greater economic benefit and ultimately boosts profits¹⁷⁴.

A study was conducted to investigate the impact of human resource costs on the financial performance of Nigerian brewing enterprises that are publicly traded. The study used an ex-post facto research approach, and its population consists of five brewing businesses that are listed on the Nigerian Stock Exchange's floor as of 2019 and have continuously filed annual reports to the exchange between 2007 and 2019. The published annual reports and accounts of the mentioned corporations provided the data for this study. The study's analysis showed that, while personnel costs have a positive and moderate impact on listed brewery enterprises in Nigeria's return on assets, they have a positive and noteworthy influence on the net profit margin of these businesses. According to the study's findings, Nigerian brewers should embrace a culture that emphasizes utilizing human resources and disclosing such investments in order to boost output and quality¹⁷⁵.

An additional study aims to objectively explore the connection between the financial performance of Nigerian listed companies and the costs associated with human resources. Using Ordinary Least Square Multiple Regression and Auto Regressive Lag, panel data on various forms of human resource costs and financial performance on financial reports and accounts of quoted companies on the Nigeria stock exchange and federal Inland Revenue Service were gathered between 2016 and 2017. Data analysis was conducted using E-view version 12 and the following methods: Granger Causality Test, Co-integration test, Error Correction Model, and Augmented Dickey-Fuller. The study's findings demonstrate a considerable relationship between human resource costs and financial performance, with human resource accounting projecting for approximately 80.1% of the variance in revenue. The study shows that there is a positive and significant relationship between financial performance and human resource costs. It suggests that management should consider keeping only efficient people instead of hiring more. This means that insurance companies should hire fewer employees and concentrate on developing and retraining their most productive workers. The study also suggests that in order to draw bright individuals to their companies, managers should offer competitive retirement benefits and a well-thought-out staff development program to improve performance and profitability¹⁷⁶.

A study looked into how management decisions in Seventh-day Adventist institutions in the Eastern Nigeria Union Conference were impacted by human resources in accounting information systems. The research strategy used in this study was a cross-sectional survey, and the population consisted of 250 accounting officers from 24 entities, representing management and general administration. The sample size included of the 250 accounting officials as well. A standardized and verified questionnaire was used to gather data for the study, and 84.4% of respondents answered it. Inferential statistics were used to analyze the data (basic linear regression analysis). The outcome showed that management decision-

making in Seventh-day Adventist Institutions in Eastern Nigeria is positively and significantly impacted by human resources in AIS. Because they have the ability to support organizational management, particularly in decision-making, the study advises institutions to take into account factors that are likely to improve human resource development within the institutions. This recommendation is based on the analysis's findings¹⁷⁷.

An analysis of the company's performance's effect on HRA disclosures is the goal of the study. The study employed multiple regression analysis and made use of secondary data. The study's findings demonstrate that the disclosure of human resource accounting is positively and significantly impacted by the size of the company, leverage, CAR, and LDR. However, the disclosure of human resource accounting is not significantly impacted by the age or profitability of the organization¹⁷⁸.

According to results from a different study, staff compensation, health care costs, and safety costs have no discernible effects on market value when measured using Tobin's Q. However, staff training costs have a considerable impact on a listed deposit money bank's market value. The study looked at how Deposit Money Banks listed on the Nigerian Stock Exchange performed in relation to human resource accounting. The primary objective of the study was to examine the impact of employee compensation, training, and health care expenses on worker safety in Deposit Money institutions operating in Nigeria. Data from annual public financial reports of Deposit Money Banks listed on the Nigerian Stock Exchange for the period of 2015-2019 were used in the study, which employed an ex-post facto research approach. At a five percent significance level, the hypotheses were tested using multiple regression analysis, and the data was analyzed using descriptive statistics and correlation. The study came to the conclusion that bank employees need to be paid more in order to perform better¹⁷⁹.

A twelve-year period, from 2006 to 2017, saw data collected from the annual reports of

sixteen Deposit Money Banks listed on the Nigerian Stock Exchange. The study looked at the relationship between the wealth of shareholders and human resources accounting in Nigerian Deposit Money Banks. To investigate the link, the study used static panel data (Random Effect Model). The wealth of shareholders was represented by return on assets (ROE), whereas the accounting for human resources included salaries and wages, director compensation, pension expenditures, and training expenses. With the exception of pension, which exhibits an insignificant negative relationship, the random result shows that all the factors have an insignificant positive relationship with a return on equity. This suggests that there is no discernible relationship between any of the explanatory variables and equity returns. The corrected R-value of $-.09315$ and the total result, or R-Square, of 0.0045 indicate that the explanatory factors are not significant enough to explain the dependent variable. The explanatory variables are not appropriate indicators of return on equity, as indicated by the R-Square value being too low. The outcome corroborates the random effect, which found that the return on equity—a gauge of the "wealth" of Nigerian banks' shareholders—is not substantially impacted by the variables related to human resources. Therefore, it was determined that, with the exception of the staff pension, nearly all of the repressors are appropriate for enhancing the human resources¹⁸⁰.

A ten-year (2010-2019) study that used staff costs, employee numbers, and compensation to sales as independent variables and financial performance as the return on investment also looked at the impact of human capital investment on the return on investment of listed deposit money banks in Nigeria. Twelve (12) designated deposit money banks' annual financial reports provided secondary data for the study. The panel regression technique showed that the number of employees, staff cost, and employee remuneration to sales had little effects on return on investment. Nonetheless, banks were advised to implement efficient investment plans covering staff training, retraining, seminars, and workshops. The

study suggests that in order to enhance employee performance in the banking industry, management should take the initiative, have a better awareness of the issue, and balance the long-term costs of staff maintenance¹⁸¹.

Fifty HRA professionals from reputable firms in Bengaluru, Karnataka, participated in another study to determine the effect of HRA practices on management performance. The results were analyzed using percentage analysis and one sample T-test. According to the report, human resources are a valuable asset for any kind of business. Furthermore, it highlights the importance of human resources to the expansion of a business and the economy. It describes how human resource accounting (HRA) has recently gained relevance on a global scale in the compilation of financial statements, but when compared to other accounting specialties, HRA has failed to find a position because there is no statutory framework governing its practice. Human resources are being viewed as strategic assets by industries today, which appears to recognize the value of people and is steadily driving up the implementation of HRA practices. The study shows that HRA practices have a major influence on managerial tasks and the success of organizations, and they are also quite successful in doing so. As a result, it suggests using human resources accounting to present firm valuation fairly and boost overall business growth¹⁸².

The development of the company is significantly influenced by its human resources. Accounting for human resources aids managers in making critical decisions regarding the organization's workforce by calculating the cost and value of those resources. Using panel data from 2001 to 2017, this study examines how human resource accounting affects the financial performance of industry-focused companies listed on the Tehran Stock Exchange. The results show that whereas asset and stock returns have a negative but negligible impact on human resource accounting, organizational profitability has a positive and considerable impact on HRM¹⁸³.

In order to confirm the effect of HR accounting procedures on the financial performance of thirty specific small-scale Odisha-based enterprises, a study obtained financial information for these thirty industries from secondary sources during a five-year period beginning in 2016 and ending in 2020. The manufacturing and service sectors account for fifteen of the thirty small-scale industries that were chosen. The study used panel fixed and random effect regression models, and its conclusions supported the notion that human resource accounting plays a critical role in small-scale industry management. The study also shows a direct relationship between human resource accounting and financial performance as indicated by ROA and ROCE. The study recommends that small-scale industries improve their human capital through proper implementation of human resource accounting, which will ensure that all aspects of cost and benefits related to human resources are identified, recorded, and reviewed for improved performance. This is because the type of business under study has a strong bearing on the profitability and any organization's dependency on its human capital cannot be ignored¹⁸⁴.

A paper makes the case that empirical research on the impact of HRA disclosure on financial reporting quality (FRQ) is necessary, and it suggests that measuring financial reporting quality using qualitative characteristics is one of the best ways to assess the substantial contribution of HRA accounting to FRQ. Because qualitative traits can handle both financial and non-financial information in a financial report, their use as a measure of FRQ was recommended. Furthermore, it is more acceptable to measure Financial Reporting Quality using qualitative criteria because HRA disclosure contains both financial and non-financial information. Human resources are important because they can create value, as recent economic development has shown. Human resource accounting (HRA) practice and research must advance for economic development in order to guarantee that financial reports suitably supply stakeholders with the data they need to

make informed decisions. Even though there is actual data to support the impact of HRA information on business performance, HRA has not yet been included into traditional accounting practices. Since reporting entities are not required to adopt HRA by the present accounting rules and regulations, organizations prepare HRA information voluntarily. Researchers and practitioners have become interested in HRA in recent times; nevertheless, they should focus more on how HRA disclosure enhances financial reporting quality (FRQ) 185.

Another study looked at the connection between a company's worth and human resource accounting transparency. The ex post facto research design was used in this study, and the variables and impact of the disclosure of accounting information on human resources on business value were examined using data that already existed. To ascertain the perceived and expected values of the variables as well as the correlation between them, a co-integration test was performed. The findings showed that there is a substantial influence on the firm value by disclosing employee training and development. Businesses always use new techniques and technologies to raise their total value and performance. It is generally understood that accounting procedures affect a company's worth. It is known that reporting an asset's value is a part of traditional accounting procedures. Recent research, however, indicates a trend toward reporting that incorporates accounting data related to human resources. This study essentially finds that the value of a corporation is significantly impacted by the accounting disclosure of human resources¹⁸⁶.

Another study looked at the financial performance and accounting for human resources of Nigerian listed commercial banks. The study's main objective was to assess the connection between hiring and recruitment expenses and return on assets in Nigeria's listed commercial banks. The study looked into the connection between return on assets and compensation costs in Nigerian commercial banks that are listed. Ex post facto research

design was employed. Twelve commercial banks that are listed as such on the NSE floor make up the population, which also serves as the study's sample size (NSE FACT book 2020). Secondary data gathering was employed. The study's conclusions show that recruiting and recruitment expenses have a major impact on the listed commercial banks in Nigeria's return on assets. The relationship between human assets accounting and the financial performance of Nigeria's listed commercial banks varies significantly depending on the size of the organization. Accordingly, the study proposes that recruiting and employing qualified staff members are essential to supporting an organization's personnel development as well as its level of productivity. As a result, banks were advised to prioritize hiring and employee training since these initiatives improve the performance of the bank. Organizations must now adapt to the current issues due to the rapid advancement of technology in the era of computers. According to the report, human capital is an organization's most valuable resource, hence training is advised to increase capacity for long-term, sustainable economic growth and development¹⁸⁷.

Examined was the impact of human resources accounting (HRA) on the financial results (ROA) of a subset of publicly traded Nigerian food and beverage companies. The four companies that comprise the study's sample were chosen between 2006 and 2021. Through the use of Econometric Views, the research analyzed the data acquired through panel regression analysis. The study shown that while staff safety expenses did not significantly increase company performance, staff training and development costs (STC) and welfare costs (EWC) did. In the meantime, recruiting expenses had a major detrimental impact on the ROA of the Nigerian companies that were studied during that time. The study came to the conclusion that accounting for human resources improves business performance. Thus, it suggests that management of certain organizations should consistently adopt various forms of job training. It is also recommended that the management of the chosen

companies ensure that both monetary and non-monetary benefits are part of their welfare package¹⁸⁸.

The ex-post facto study design was used to examine the relationship between the cost of human resources and the financial performance of listed pharmaceutical businesses in Nigeria. Ten (10) pharmaceutical businesses in Nigeria that were listed by the Nigerian Exchange Group in 2021 make up the study's population. Using the census method, the entire population was included as the sample size. The annual reports of pharmaceutical companies that are listed were the source of the data utilized between 2011 and 2020. Data analysis was done using multiple regression with the help of E View software. Both the staff cost and return on assets, as well as the staff cost and return on capital used by the pharmaceutical companies under consideration, demonstrated a favorable and significant association, according to the study. In order to increase their return on assets, pharmaceutical businesses in Nigeria are advised by the study to increase their investment in human resources by providing ongoing training and retraining for their workforce as well as welfare services. Ultimately, in order to attract bright talent to their companies and increase return on capital employed, pharmaceutical management needs make retirement benefits enticing¹⁸⁹.

A study was carried out to assess the impact of human resource expenditure on the financial outcomes of Nigerian manufacturing companies that are publicly traded. In the same way that accounting-based profitability, demonstrated as return on equity (ROE), and capital market performance, expressed as market value performance of firms (MVP), were used as proxies for financial performance, salaries, wages, allowances, other staff-related expenses, and human resource efficiency were taken as proxies for expenditure in human resources. The study included both causal comparative and descriptive research designs to estimate the test findings of the four hypotheses that were put forth. The multivariate

econometric regression's outcome revealed a varied result. SWA showed a considerably positive unstandardized beta coefficient input, while HRE showed an insignificant but positive unstandardized beta coefficient, in addition to statistically significant P-values for both SWA and OSRE. Nevertheless, the study rejected the null hypotheses. Their null hypotheses were not rejected since the primary focus predictors in hypothesis two and three were not statistically significant enough. The research concluded that there is a positive correlation between the financial performance of mentioned manufacturing businesses in Nigeria and their expenditures on human resources (EHR), based on the interpretation of the empirical findings from earlier explanatory accounting literature. As a result, the study suggested that adopting fair compensation, wages, and benefits and disclosing them as a competitive tactic enhances financial success. It also recommended paying for additional employee-related expenses as a tactic to draw in and keep top talent. Finally, the study recommended that regulatory bodies require quoted manufacturing businesses in Nigeria to take human resource efficiency—as shown by the VAIC model—into account when calculating their accounting ratios¹⁹⁰.

The impact of human resource accounting on business performance in Nigeria was examined in a study. Twenty-five consumer goods firms that were listed as of December 31, 2018, on the Nigerian Stock Exchange make up the population under study. Eight businesses were purposefully selected as the sample size from the study population for the years 2013 to 2018. Based on the study's findings, the management of listed consumer firms in Nigeria was advised to improve employee salaries, wages and allowances, personnel expenses, and other benefits. The study's data was analyzed using multiple regression, and the results showed that human resources accounting, represented by salaries, wages and allowances, personnel expenses and other benefits, pension and gratuity, had a positive and significant effect on corporate performance, as measured by

return on assets and earning per share. It was also suggested that all government pension and gratuity policies be adopted in order to motivate staff to boost output and achieve excellent business performance¹⁹¹.

An analysis of the relationship between human capital investments and business success in Croatia was conducted. The results showed a significant difference in the average wage per employee between high and moderate-intensive intellectual capital organizations, as well as a favorable correlation between corporate excellence and bonuses or salaries. When human capital expenditures were capitalized on a business's balance sheet instead of being reported as expenses in the profit and loss account, differences in corporate excellence were verified. Prioritizing human resource management can help companies achieve business excellence. Furthermore, emphasis was placed on the significance of accurately recognizing and measuring human capital in financial statements¹⁹².

In a study, factors influencing the financial performance of service companies listed on the Stock Exchange of Thailand were examined with human resource accounting acting as an intervening variable. The population of this study consists of all the companies that are listed on the Stock Exchange of Thailand. The study's research methodology incorporates path analysis, hypothesis testing with a partial test (t-test), and a traditional assumption test set that includes multicollinearity and normality tests. The findings showed that there was no correlation between the various factors—such as ownership concentration, firm size, age, and product diversification—and financial performance when it came to human resource accounting disclosures. The relationship between the variables of company size, product diversification, age of the company, ownership concentration, and industry type and financial performance is not mediated by disclosure of human resources accounting¹⁹³.

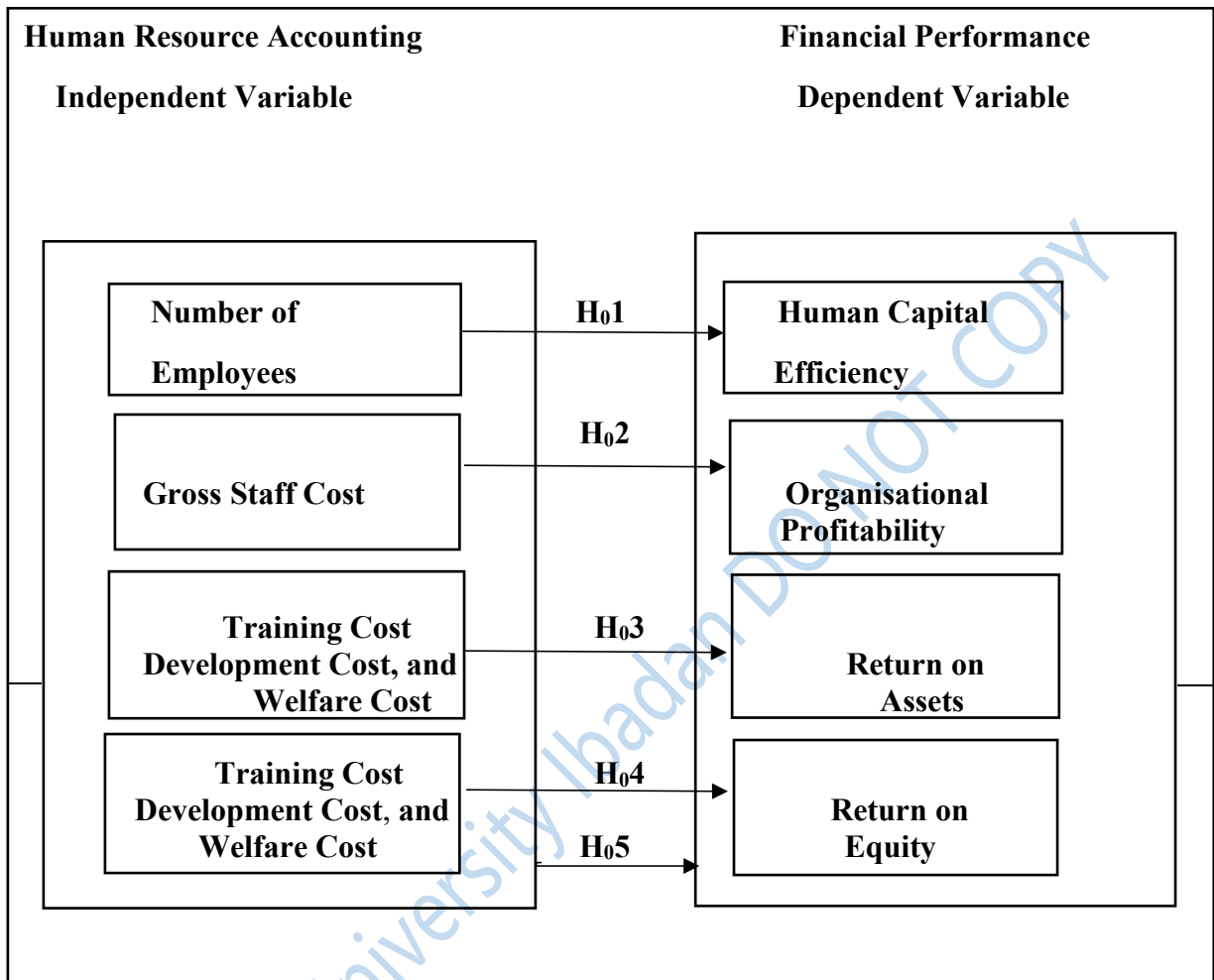
An additional study was carried out to supplement the earlier research by different academics and researchers on the evaluation of human resource accounting and its effect on the financial performance of business companies. The research employed secondary data. It used an ex-post research approach to demonstrate how different independent variables impact each deposit money bank's annual financial performance. Twenty-one (21) deposit money banks in Nigeria make up the study's population, according to information provided by the Nigerian Stock Exchange following the country's 2011 banking recapitalization. Purposive (non-judgmental) probability sampling was used in the investigation. Twelve (12) deposit money banks that were still in business at the time of IFRS introduction made up the sample size. Access Bank, Guaranty Trust Bank, Zenith Bank, Sterling Bank, STANBIC IBTC Bank, Union Bank, Unity Bank, United Bank of Africa (UBA), First Bank of Nigeria, Eco Bank, WEMA Bank, and First City Monument Bank were the twelve deposit money banks that made up the sample. The nine-year study period ran from 2011 to 2019. Determining the impact of personnel costs, employee benefits costs, and employee salaries on the return on equity of Nigerian deposit money banks was one of the study's goals. In order to do this, the impact of the independent variables—employee salary, employee benefits cost, and personnel expense—on the dependent variable—return on equity—was examined using a Pearson correlation matrix. The analysis's findings showed that salaries for employees significantly and favorably impacted return on equity. Additionally, the findings demonstrated that Return on Equity was significantly and favorably impacted by Employee Benefits Cost¹⁹⁴.

A different study examined the effect of human capital expenditure on the financial performance of listed manufacturing firms in Nigeria from 2012 to 2022. An ex-post facto research design was employed and 10 firms from 10 sectors were sampled. Data were sourced from their annual report and analyzed using the panel regression. The study found

a positive significant connection linking ST, WS and RBC on financial performance. Based on the findings, the study concludes that all the proxies tested positively influence the financial performance of listed manufacturing firms in Nigeria. The study recommends that firms adhere strictly to labour laws and improve the welfare of their employees since it will increase productivity and guarantee financial growth¹⁹⁵.

Lead City University Ibadan DO NOT COPY

2.4 Conceptual Model



Source: The Researcher Framework, 2024
Fig. 2.1 Conceptual Model

2.5 Summary of Gaps in the Literature Reviewed

From the pieces of literature reviewed, presently, it was observed that scholars within and outside Nigeria have attempted to research the impact of human resources accounting on firm performances in different sectors: insurance, quoted manufacturing companies, Banking, and Oil & Gas but, there have not been much work on Information Communication Technology sector. Additional research has been suggested into the relationship between human resource accounting and financial performance to enhance the understanding of the benefits that organizations might derive from employing the human resources accounting approach. Also, lack of precision about the criteria regarding the measurement of human resource accounting has led researchers to use different alternatives, ultimately leading to varied results. So, further investigation has been suggested to establish measurement practices regarding the human resource accounting.

Endnotes

1. M. B. Tudose, V. D. Rusu & S. Avasilcai, *Financial Performance – Determinants and Interdependencies Between Measurement Indicators*, **Business, Management and Economics Engineering**, 20 (1), 2022, 119–138
2. O.O. Akinrinola, *Non-financial Performance Indicators and Operational Efficiency of Deposit Money Banks in Nigeria*, **International Journal of Research and Scientific Innovation**, 6 (12), 2019, 175 – 183
3. R. Setiawan, M. Hassan, L. L. Cavaliere & D. Sankaran, *The Impact of Human Resources Practices on SME's Sustainability*, **Productivity Management**, 25 (15), 2020, 728-751
4. O. A. Ekere & B. C. Onuoha, *Employee Welfare Practices and Work Performance of the Oil and Gas Industry in South Nigeria*, **EPRA International Journal of Business and Management Studies**, 8 (10), 2021, 59-69
5. I. Oncioiua, V. Kandzija, A. Petrescu, I. Panagoret, & M. Petrescu, *Managing and Measuring Performance in Organizational Development*, **Economic Research-Ekonomska Istraživanja**, 35 (1), 2022, 915 –928
6. B. Demeke & C. Tao, *Concept & Perspectives of Organizational Performance Measurement: Literature Review*, **International Journal of Academic Multidisciplinary Research**, 4 (8), 2020, 89-96
7. V. A. Refmasari & R. A. Supriyono, *The Effect of Non-Financial Performance on Financial Performance Moderated By Information Disclosure*, **Journal of Economics, Business, and Accountancy Ventura**, 22 (2), 2019, 248 – 263
8. E. T. Ufoaroh, A. Udemezue & A. O. Anyadufu, *Employee Welfare Package and Its Impact on Productivity (A Case Study of Roesons Industries Ltd Enugu- Ukwu, Anambra State, Nigeria)*, **Asian Journal of Economics, Business and Accounting**, 11 (1), 2019, 1-15
9. E. Cera & A. Kusaku, *Factors Influencing Organizational Performance: Work Environment, Training-Development, Management and Organizational Culture*, **European Journal of Economics and Business Studies**, 6 (1), 2020, 16-27
10. F. F. Adegbie, I. R. Akintoye & C.N.A. Alu, *Effect of Managerial Efficiency on Corporate Financial Performance of Quoted Nigerian Firms*, **European Journal of Accounting, Auditing and Finance Research**, 7 (6), 2019, 12-39
11. M. Kusuma, *Measurement of Return on Assets (ROA) on Comprehensive Income and Its Ability to Predict Investments Returns: An Empirical Evidence on Go Public Companies in Indonesia Before and During the Covid-19 Pandemic*, **Jurnal Ilmiah Bidang Ilmu Ekonomi**, 16 (1), 2021, 94-106

12. O. Adekoya & Y.A. Adeniji, *Impact of Social Costs on Financial Performance of Listed Firms in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 8 (11), 2020, 12-29
13. O. Olayemi & P.O. Fakayode, *Effect of Capital Structure on Financial Performance of Quoted Manufacturing Companies in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 9 (5), 2021, 73-89
14. W. Kenton, *Financial Performance: Definition, How it Works, and Example*, Updated April 30, 2023, [Investopedia Link](#)
15. S. Beaver, *30 Financial Metrics and KPIS to Measure Success in 2023*, Updated March 22, 2023, [Netsuite Link](#)
16. O. Taouab & Z. Issar, *Firm Performance: Definition and Measurement Models*, **European Scientific Journal**, 15 (1), 2019, 93-106
17. S. Khan, *Impact of Human Resource Accounting on Organisation's Financial Performance in the Context of SMEs*, **Growing Sciences, Accounting**, 7, 2021, 621-628.
18. N.P. Tran & D.H. Vo, *Human Capital Efficiency and Firm Performance Across Sectors in Emerging Market*, **Cogent Business and Management**, 7 (1), 2020, 1-15
19. M. Ibarra, M.R. Garcia & F.H. Perhines, *Intellectual Capital: Organisational Performance and Competitive Advantage*, **European Journal of International Management**, 14 (6), 2020, 976-998
20. S. Ali, G. Murtaza, M. Hedvicakova, J. Jiang & M. Naeem., *Intellectual Capital and Financial Performance: A Comparative Study*, **Frontiers in Psychology**, 2022, 1-12
21. S. Rana & S. Z. Hossain, *Intellectual Capital, Firm Performance and Sustainable Growth: A Study on DSE-Listed Non-financial Companies in Bangladesh*, **Sustainability**, 15 (7206), 2023, 1-23
22. S. Alfiero, V. Brescia & F. Bert, *Intellectual Capital-Based Performance Improvement: A Study in Healthcare Sector*, **BMC Health Services Research**, 21 (73), 2021, 1-15
23. A. Skhvediani, A. Koklina, T. Kudryavtseva & D. Maksimenko, *The Impact of Intellectual Capital on the Firm Performance of Russian Manufacturing Companies*, **Risks**, 11 (76), 2023, 1-25
24. W. Quintero-Quintero, A. B. Blanco-Ariza, & M. A. Garzón-Castrillón, *Intellectual Capital: A Review and Bibliometric Analysis*, **Publications**, 9 (46), 2021, 1-23
25. A. Alturiqi & K. Halioui, *The Impact of Intellectual Capital on Firms' Performance: Evidence From Saudi Arabia*, **Accounting and Finance Research**, 9 (4), 2020, 44-69
26. S. M. A. Kalkhoran, K. Rabiei, S. M. S. Alizadeh, H. M. Heravi & Y. Rouzpeykar., *Analyzing Impact of Intellectual Capital on Business Performance Using Structural Models Based on Customer Knowledge Management*, **Hindawi Discrete Dynamics in Nature and Society**, 7453565, 2022, 1-10

27. N. Veselinović, B. Krstić & M. Veselinović, *Measuring the Efficiency of Human Capital*, **Economics of Sustainable Development**, 5 (2), 2021, 1-17.
28. P.C. Egolum, *An Evaluation of Human Capital Efficiency on Performance of Listed Service Firm in Nigeria*, **Nigerian Journal of Social Development**, 10 (1), 2021, 63-73
29. Q. Mpfua & F. Y. Sebele-Mpfub, *Conceptualizing A Human Capital Measurement and Reporting Framework*, **Journal of Accounting, Finance and Auditing Studies**, 9 (2), 2023, 137-157
30. F. Mackenzie, *What is Human Capital Efficiency and Why is it So Important?*, Uploaded September , 2023, [Workable Link](#)
31. B. Riya, *Objectives of Business*, No Date, [Economics Discussion Link](#)
32. M. Minanari & A. Rahayu, *The Effect of Profit Management, Good Corporate Governance Mechanism and Investment Decisions on Firm Value*, **Advances in Economics, Business and Management Research**, (120), 2020, 258-263
33. J. Gordon, *Theory of Firms (Economics) – Explained*, Updated March 26, 2023, [Business Professor Link](#)
34. C. Cote, *How to Determine Profitability and Drive Strategic Decisions*, Updated June 11, 2020, [HBS Online Link](#)
35. J. A. Adewole, J. K. Ogunyemi & S. A. Ojo, *Effect of Capitalising Human Resource Cost on Corporate Profitability in Ondo State, Nigeria*, **International Journal of Shariah and Corporate Governance Research**, 2 (1), 2019, 14-33
36. A. O. Koleosho, F. F. Adegbe & A. O. Ajayi-Owoeye, *Stock Market Returns and Shareholders' Wealth Sustainability of Companies Listed on the Nigerian Stock Exchange*, **Asian Journal of Economics, Business and Accounting**, 16 (2), 2020, 27-45
37. C. Banton, *Efficiency: What it Means in Economics, the Formula to Measure it*, Updated September 28, 2023, [Investopedia Link](#)
38. S. O. Abu & J. U. Okpe, *Dividend Policy and Profitability of Agro- Allied Companies in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 8 (8), 2020, 121-137
39. A. K. K. R. Jayathilaka, *Operating Profit and Net Profit: Measurements of Profitability*, **Open Access Library Journal**, 7 (12), 2020, 1-11
40. J. Fuchs, *Revenue vs. Profit: The Difference & Why it Matters*, Published January 2022, [HubSpot Link](#)
41. J. S. Akbar, *The Effect of Return on Assets and Return on Equity on Price to Book Value on Banking Companies Listed on the Indonesia Stock Exchange*, **International Journal of Economics, Business and Accounting Research**, 5 (2), 2021, 9-20

42. C.O. Onyewelu & U.I. Ironkwe, *Human Resource Accounting and Corporate Financial Performance of Quoted Insurance Companies in Nigeria*, **Research Journal of Management Practice**, 7 (3), 2021, 20-39
43. H. S. Mohammad, I. Bujang & T. A. Hakim, *Capital Structure and Financial Performance of Malaysian Construction Firms*, **Asian Economic and Financial Review**, 9 (12), 2019, 1306-1319
44. R. Fuhmann, *How to Calculate Return on Equity (ROE)*, Updated October 12, 2023, [Investopedia Link](#)
45. A. K. Srivastav, *Return on Equity (ROE)*, Updated May 14, 2024, [Wall Street Mojo Link](#)
46. K.S. Oladejo & R. M. Ojokuku, *Human Resource Accounting Practices and Financial Performance of Nigerian Quoted Manufacturing Companies*, **Journal of Management and Entrepreneurship**, 11 (7), 2019, 147-167
47. P. Alekhya & V. Lakshmi, *Impact of Human Resource Accounting on Companies Profitability*, **Test Engineering and Management**, 83 (0193-4120), 2020, 16048-16055
48. D. A. Yulianeu, *The Development of Capacity Building to Improve the Quality of Human Resources Among Small and Medium Enterprises*, **ManajemenBisnis**, 9 (1), 2019, 75-83
49. U. C. Okolie & I. D. Udom, *Challenges of HRM in a Global Business Environment: A Review and Research Agenda (International Approach)*, **International Journal of New Economics and Social Sciences**, 1 (9) 2019, 181-194
50. V. Samartha, T. M. Rajesha, I.T. Hawaldar & L. J. D Sousa., *Application of Lev, and Schwartz Compensation Model on the Accounting Practices of MCF Limited*, **International Journal of Scientific and Technology Research**, 8 (8), 2019, 355-360
51. Y.S Akinjare, M. A. Idowu & T.O Sule, *The Impact of Human Resource Accounting (HRA) on the Performance of Nigerian Firms*, **JABU International Journal of Social and Management Sciences**, 7 (1), 2019, 252-265
52. A. Asein, T.A. Soetan & I. R Akintoye., *Implications of Human Resource Accounting on Human Capital Measurement in Financial Reports*, **International Journal of Advanced Research**, 7 (1), 2019, 287-295
53. A. Bansal & P. Sharma, *An Empirical Evaluation on Performance of Organisation Through Human Resource Accounting: A Study on Selected Corporate Units of India*, **Indian Journal of Finance and Banking**, 3 (1), 2019, 1-12
54. G. Abderraouf, *Measuring Human Resources Value Using Human Resources Accounting Methods and Models-Theoretical Study*, **Elwahas for Research and Studies Review**, 13 (2) 2020, 1416-1431
55. A. A. Pathak, *Human Resource Accounting: An Exemplary Case Study*, **International Journal of Creative Research Thoughts (IJCRT)**, 11 (6), 2023, b700 - b703

56. S. Anil, R. Sudharani, & N. Suresh, *A Study on the Impact of Human Resource Accounting on Firm's Value With Respect to Companies Listed in National Stock Exchange*, **Bulletin Monumental**, 21 (8), 2020, 38-43
57. A. K. Gupta, *A Study of Human Resource Accounting*, **International Journal of Research in Engineering, Science and Management**, 4 (1), 2021, 10-12
58. S. D. Prasanna, *A Study on Human Resource Accounting Methods and Practices in India*, **Journal of Emerging Technologies and Innovative Research**, 8 (10), 2021, 113-119
59. M. Kataria, *A Study on Human Resource Accounting Practices in India*, **International Journal of Trend in Scientific Research and Development (IJTSRD)**, 6 (4), 2022, 1550-1556
60. M. Kumar & U.K. Agrawal, *A Study of Human Resource Accounting Practices in India*, **International Journal of Research Publication and Reviews**, 4 (4), 2023, 475-480
61. S. Mishra, *Human Resources Accounting (HRA) – 2 Major Aspects Financial Analysis*, No Date, [Your Article Library Link](#)
62. A. Deval, *Human Resource Accounting: The True Valuation of Human Asset*, **Inspira-Journal of Modern Management and Entrepreneurship**, 11 (1), 2021, 37-41
63. Vicky, *Top 7 Methods of Human Resource Valuations*, No Date, [Your Article Library Link](#)
64. S. Saxena and D. Verma, *Human Resource Accounting: Basic Introduction*, **International Journal of Education, Modern Management, Applied Science and Social Science**, 3 (2), 2021, 197-200
65. N. Adhikari, *Training and Development Costs, Staff Costs and Operational Profitability in Nepalese Commercial Banks*, **Management Dynamics**, 23 (2), 2020, 109-118
66. Open Tuition, *Management Information (MA1)*, No Date, [Open Tuition Link](#)
67. Orion Infinity HR Solutions, *Importance and Advantages of Manpower Supply for Businesses*, Updated May 24, 2023, [LinkedIn Link](#)
68. Chron Contributor, *The Importance of Company Manpower*, Updated November 17, 2020, [Chron Link](#)
69. A. F. Anoke, *Effect of Employees' Development on the Performance of National Assembly, Nigeria*, **Abuja Journal of Business and Economic Management**, 8 (10), 2020, 366-373
70. H. J. Chowdhury & K. Uddin, *Impact of Training and Development Program on Employee Performance: A Study on State Own Commercial Banks of Bangladesh*, **Journal of Asian and African Social Science and Humanities**, 8 (2), 2022, 1-30
71. Seismic, *The Difference Between Training and Development*, No Date, [Seismic Link](#)

72. Anuradha, *What is the Difference Between Training and Development*, Updated on January 18, 2022, [Pediaa Link](#)
73. Indeed, Editorial Team, *A Guide: Cost of Training Employees With Types and Tips*, Updated March 23, 2023, [Indeed Link](#)
74. G. Anwar & N. N. Abdullah, *The Impact of Human Resource Management Practice on Organizational Performance*, **International Journal of Engineering, Business and Management**, 5 (1), 2021, 35-47
75. E. A. Khawaldeh, *The Impact of Training on Improving Employee Performance: A Case Study on Employees in the Directorate of Education of Ma'an District*, **International Journal of Professional Business Review**, 8 (10), 2023, 1-24
76. Enyota Learning, *The Key Role of Training in Creating a Competitive Advantage*, Updated July 15, 2021, [Enyota Learning Link](#)
77. A. T. Adegbayibi & O. M. Akinyemi, *Human Resource Cost and Return on Assets of Listed Manufacturing Firms in Nigeria*, **European Modern Studies Journal**, 8 (2), 2024, 96-111
78. Chron Contributor, *The Importance of Computer Training and the Workplace*, Updated October 29, 2020, [Chron Link](#)
79. F. A. Sairmaly, *Human Capital Development and Economic Growth: A Literature Review on Information Technology Investment, Education, Skills, and Productive Labour*, **JurnalMinfoPolgan**, 12 (2), 2023, 679-693
80. M. Karim, M. M. Choudhury & W. B. Latif, *The Impact of Training and Development on Employees' Performance: An Analysis of Quantitative Data*, **Noble International Journal of Business and Management Research**, 3 (2), 2019, 25-33
81. S. O. Anikwe, *Manpower Training and Development in Nigeria Public Organizations: A Study of Abia State Civil Service*, **International Journal of Scientific Research and Management**, 10 (1), 2022, 2871-2880
82. M. H. Yimam, *Impact of Training on Employees Performance: A Case Study of Bahir Dar University, Ethiopia*, **Cogent Education**, 9 (1), 2022, 1-18
83. N. Hendy, *The Consequences of A Lack of Training in the Workplace*, Updated on April 5, 2023, [High Speed Training Link](#)
84. J. Herrity, *The Importance of Training Employees: 11 Benefits*, Updated March 29, 2023, [Indeed Link](#)
85. D. I. Met, A. Erkog, B. Ipek & N. A. Kizildere., *Being A Game Changer With Happy Workers: The Ziraat Bank Example*, **Heliyon**, 9 (7), 2023, 1-12
86. G. Poi, *Employee Welfare Packages and the Performance of Public Organizations in Rivers State, Nigeria*, **European Journal of Research and Reflection in Management Sciences**, 8 (2), 2020, 58-79

87. A. Aljumah, *The Impact of Job Training on Recruitment and Employability Skills Among Graduates*, **International Journal of Professional Business Review**, 8 (10), 2023, 1-32
88. N. Behbahani, *Organizations That Invest in Employee Training Help Reduce Costs in the Recruiting and Staffing Process By 49%*, Updated October 2, 2023, [LinkedIn Link](#)
89. S. Vasanthi & S. Basariya, *On-the-job Training Implementation and Its Benefits*, **International Journal of Research and Analytical Reviews**, 6 (1), 2019, 210-215
90. K. Na, *The Effect of On-the-job Training and Education Level of Employees on Innovation in Emerging Markets*, **Journal of Open Innovation: Technology, Market and Complexity**, 7 (47), 2021, 1-20
91. S. Surbhi, *Difference Between On-the-job and Off-the-job Training*, Updated on July 16, 2019, [keydifferences Link](#)
92. Hrlineup, *10 Benefits of Employee Training and Development in the Workplace in 2023*, Updated on December 26, 2022, [HR Lineup Link](#)
93. Talent Garden, *The Benefits of Employee Training and Development in 2023*, No Date, [Talent Garden Link](#)
94. G. Dagne Gebrehiwot & P. Elantheraiyan, *A Study on the Effect of Training on Employee Performance in the Case of Mekelle City, Tigray, Ethiopia*, **Social Sciences & Humanities Open**, 8, 2023, 1-11.
95. C. E. Ugochukwu, U. M. Onwunyi, & S. A. Amah, *Human Capital Development and Organizational Productivity in Selected Manufacturing Firms South-East*, **International Journal of Academic Management Science Research**, 3 (12) 2019, 9-19.
96. M.H. Yimam, *Impact of Training on Employees Performance: A Case Study of Bahir Dar University, Ethiopia*, **Cogent Education**, 9 (1), 2022, 1-57
97. H. V. Lan, *Factors Which Affect the Effectiveness of the Training Program for School Managers in Vietnam*, **Palarch's Journal of Archaeology of Egypt/Egyptology**, 18 (4), 2021, 1912-1926
98. P. C. Mohanty, M. Dash & S. Das, *A Study on Factors Influencing Training Effectiveness*, **Espacios**, 40 (2), 2019, 7
99. E. P. Makanjuola, M.T. Shaibu & O. Isijola, *Effects of Welfare on Employees Commitment in Public Service Organisation: A Case Study of Nesrea Southwest Zone, Nigeria*, **Global Journal of Human Resource Management**, 9 (3), 2021, 12-36
100. D. Marzullo, *What is the Value of Employee Commitment?* , Published April 10, 2019, [Zenefits Link](#)
101. A. Ibrahim & U. Bappi, *Effect of Welfare Package on Workers Performance in the Federal Inland Revenue Service, Abuja*, **International Journal of Social Research and Development**, 1 (4), 2019, 11-16

102. A. O. Binuyo & C. Durugbo, *Employee Welfare and Intention to Leave Evidence From Lagos State Internal Revenue Service, Nigeria*, **International Journal of Innovative Research and Development**, 9 (2), 2020, 148-156
103. N. Agusioma, S. Nyakwara & E. Mwititi, *The Influence of Staff Welfare on Employee Performance at Public Service Commission in Kenya*, **Asian Journal of Business and Management**, 7 (10), 2019, 77-82
104. A. Varadaraj & D. Charumathi, *Impact of Welfare Measures on the Quality of Employees Performance With Special Reference to Construction Industry*, **International Journal of Management Science and Business Administration**, 5 (2), 2019, 30 – 36
105. D. W Lee, J. Lee, H. Kim & M. Kang, *Health-Related Productivity Loss According to Health Conditions Among Workers in South Korea*, **International Journal of Environmental Research and Public Health**, 18 (14), 2021, 1-11
106. N. Reay, *The Hidden Costs of Workplace Accidents*, Updated March 16, 2023, [LinkedIn Article Link](#)
107. S. V. Thorsen, M. A. Flyholm, J. Pedersen, U. Bultmann, Lars L. Andersen & J.B. Bjorner., *Associations Between Physical and Psychosocial Work Environment Factors and Sickness Absence Incidence Depend on the Lengths of the Sickness Absence Episodes: A Prospective Study of 27 678 Danish Employees*, **Occup Environ Med**, (78), 2021, 46–53
108. E. O. Akintoye & S. A. Ofobruku, *Staff Welfare Package and Organizational Performance: A Theoretical Discourse* **European Journal of Business and Management Research**, 7 (2), 2022, 155-159
109. C.S. Chukwueloka, N. G. Okeh & D. C Chukwurah, *Staff Benefits and Its' Activities on Employee Productivity: A Study of Chukwuemeka Odumegwu Ojukwu University, Igbariam – Anambra State, Nigeria*, **International Journal of Academic Multidisciplinary Research**, 5 (2), 2021, 294-303
110. N. P. Z. Thwin, M. Janarthanan & A. Bhaumik., *Impact of Career Advancement on Employee Retention*, **International Journal of Latest Engineering and Management Research**, 8 (1), 2023,106-109
111. F. O. Lanre-Babalola, B. O Oginni, K. S. Ajibade, A. E. Olowu, R. A Balogun, S. O.Tewogbade, O. A. Ilori & A. S. Gbotosho, *Human Capital Development and Employee Performance: Evidence From Osun State Ministry of Human Resource and Capacity Building, Nigeria*, **Journal of Behavioural Studies**, 4 (2), 2023, 1-18
112. P. Boyce, *Human Capital: Definition, Examples, Pros & Cons*, Updated February 7, 2023, [Boycewire link](#)
113. Health Assured Team, *Human Capital Theory*, Updated December 10, 2021, [Health Assured Team Link](#)
114. W. Kenton, *Human Capital Definition: Types, Examples, and Relationship to the Economy*, Updated March 22, 2023, [Humancapital link](#)

115. M. Matashu, *Education, Human Capital Formation and Economic Growth in Sub-Saharan African Countries: A Conceptual Analysis*, **Bulgarian Comparative Education Society**, 20, 2022, 80-85
116. M. J. Alam & D. Sharmin, *Skills Development for Graduate Employability in Bangladesh: Japanese Language in TVET Program*, **Journal of Technical Education and Training**, 15 (2), 2023, 72-91
117. C. G. Eze, *Impact of Human Capital Investment on Economic Growth in Nigeria: Econometric Approach of Autoregressive Distributive Lag Model (Ardl)*, **World Journal of Advanced Research and Reviews**, 18 (2), 2023, 1096–1110
118. S. S. Shandilya, *A Behavioural Economic Perspective on Global Migration and Human Capital Shifts With Special Consideration for Sectoral Development and Industry Specific Innovation*, **International Journal of Social Science and Economic Research**, 6 (10), 2021, 4011-4017
119. S. Ross, *What is the Human Capital Theory and How is it Used?* Updated September 17, 2023, [Human-capital-and-how-it-used Link](#)
120. L. Almendarez., *Human Capital Theory: Implications for Educational Development*, No Date, [Global.uwi.edu Link](#)
121. S. Nickolas., *What is the Relationship Between Human Capital and Economic Growth*, Updated October 28, 2023, [Humancapital Link](#)
122. J.B. Barney, D. J Ketchen & M. Wright., *Resource-Based Theory, and the Value Creation Framework*, **Journal of Management**, 20 (10), 2021, 1–20
123. Mind Tools Content Team, *The Resource-Based View of Strategy*, No Date, [Mindtools.com Link](#)
124. S. Singh, R.P. Mohanty, S. K. Mangla & V. Agrawal, *Critical Success Factors of Additive Manufacturing for Higher Sustainable Competitive Advantage in Supply Chains*, **Journal of Cleaner Production**, 425, 2023, 1-18
125. F. U. Rehman , S. Gyamfi, S. F. Rasool, F. Akbar, K. Hussain & V. Prokop, *The Nexus Between Circular Economy Innovation, Market Competitiveness, and Triple Bottom Lines Efficiencies Among SMES: Evidence From Emerging Economies*, **Environmental Science and Pollution Research**, 30, 2023, 1-19
126. O. Jurevicius, *Resource-Based View*, Updated November 11, 2021, [Strategicmanagementinsight.com Link](#)
127. Oregon State University, *Strategic Management- VRIO Analysis*, No Date, [Open.oregonstate Link](#)
128. C. Zvarimwa & J. Zimuto, *Valuable, Rare, Inimitable, Non-Substitutable, and Exploitable (VRINE) Resources on Competitive Advantage*, **International Journal of Business and Management Science**, 8 (1), 2022, 1-14

129. C .E. Helfat , A. Kaul , D. J. Ketchen Jr, J. B. Barney, O. Chatain & H. Singh, *Renewing the Resource-Based View: New Contexts, New Concepts, and New Methods*, **Strategic Management Journal, Special Release Article**,44 (6), 2023, 1–34
130. J. Donnellan & W. L. Rutledge , *A Case for Resource-Based View and Competitive Advantage in Banking*, **Managerial and Decision Economics**, 2019, 1–10
131. A. A. Kamardi, H. A Mahdiraji, S. Masoumi & V. Jafari-Sadeghi., *Developing Sustainable Competitive Advantages From the Lens of Resource-Based View: Evidence From IT Sector of an Emerging Economy*, **Journal of Strategic Marketing**, 2022, 1-24
132. Y. Liu, J. Kim & J. Yoo, *Intangible Resources and Internationalization for the Innovation Performance of Chinese High-Tech Firms*, **Journal of Open Innovation, Technology, Market and Complexity**,5 (52), 2019, 1-17
133. V. Kaur, *Knowledge-Based Dynamic Capabilities: The Road Ahead in Gaining Organizational Competitiveness, Innovation, Technology and Knowledge Management*, Springer Nature Switzerland AG, 2019, 27. <https://doi.org/10.1007/978-3-030-21649-8>
134. P. Cabanelas, G. Parkhurst, N. Thomopoulos & J. F. Lampon, *A Dynamic Capability Evaluation of Emerging Business Models for New Mobility*, **Research in Transportation Business and Management**, 47, 2023, 1-13.
135. S. Cyfert, A. Chwilkowska-Kubala, W. Szumowski & R. Miskiewicz, *The Process of Developing Dynamic Capabilities: the Conceptualization Attempt and the Results of Empirical Studies*, **PLOS ONE**, 16 (4), 2021, 1-24
136. Entrepreneurship Theories, *Dynamic Capabilities Theory and Entrepreneurship*, No Date, [Entrepreneurshiptheories Link](#)
- 137.C. A. Kero & A. T. Bogale, *A Systematic Review of Resource-Based View. Dynamic Capabilities of Firms and Future Research Avenues*, **International Journal of Sustainable Development and Planning**, 18 (10), 2023, 3137-3154
138. Z. Samsudin & M. D. Ismail, *The Concept of Theory of Dynamic Capabilities in Changing Environment*, **International Journal of Academic Research in Business and Social Sciences**, 9 (6), 2019, 1071 – 1078
139. A. T. Walter, *Organizational Agility: Ill- Defined and Somewhat Confusing A Systematic Literature Review and Conceptualization*, **Management Review Quarterly**, 71, 2021, 343–391
140. M. Saunila, J. Ukko, T. Rantala, M. Nasiri & H. Rantanen., *Preceding Operational Capabilities As Antecedents for Productivity and Innovation Performance*, **Journal of Business Economics**, 90 (3), 2020, 537–561
141. Dynamic capabilities, Updated June 21, 2024, [Wikipedia.Dynamic_Capabilities Link](#)
142. K. Kanapathipillai, S. Kumaran & S. Narayanan, *The Mediating Effect of Entrepreneurial Marketing Strategy Between Dynamic Capabilities and Competitive*

Advantage in the Women-Owned Enterprises in Malaysia, **European Journal of Management and Marketing Studies**, 7 (3), 2022, 1-35

143. M. Muhic & L. Bengtsson, *Dynamic Capabilities Triggered By Cloud Sourcing: A Stage-Based Model of Business Model Innovation*, **Review of Managerial Science**, 15, 2021, 33–54
144. T. R. Pertheban R. Thurasamy, A. Marimuthu, K. Rajah, S. Annamalah, P. Paraman, & W. Chee Hoo. *The Impact of Proactive Resilience Strategies on Organizational Performance: Role of Ambidextrous and Dynamic Capabilities of SMEs in Manufacturing Sector*, **Sustainability**, 15 (16), 2023, 1-32
145. C. Culek, *Dynamic Capabilities: The Source of Competitive Advantage*, Uploaded December 6, 2019, [Batonglobal Link](#).
146. F. Orishede, *Relationship Between Competitive Advantage and Value Creation and Profitability in the Firm*, **African Journal of Social and Behavioural Sciences**, 11 (2), 2021, 1-16
147. W. Dyduch, P. Chudzinski, S. Cyfert & M. Zastempowski, *Dynamic Capabilities, Value Creation and Value Capture: Evidence From SMEs Under Covid-19 Lockdown in Poland*, **PLOS ONE**, 16 (6) 2021, 1-28
148. R. Martínez-Peláez, A. Ochoa-Brust, S. Rivera, V.G. Felix, R. Ostos, H. Brito, R. A. Felix & L. J. Mena, *Role of Digital Transformation for Achieving Technology Sustainability: Mediated Role of Stakeholders, Key Capabilities, and Technology*, **Sustainability**, 15 (14), 2023, 11221, 1-27
149. A. D. Shodeinde & T. N Taiwo, *Absorptive Capabilities As Determinants of Economic Sustainability of Small and Medium-Scale Enterprises*, **Business Perspective Review**, 5 (1), 31-45
150. V. M. Hieu, *A Review of Dynamic Capabilities, Innovation Capabilities, Entrepreneurial Capabilities and Their Consequences*, **Journal of Asian Finance and Business**, 7 (8), 2020, 485–494
151. A. Ngatno & R. S. Dewi, *The Role of Adaptive Ability in Firm Performance: Moderating Effect of Firm Size and Age*, **Asian Economic and Financial Review**, 9 (7), 2019, 807-823
152. C. Nwachukwu & H. Chladkova, *Firm Resources, Strategic Analysis Capability and Strategic Performance: Organizational Structure as Moderator*, **International Journal for Quality Research**, 13 (1), 2019, 75-94
153. The Human Capital Hub, *Dynamic Capability: Everything You Need to Know*, Updated July 5, 2023, [Humancapitalhub Link](#)
154. F. Karimi-Alagheband & S. Rivard, *IT Outsourcing Success: A Dynamic Capability-Based Model*, **Journal of Strategic Information Systems**, 29 (10159), 2020, 1-20

155. S. S. Zhou, A. J. Zhou, J. Feng & S Jiang, *Dynamic Capabilities and Organizational Performance: The Mediating Role of Innovation*, **Journal of Management and Organization**, 25 (5), 2019, 731–747
156. D. J. Teece, *Dynamic Capabilities*, 2023, [Davidjteece.dynamic-capabilities Link](https://www.davidjteece.com/dynamic-capabilities)
157. D. J. Collis & B. N. Anand, *The Virtues and Limitations of Dynamic Capabilities*, **Strategic Management Review**, 2 (1), 2021, 47-78
158. O. A. M. Bonsu, L.K. Dui, L. Ruiwen, E. K. Asare, A. F. S. Prempeh, *Exclusion of Human Resource Accounting in Statement of Financial Position and its Effects on Performance: Empirical Evidence of Ghana*, **Business and Economic Research**, 9 (2), 2019, 1–17
159. G. K. Supriya, *The Role of HRA for Gaining Competitive Advantage*, **International Journal of Trend in Scientific Research and Development**, 3 (2), 2019, 1020
160. K. A. K. Saputra & D. T. Manurung, *The Role of Human Resource Accounting and the Synergy of Village Government in Village Fund Management*, **Journal of Adv Research in Dynamical & Control Systems**, 11 (11), 2019, 303-309
161. B.O. Oginni, J. K. Olowookere & A. O. Ikotun, *Human Resource Accounting and Financial Performance of Deposit Money Bank in Nigeria*, **Nigerian Defence Academy Journal of Economics and Finance**, 4 (1), 2020, 329- 341
162. A. M. Adejuwon, F. Olurankinse & O. Jinadu, *Corporate Determinants and Human Resource Accounting Disclosure of Listed Banks in Nigeria*, **International Journal of Human Resource Studies**, 10 (4), 2020, 303 -317
163. J. O. Abiola & R. A. Adisa, *Influence of Human Resource Accounting Practices on Managerial Decision-making*, **Archives of Business Review**, 8 (5), 2020, 8 -18
164. R. Alamelu, R. Amudha, S. Dinesh, R. Nalini & A.K. Parthasaarathy, *Block Chain Technology and Human Resource Accounting – An Insight*, **International Journal of Advanced Science and Technology**, 29 (5), 2020, 9839-9845
165. C. O. Olaoye & A. B. Afolalu, *Effect of Human Capital Accounting on Earning Per Share of Equity Owners of Deposit Money Banks in Nigeria*, **African Journal of Business Management**, 14 (1), 2020, 485-497
166. A.O. Olayinka & F. F. Adegbe, *Human Resource Accounting and Quality of Financial Reporting of Quoted Oil and Gas Companies in Nigeria*, **International Journal of Accounting, Finance and Risk Management**, 5 (4), 2020, 195-206
167. C. O. Nwauzor & B. L. Tamunoemi, *Human Capital Accounting and Firm Performance: A Study of Oil and Gas Firms in Nigeria*, **Journal of Economics, Management & Social Science**, 6 (2), 2020, 1-22
168. A. S. Sajuyigbe, A.O. Ikotun, & J. N. Obi, *Human Resource Accounting and Organizational Performance: Empirical Investigation of Nigerian Banks*, **International Journal of Economic Research**, 17 (1), 2020, 11-22

169. S. A. Ilemona & G.E. Oyedokun, *Human Resource Accounting and Its Influence on Organisational Profitability*, **SAU Journal of Management and Social Sciences**, 5 (2), 2021, 45-52
170. O. A. Godwin & F.N.P. Udeh, *The Effect of Human Resource Accounting (HRA) on Profitability: A Study of Selected Firms Quoted on the Nigerian Stock Exchange*, **International Journal of Economics, Business and Management Studies (EBMS)**, 8 (11), 2021, 61 -68
171. P. Opoku, *Awareness of Human Resource Accounting in Ghana: Evidence from Tertiary Students*, **International Journal of Research, and Innovation in Social Science (IJRISS)**, 5 (7), 2021, 437 -441
172. M. I. Onyeukwu, O. O, Ihendinihu, & J. U. Nwachukwu, *Human Resource Accounting and Financial Performance of Listed Microfinance Banks in Nigeria*, **Quest Journal of Research in Humanities and Social Services**, 9 (5), 2021, 9 – 16
173. W. Wiyadi, S. E. R. Meilani, I. Pertiwi & R. Trisnawati, *Practices of Human Resource Accounting Disclosure: A Comparative Study Across ASEAN Countries*, **Universal Journal of Accounting and Finance**, 9 (3), 2021,306 – 315
174. T. A. Atoyebi, A. Itegebe & T. K. Lasisi, *The Influence of Human Resources Accounting on the Performance of Nigeria's Listed Consumer Goods Companies*, **International Journal of Research in Commerce and Management Studies**, 3 (3), 2021, 33-51
175. N. B. Ndum & P. Oranefo, *Human Resource Cost and Financial Performance: A Study of Quoted Brewery Firms in Nigeria*, **International Journal of Innovative Finance and Economics Research**, 9 (2), 2021, 73-84
176. C.O. Onyekwelu & F.N. Akanni, *Human Resource Costs and Financial Performance of Quoted Companies in Nigeria*, **Research Journal of Management Practice**, 7 (3), 2021, 1-19
177. E. E. Okon, C. E. Otuza, & S. O. Dada, *Effect of Human Resource in Accounting Information System on Management Decision-Making in Seventh - day Adventist Institutions in Eastern Nigeria*, **Advances in Social Sciences Research Journal**, 8 (6), 2021, 117-129
178. S Kusumastuti, *Company Characteristics, Performance, and Disclosure of Human Resource Accounting: Empirical Study of Banking Companies in Indonesia*, **International Journal of Economics, Business, and Accounting Research**, 5 (1), 2021, 306-319
179. E. O. Abraham, O. D. Odobi & R.O. Enwuchola, *Effect of Human Resources Accounting on Performance of Listed Deposit Money Banks in Nigeria*, **Journal of Accounting and Financial Management**, 8 (4), 2022, 80-132

180. G. Ezeala & A. B Afolalu, *Human Resources Accounting and Shareholders' Wealth of Deposit Money Banks in Nigeria*, **International Journal of Trend in Scientific Research and Development (IJTSRD)**, 6 (2), 2022, 1443-1450
181. J. T. Gimba & C.C. Anyanwu, *Effect of Human Capital Investment on Financial Performance of Listed Deposit Money Banks in Nigeria*, **Baze University Journal of Entrepreneurship, and Interdisciplinary Studies (BUJEIS)**,1 (1), 2022, 5 -103
182. K. S. Raghavendra, *Human Resource Accounting Practices and Its Impact on Managerial Performance: A Study*, **The Review of Contemporary Scientific and Academic Studies an International Multidisciplinary Online Journal**, 2 (8) 2022,1-10
183. M. Kashanipour & R. Z Farooji, *The Impact of Human Resource Accounting on Financial Performance (Case Study: Industry-Oriented Companies Admitted to the Tehran Stock Exchange*, **International Journal of Health Sciences**, 6 (7), 2022, 6549-6558
184. B. M. Jena, N. Maharana, S. K. Chaudhury, & S. Mohanty, *Human Resource Accounting and Financial Performance of Selected Small-Scale Industries of Odisha: An Empirical Analysis*. **Orissa Journal of Commerce**, 43 (1), 2022, 80-92
185. R. Aminu, S. L. Shagari & A. Abubakar, *An Analysis of the Contribution of Human Resource Accounting Disclosure to the Qualitative Characteristics of Financial Reporting*, **International Journal of Advanced Academic Research**, 8 (3), 2022, 132-147
186. G. O. Ogundajo, O. A Kujore & S. K. Kassim, *Human Resource Accounting, Information Disclosure and Firm Value*, **South Asian Research Journal of Business Management**, 4 (5), 2022, 182-187
187. A. P. Abolo, *Human Assets Accounting and Financial Performance of Listed Commercial Banks in Nigeria*, **Management and Accounting Innovative Journal**, 8 (2), 2022, 96-122
188. S. I. Mukolo, E. Jeroh & A. O. Ideh, *Human Resource Accounting and Financial Performance of Selected Quoted Nigerian Food and Beverages Firms*, **Finance and Accounting Research Journal**, 4 (3), 2022, 51-57
189. O. A. Vincent, P. Ledibabari & C. A. Egbuhuzor, *Human Resource Cost and Financial Performance: Evidence from Listed Pharmaceutical Companies in Nigeria*, **European Journal of Accounting, Finance and Investment**, 8 (5), 2022, 1-8
190. U. I. Okafor, C. I. Ohachosim & R. N. Oji, *Expenditure in Human Resource and Financial Performance of Quoted Manufacturing Companies in Nigeria*, **East African Scholars Journal of Economics, Business and Management**, 5 (2), 2022, 48-80
191. B. N. Ogodor & A. R. Olaniyi, *Effect of Human Resource Accounting on Corporate Performance of Nigerian Listed Consumer Products Firm (2013- 2018)*, **ACU Journal of Social and Management Sciences**, 3 (1), 2022, 212-225

192. I. Tadic & Z. A. Barac, *The Role of Human Capital Investments in Business Excellence of Croatian Companies*, **Economic and Business Review**, 24 (3), 2022, 161-170
193. D. D. Astuti & L. Rachmawati, *Factors Affecting Company Financial Performance Using Human Resource Accounting As An Intervening Variable Empirical Study on Service Companies Listed on the Stock Exchange of Thailand (Set)*, **Assets: Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak**, 6 (2), 2022, 86-99
194. T.M. Worimegbe, O. M. Akinyede & M.I. Ojedele, *Human Resource Accounting and Profitability of Deposit Money Banks in Nigeria*, **International Journal of Research Publication and Reviews**, 4 (6), 2023, 3437-344
195. O.O. Ayesan & A. Salemcity, *Human Capital Expenditure and Financial Performance of Selected Manufacturing Firms in Nigeria*, **African Journal of Accounting, Finance & Marketing, University of Port-Harcourt Business School, University of Port-Harcourt**, 7 (3), 2023, 48-59

Lead City University Ibadan DO NOT COPY

Chapter Three

Methodology

This chapter contains the research procedure used in this study. This includes the research design, population of the study, sample size and sampling techniques, methods of data collection, description of research instrument and method of data analysis.

3.1 Research Design

A descriptive research design was used for this study to investigate the relationship between human resource accounting and the financial performance. It was used to provide more information of the topic. The choice of descriptive research design was based on the selection of financial reports of the information communication technology companies to collect data for the study. It will assist in providing a greater understanding of the topic is an area in that much study has not been done and provide an in-depth study into the topic. Quantitative approach was applied to analyse the data of the selected samples from the organisation.

3.2 Population of the Study

The population of the study consists of all information communication technology companies listed on the Nigeria Exchange Group as of December 2022. As of 2022, there were nine companies listed on the Nigeria Exchange Group. Research on human resources accounting and financial performance has been conducted in some areas. This study is

therefore limited to Information Communication Technology companies because it is an area of interest to the researcher and not many studies have been conducted in the area.

3.3 Sample and Sampling Technique

The sample size comprises the nine Information Communication Technology Companies listed on the Nigeria Exchange Group as of 2022. Data for this study was collected from the financial reports of the nine Information Communication Technology Companies listed on the Nigeria Exchange Group for the period of ten years (2013-2022). The purposive sampling technique (non-probability sampling method) was used for selecting the sector due to the relevance of Information Communication Technology and availability of data. There were nine information technology companies listed on the Nigeria Exchange Group namely Airtel, BRICLINKS, CHAMS, Courteville, CWG, eTranzact, MTN, NCR, and OMATEK.

3.4 Description of Research Instrument(s)

Data for the study was collected from secondary sources. This study adopted a quantitative method of data collection that involves the use of financial statements as research instruments for collecting the relevant data on the various Information Communication Technology companies listed on the Nigerian Exchange Group as at 2022.

3.5 Method of Data Collection

This study employed a quantitative method of data collection. Panel data were employed ranging from 2013 -2022 published financial reports of nine companies. The collection of

quantitative data was done through the use of secondary sources. Data for this study was collected from the annual financial reports published by the nine Information Communication Technology Companies listed on the Nigerian Exchange Group for the period of ten years (2013-2022) on the website of Nigeria Exchange Group¹.

3.6 Method of Data Analysis

The ordinary least square regression analytical technique was used for data analysis to determine the relationship between a dependent variable and an independent variable. Results from testing these hypotheses will be statistically significant at a significance level of 0.05. Statistical Package for the Social Sciences (SPSS) version 23 was used to generate descriptive and inferential statistics respectively. The linear regression model developed for the purpose of the analysis is as follows to examine the relationship among variables of human resource accounting and financial performance

$$Y_1 = f(X_1) \quad (i)$$

$$Y_1 = \alpha_0 + \alpha_1 X_1 \quad (ii)$$

$$FP = \alpha_0 + \alpha_1 HRA + e \quad (iii)$$

Where,

y= financial performance is the dependent variable, and

X = human resources accounting is the independent variable

FP = financial performance (human capital efficiency (HCE), organisational profitability ORP), return on assets (ROA) and return on equity (ROE))

HRA = Human Resource Accounting (Number of employees (NE), gross staff cost (GSC), training, development and welfare costs (TDW))

α_0, α_1 = Parameter of the estimate

e = error term

$\alpha_0, \alpha_1 > 0$

Endnote

1. NEG, *Listed Companies*, Nigerian Exchange Group, 2022, <https://ngxgroup.com/exchange/trade/equities/listed-companies/>

Lead City University Ibadan DO NOT COPY

Chapter Four

Results and Discussions of Findings

In this chapter, descriptive and inferential statistics were used in this study to analyse the data.

4.1 Presentation of Data

The data used in this study for the analysis of human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria is presented in Appendix section.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Human Capital Efficiency	90	-10.892	501.480	26.604	76.705
Number of Employee	90	0.000	4000.000	441.256	872.410
Organisational Profitability (net profit after tax)	90	7316716.000	318000000.000	23249474.856	66161669.516
Gross Staff Costs	90	0.000	394000000.000	29286322.077	78415897.064
Return on Assets	90	-999.833	37.902	-17.707	110.028
Training, Development Cost Welfare Costs	90	0.000	589000000.000	13262720.611	64890400.630
Return on Equity	90	-19.644	1.874	-0.345	2.587

Descriptive Statistics

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Human Capital Efficiency	4.962	.254	26.502	.503
Number of Employee	2.831	.254	7.497	.503

Organisational Profitability (net profit after tax)	3.423	.254	11.707	.503
Gross Staff Costs	3.235	.254	10.408	.503
Return on Assets	-8.330	.254	73.610	.503
Training, Development Cost Welfare Costs	8.125	.254	71.528	.503
Return on Equity	-5.802	.254	38.100	.503

Source: Researcher's Fieldwork, 2024

4.2 Descriptive Statistics of Variables

By measuring the financial performance of listed Information Communication Technology Companies in Nigeria, the descriptive analysis sheds light on the variables pertaining to human resource accounting.

The financial reports of the nine information and communication technology companies listed on the Nigeria Exchange Group over a ten-year period (2013–2022) provided the data used in the analysis for this study.

The data presented in Table 4.1 indicates that the Human Capital Efficiency index has a mean of 26.604 with a standard deviation of 76.705. Number of Employees index has a mean of 441.256 with a standard deviation of 872.410; Organizational Profitability (net profit after tax) index has a mean of 23249474.856 with a standard deviation of 66161669; Gross Staff Costs index has a mean of 29286322.077 with a standard deviation of 78415897.064; the Return on Assets index has a mean of -17.707 with a standard deviation of 110.028; the Training, Development Cost & Welfare Costs index has a mean of 13262720.611 with a standard deviation of 64890400.630; and the Return on Equity index has a mean of -0.345 with a standard deviation of 2.587.

Human Capital Efficiency showed a positive skewness that was skew to the right. The skewness is 4.962, the number of employees is 2.831, skewness is 3.423 for organizational profitability (net profit after taxes), the skewness is 3.235 for gross staff costs, the

skewness is 8.125 for training, development & welfare costs, and the skewness is -8.330 for return on assets and -5.802 for return on equity. These values indicate a leftward skewness.

In terms of kurtosis, a distribution that is larger than three and produces a sharper peak with a lower likelihood is referred to as a leptokurtic distribution. The kurtosis for human capital efficiency is (26.502), number of employees (7.497), organizational profitability (net profit after tax) (11.707), gross staff costs (10.408), return on assets (73.610), training, development, and welfare costs (71.528), and return on equity (38.100) all have leptokurtic kurtoses.

4.3 Test of Hypotheses

H₀1: Number of employees does not have any significant effect on human capital efficiency

Table 4.2: Summary of Regression Model Showing number of employees does not have any significant effect on human capital efficiency.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.879 ^a	.772	.770	36.798056945	.603

a. Predictors: (Constant), Number of Employee

b. Dependent Variable: Human Capital Efficiency

Source: Researcher's Fieldwork, 2024

Table 4.3 ANOVA Table Showing number of employees does not have any significant effect on human capital efficiency.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	404488.243	1	404488.243	298.714	.000 ^b
	Residual	119160.536	88	1354.097		
	Total	523648.779	89			

a. Dependent Variable: Human Capital Efficiency

b. Predictors: (Constant), Number of Employee

Source: Researcher's Fieldwork, 2024

Table 4.2 illustrates the regression model summary for the number of employees does not significantly affect the efficiency of human capital. The study of the model summary reveals that the multiple correlation coefficient R is .879, indicating a highly positive connection between the dependent variable (human capital efficiency) and the predictors (number of employees).

From table 4.2, the following data can be obtained:

With R square (R^2) of .772, it can be inferred that the number of employees (an independent variable) accounts for 77.2% of the variation in the dependent variable of human capital efficiency. The error term and additional variables not included in the model account for the remaining 22.8%.

Additionally, the very small difference of $.772 - .770 = 0.002$ between the R square (R^2) and Adjusted R square (Adjusted R^2) values shows that the model fits the data quite well. The average separation between the data points and the fitted line is approximately 36.8% human capital efficiency, as indicated by the standard error of the estimate, which is also referred to as the standard error of the regression and is at 36.798.

Since the observed value of the test statistic (.603) is less than the tabulated lower bound, then, we reject the null hypothesis of non-auto correlated error in favor of the hypothesis of positive first-order autocorrelation. The last column displays Durbin-Watson, which is .603.

From the table, the bounds are $dL = 1.635$ and $dU = 1.679$.

The ANOVA table is used to assess if the model is sufficiently significant, as shown in Table 4.3. The null hypothesis according to which the number of employees has no discernible impact on the efficiency of human capital, can be tested using the F-value of 298.714. F must be compared with an F (1, 88) degree of freedom in order to accomplish this. The output is a p value, which is listed in the significance column. In this case, p is reported as .000, which is less than the standard .05 level of significance.

As a result, we reject the null hypothesis, which states that the number of employees has no discernible impact on human capital efficiency. Instead, we can conclude that the number of employees significantly varies human capital efficiency, indicating that the regression model fits the data well.

Table 4.4: Coefficients showing number of employees does not have any significant effect on human capital efficiency.

		Coefficients ^a					95.0% Confidence Interval for B	
		Unstandardized Coefficients		Standardized Coefficients				
Model	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	
1 (Constant)	-7.494	4.352		-1.722	.089	-16.142	1.154	
Number of Employee	.077	.004	.879	17.283	.000	.068	.086	

a. Dependent Variable: Human Capital Efficiency

Source: Researcher's Fieldwork, 2024

The regression model's summary in table 4.4, indicating the number of employees has no discernible impact on the efficiency of human capital. The coefficients that make up the regression equation are the first part of the regression model shown above. When there are

no employees, the expected value of human capital efficiency is -7.494, which is represented by the regression intercept (Constant).

The amount by which we forecast that human capital efficiency changes for an increase in the number of employees of one unit is represented by the regression slope, or B, which is 0.077. The associated standard errors of 0.004 and 4.352 for each of the coefficients can be used to evaluate their significance. In the case of the slope, a standardized coefficient can also be constructed, and the value under the Beta column of 0.879 indicates the expected change in the number of standard deviations of human capital efficiency for an increase of one standard deviation in the workforce.

Forming test statistics that are reported under the t column is necessary in order to determine the significance of the coefficients. The t statistic for the intercept is -1.722, and the value can be compared with a t distribution to test the null hypothesis that the intercept $B = 0$. The p value is 0.089, meaning that we are unable to reject the null hypothesis that the intercept is zero.

Similarly, the t statistic for the slope is 17.283, and the value can be compared with a t distribution to test the null hypothesis that $B = 0$. The p value is 0.000, meaning that the null hypothesis regarding the slope coefficient on the number of employees is zero is rejected.

The confidence intervals for the coefficients are finally displayed in the two columns, with a lower bound of -16.142 and an upper bound of 1.154 for the estimation of the intercept. Likewise, we reject the null hypothesis that the slope was zero because the 95 percent confidence interval bounds for the slope (number of employees) B coefficient are 0.068 and 0.086, respectively.

H₀2: Gross staff cost does not influence organisational profitability

Table 4.5: Summary of Regression Model showing gross staff cost does not influence organisational profitability.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.591 ^a	.349	.342	53681090.32	1.408

a. Predictors: (Constant), Gross Staff Costs

b. Dependent Variable: Organisational Profitability (net profit after tax)

Source: Researcher's Fieldwork, 2024

Table 4.6 ANOVA Table Showing gross staff does not influence organisational profitability.

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.36E+17	1	1.36E+17	47.195	.000 ^b
	Residual	2.5359E+17	88	2.88166E+15		
	Total	3.8959E+17	89			

a. Dependent Variable: Organisational Profitability (net profit after tax)

b. Predictors: (Constant), Gross Staff Costs

Source: Researcher's Fieldwork, 2024

The model summary of the regression model of gross staff cost does not significantly affect organizational profitability, as table 4.5 demonstrates.

The study of the model summary reveals that the multiple correlation coefficient R is .591, indicating a high positive connection between the dependent variable (organizational profitability) and the predictors (gross staff costs).

The table 4.5 yields the following information that the R square (R^2) is .349. This indicates that the gross staff expenses (the independent variable) can account for 34.9% of the

variation in the dependent variable, which is organizational profitability. The error term and additional variables not included in the model account for the remaining 65.1%. The average distance between the data points and the fitted line of organizational profitability is indicated by the standard error of the estimate, which is also referred to as the standard error of the regression and is 53681090.32.

Since the observed value of the test statistic (1.408) is less than the tabulated lower bound, we reject the null hypothesis of non-auto correlated error in favor of the hypothesis of positive first-order autocorrelation.

The last column displays Durbin-Watson, which is 1.408. From the table, the bounds are $dL = 1.635$ and $dU = 1.679$.

The ANOVA table is used to assess if the model is sufficiently significant, as shown in Table 4.6. The null hypothesis, which states that gross staff costs have no discernible impact on organizational profitability, can be tested using the F-value of 47.195. F must be compared with an F (1, 88) degree of freedom in order to accomplish this. The output is a p value, which is listed in the significance column. In this case, p is reported as .000, which is less significant than the standard .05 level of significance.

It can be concluded that there is a significant variation in organizational profitability due to gross staff cost, indicating that the regression model is a good fit for the data. As a result, we reject the null hypothesis that gross staff cost has no significant effect on organizational profitability.

Table 4.7: Coefficients showing gross staff does not influence organisational profitability.

Model	Coefficients ^a				95.0% Confidence Interval for B
	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	

	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	8650092	6044390		1.431	.156	-3361863	20662046
Gross Staff Costs	.499	.073	.591	6.870	.000	.354	.643

a. Dependent Variable: Organisational Profitability (net profit after tax)

Source: Researcher's Fieldwork, 2024

The regression model demonstrating that gross personnel expenses have no bearing on organizational profitability is described in Table 4.7.

The coefficients that make up the regression equation are the first part of the regression model shown above. When gross staff expenses are zero, the expected value of organizational profitability is 8650092, which is represented by the regression intercept (Constant). The amount by which we forecast that an increase in gross staff expenses of one unit will affect organizational profitability is represented by the regression slope, or B, which is .499.

In order to determine their significance and, in the case of the slope, to construct a standardized coefficient, both coefficients have associated standard errors of 6044390 and .073, respectively. The coefficient under the Beta column of .591 indicates the expected change in the number of standard deviations of organizational profitability for an increase of one standard deviation in gross staff costs. The test statistics that are reported under the t column must be formed in order to determine the significance of the coefficients. The t statistic for the intercept is 1.431, and the value can be compared with a t distribution to test the null hypothesis that the intercept $B = 0$. The p value is .156, so we are unable to reject the null hypothesis that the intercept is zero.

Similarly, the t statistic for the slope is 6.870, and the value can be compared with a t distribution to test the null hypothesis that $B = 0$, the p value is .000, allowing us to reject the null hypothesis that the slope coefficient on gross staff costs is zero.

The confidence intervals for the coefficients are finally displayed in the two columns, with an upper bound of 20662046 and a lower bound of -3361863. Likewise, we reject the null hypothesis that the slope was zero because the 95 percent confidence interval bounds for the slope (gross staff costs) B coefficient are .354 and .643.

H₀₃: Human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset

Table 4.8: Summary of Regression Model Showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.040 ^a	.002	-.010	110.564559884	2.062

a. Predictors: (Constant), Training, Development Cost Welfare Costs

b. Dependent Variable: Return on Assets

Source: Researcher's Fieldwork, 2024

Table 4.9 ANOVA Table Showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset.

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1697.149	1	1697.149	.139	.710 ^b

Residual	1075757.927	88	12224.522
Total	1077455.076	89	

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Training, Development Cost Welfare Costs

Source: Researcher's Fieldwork, 2024

Table 4.8 shows the model summary of regression model of human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset.

In the model summary, the analysis shows that the multiple correlation coefficient R is .040, which indicated a very weakly positive correlation between the predictors (human resources accounting) and the dependent variable (return on asset).

The following information can be derived from the table 4.8.

R square (R^2) is .002, which implies that 0.2% of variation in return on asset (dependent variable) can be explained by the human resources accounting (independent variable). The remaining 99.8% is explained by other factors outside the model and the error term. The standard error of the estimate is 110.564559884, is also known as the standard error of the regression, which tells us the average distance of the data points from the fitted line of organisational profitability.

The last column show Durbin-Watson which is 2.062, since $d > 2$, then the error terms are negatively correlated, to test for negative autocorrelation, the test statistic (4-d) is compared to lower and upper critical values, from the table the bound are $dL = 1.635$ and $dU = 1.679$, since the observed value of the test statistic ($4 - 2.062 = 1.938$) is greater than the tabulated upper bound, then we do not reject the null hypothesis of non-auto correlated error in the favour of the hypothesis of the negative first-order autocorrelation.

Table 4.9 shows the ANOVA table is used to determine whether the model is significant enough. F – Value is .139 and can be used to test the null hypothesis human resources accounting does not have any significant effect on return on asset. To do this, F needs to be compared with an F (1, 88) degree of freedom.

The results in a p value that is given in the sig. column, here p is quoted as .710 which is greater than the conventional .05 level of significance. Therefore, we fail to reject the null hypothesis that human resources accounting does not have any significant effect on return on asset and it can be concluded that there exists not a significant variation in return on asset due human resources accounting.

Table 4.10: Coefficients showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on asset.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	-18.6	11.898				-1.563
1 Training, Development Cost Welfare Costs	6.73E-08	1.806E-07	.04	.373	.71	-2.916E-07	4.262E-07

a. Dependent Variable: Return on Assets

Source: Researcher’s Fieldwork, 2024

The regression model demonstrating that costs associated with human resources accounting (training, development, and welfare costs) have no effect on return on asset is described in Table 4.10. The coefficients that make up the regression equation are the first part of the regression model shown above. The expected value of return on asset when

human resources accounting is zero is represented by the regression intercept (Constant), which is -18.6. The amount by which we predict that return on asset changes with an increase in human resources accounting of one unit is $6.73E-08$, which is the regression slope.

In order to determine their significance and, in the case of the slope, to construct a standardized coefficient, both coefficients have associated standard errors of 11.898 and $1.806E-07$, respectively. The coefficient located under the Beta column of .04 indicates the expected change in the number of standard deviations of return on asset for an increase of one standard deviation in human resources accounting. We must create test statistics that are reported under the t column in order to determine the significance of the coefficients.

For the intercept, the t statistic is -1.563, and the value can be compared with a t distribution to test the null hypothesis that the intercept $B = 0$. The p value is .122, meaning that we are unable to reject the null hypothesis that the intercept is not equal to zero. Similarly, for the slope, the t statistic is .373, and the value can be compared with a t distribution to test the null hypothesis that $B = 0$. The p value is .71, meaning that we are unable to reject the null hypothesis that the slope coefficient on human resources accounting is not equal to zero.

The confidence intervals for the coefficients are finally displayed in the two columns, with a lower bound of -42.245 and an upper bound of 5.045 for the estimation of the intercept. Similarly, we are unable to reject the null hypothesis that the slope was not equal to zero because the slope (human resources accounting) B coefficient has a 95 percent confidence interval bound of $-2.916E-07$ and $4.262E-07$.

H₀4: Human resources accounting-related costs (training, development, and welfare costs) do not influence return on equity.

Table 4.11: Summary of Regression Model Showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on equity.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.149 ^a	.022	.011	2.572794184	.249

a. Predictors: (Constant), Training, Development Cost Welfare Costs

b. Dependent Variable: Return on Equity

Source: Researcher's Fieldwork, 2024

Table 4.12 ANOVA Table Showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on equity.

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.287	1	13.287	2.007	.160 ^b
	Residual	582.496	88	6.619		
	Total	595.782	89			

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Training, Development Cost Welfare Costs

Source: Researcher's Fieldwork, 2024

The regression model summary for human resources accounting-related expenditures (training, development, and welfare costs) does not affect return on equity, as shown in Table 4.11.

The study of the model summary reveals that the multiple correlation coefficient R is .149, indicating a very weakly positive connection between the dependent variable (return on equity) and the predictors (human resources accounting).

The table 4.11 yields the following information:

The R square (R^2) is .022, meaning that the accounting for human resources can account for 2.2% of the variation in return on equity (the dependent variable). The error term and additional variables not included in the model account for the remaining 97.8%. The average distance between the data points and the fitted line of return on equity is indicated by the standard error of the estimate, which is 2.572794184. This value is also referred to as the standard error of the regression.

Since the observed value of the test statistic (.249) is less than the tabulated lower bound, we reject the null hypothesis of non-auto correlated error in favor of the hypothesis of positive first-order autocorrelation. The last column displays Durbin-Watson, which is .249. From the table, the bounds are $dL = 1.635$ and $dU = 1.679$.

The ANOVA table was used to assess if the model is sufficiently significant, as shown in Table 4.6. The null hypothesis, which states that human resources accounting has no discernible impact on return on asset, may be tested using the F -value of 2.007. F must be compared with an $F(1, 88)$ degree of freedom in order to accomplish this.

The yield of a p value, which is reported in the sig. column; in this case, p is quoted as .160, which is higher than the typical level of significance: .05. Thus, it may be said that there is no significant variance in return on equity caused by human resources accounting, and we are unable to reject the null hypothesis that human resources accounting has no effect on return on asset.

Table 4.13: Coefficients showing human resources accounting-related costs (training, development, and welfare costs) do not influence return on equity.

Model	Coefficients						
	Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
	B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
1 (Constant)	-.424	.277		-1.531	.129	-0.974	0.126
Training, Development Cost Welfare Costs	5.95E-09	4.20E-09	.149	1.417	.160	-2.3977E-09	1.43063E-08

a. Dependent Variable: Return on Equity

Source: Researcher's Fieldwork, 2024

The regression model demonstrating that costs associated with human resources accounting (training, development, and welfare costs) have no effect on return on equity is described in Table 4.13. The coefficients that make up the regression equation are the first part of the regression model shown above. The expected return on equity when human resources accounting is zero is represented by the regression intercept (Constant), which is -.424. The amount by which we forecast that return on equity decreases for an increase in human resources accounting of one unit is 5.95E-09, which is the regression slope.

In order to determine their significance and, in the case of the slope, to construct a standardized coefficient, both coefficients have associated standard errors of .277 and 4.20E-09, respectively. The coefficient under the Beta column of .149 indicates the expected change in the number of standard deviations of return on equity for an increase of one standard deviation in human resources accounting. The test statistics that are reported under the t column must be formed in order to determine the significance of the coefficients. The t statistic for the intercept is -1.531, and the value can be compared with a t distribution to test the null hypothesis that the intercept $B = 0$. The p value is .129,

meaning that we are unable to reject the null hypothesis that the intercept is not equal to zero.

Similarly, the t statistic for the slope is 1.417, and the value can be compared with a t distribution to test the null hypothesis that $B = 0$, the p value is .160, meaning that we are unable to reject the null hypothesis that the slope coefficient in human resources accounting is not equal to zero.

Lastly, the two columns present the confidence intervals for the coefficients, with the estimate of the intercept having a lower bound of -.974 and an upper bound of .126. Similarly, we are unable to reject the null hypothesis that the slope was not equal to zero because the slope (human resources accounting) B coefficient has a 95 percent confidence interval bound of -2.3977E-09 and 1.43063E-08.

H₀₅: Human resources accounting has no joint significant effect on financial performance

Table 4.14: Summary of Regression Model of joint influence of human resource accounting on financial performance

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.926 ^a	0.857	0.856	16875849.59	1.53

a. Predictors: (Constant), Human Resource Accounting

b. Dependent Variable: Financial Performance

Source: Researcher's Fieldwork, 2024

Table 4.15 ANOVA Table of joint influence of human resource accounting on financial

performance

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.508E+17	1	1.50795E+17	529.488	.000 ^b
	Residual	2.5062E+16	88	2.84794E+14		
	Total	1.7586E+17	89			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Human Resource Accounting

Source: Researcher's Fieldwork, 2024

The model summary of the regression model of human resources accounting indicates that there is no combined substantial impact on financial performance (Table 4.14).

The study of the model summary reveals that the multiple correlation coefficient R is .926, indicating a high positive correlation between the dependent variable (financial performance) and the predictors (human resources accounting).

Table 4.14 yields the following results: the R square (R^2) is .857, meaning that human resources accounting accounts for 85.7% of the variation in financial performance (the dependent variable). The error term and additional variables not included in the model account for the remaining 14.3%. Moreover, a very good fit of the model is indicated by the small difference between the R square (R^2) and Adjusted R square (Adjusted R^2) values, which is $.857 - .856 = 0.001$. The average distance between the data points and the fitted line of financial performance is indicated by the standard error of the estimate, which is often referred to as the standard error of the regression and is 16875849.59.

Since the observed value of the test statistic (1.53) is less than the tabulated lower bound, we reject the null hypothesis of non-auto correlated error in favor of the hypothesis of positive first-order autocorrelation. The last column displays Durbin-Watson, which is 1.53. From the table, the bounds are $dL = 1.635$ and $dU = 1.679$.

Table 4.6 shows how ANOVA table was used to determine whether the model is sufficiently significant. F – Value is 529.488 and was used to test the null hypothesis human resources accounting does not have any significant effect on financial performance. To do this, F needs to be compared with an F (1, 88) degree of freedom. The results in a p valve is given in the significance column, here p is quoted as .000 which is less than the conventional .05 level of significance.

Therefore, we reject the null hypothesis that human resources accounting does not have any significant effect on financial performance and it can be concluded that there exists a significant variation in financial performance due to human resources accounting. Which means that the regression model is a good fit for the data.

Table 4.16: Coefficients of joint influence of human resource accounting on financial performance

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Beta	Lower Bound
1 (Constant)	264457.903	1886670.266	-.140	.889	4013818.600	3484902.795	

Human Resource Accounti ng	2.489	.108	.926	23.01 1	.000	2.274	2.704
-------------------------------------	-------	------	------	------------	------	-------	-------

a. Dependent Variable: Financial Performance

Source: Researcher's Fieldwork, 2024

Table 4.16 summarized the regression model of joint influence of human resource accounting on financial performance. The regression model above begins with the coefficients that form the regression equation. The regression intercept (Constant) is -264457.903. When human resource accounting is zero, the anticipated value of financial performance is -264457.903.

By the regression slope, the B is 2.489 and is the amount by which we predict that human capital efficiency changes for an increase in human resource accounting of one unit. Both coefficients have associated standard errors of 1886670.266 and .108 respectively, that can be used to assess their significance, and also in the case of the slope, to construct a standardized coefficient which is under the Beta column of .926. It represents the predicted change in the number of standard deviation of financial performance for an increase of one standard deviation in human resource accounting.

To test for the significance of the coefficients, we need to form test statistics which are reported under the t column. For the intercept, the t statistic is -.140 and the value can be compared with a t distribution to test the null hypothesis that the intercept $B = 0$, the p value is .889. So, we fail to reject the null hypothesis that the intercept is zero, and for the slope, the t statistic is 23.011 and the value can be compared with a t distribution to test the null hypothesis that $B = 0$, the p value is .000. So we reject the null hypothesis that the slope coefficient on human resource accounting is zero.

Finally, the two columns show us the confidence intervals for the coefficients and which show a lower bound of -4013818.600 and an upper bound of 3484902.795 for the estimate of the intercept. Similarly, at the 95 percent confidence interval bound for the slope (human resource accounting), B coefficient are .2.274 and 2.704, we reject the null hypothesis that the slope was 0.

4.4 Discussion of Findings

The following are the results of multiple regression analysis for the human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria.

Hypothesis one was tested to determine the impact of the number of employees on human capital efficiency. The results indicate that the impact of the number of employees does have a significant influence on human capital efficiency. The rejection of the null hypothesis further emphasises the statistical significance of this influence, reinforcing the idea that the number of employees play crucial roles in fostering positive and strong human capital efficiency. This finding highlights that the variable contribute positively to the human capital efficiency.

Hypothesis two was tested to determine the impact of the gross staff cost on organisational profitability. The results indicate that the impact of the gross staff cost does have a significant influence on organisational profitability. The rejection of the null hypothesis further emphasises the statistical significance of this influence, reinforcing the idea that the gross staff cost play crucial roles in fostering positive and strong organisational profitability.

Hypothesis three was tested to determine the impact of human resources accounting-related costs (training and development, and welfare costs) on return on asset at $p < 0.05$. It

was found that the results were not significant (we fail to reject the null hypothesis that the slope was not equal to 0).

Hypothesis four was tested to determine the impact of human resources accounting-related costs (training and development, and welfare costs) on equity on asset. at $p < 0.05$. It was found that the results were not significant (we fail to reject the null hypothesis that the slope was not equal to 0).

Hypothesis five was tested to determine the joint influence of human resource accounting on financial performance. The results indicate that the influence of human resource accounting does have a significant influence on financial performance. The rejection of the null hypothesis further emphasises the statistical significance of this influence, reinforcing the idea that the human resource accounting plays a crucial role in fostering positive and strong financial performance. This finding highlights that the variable contribute positively to the financial performance.

Chapter Five

Conclusion

This chapter presents the summary of findings, conclusion, recommendations of the study, contribution to knowledge and suggestion for further studies.

5.1 Summary of Findings

This study examined the human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria. There were nine

information technology companies listed on the Nigeria Exchange Group namely Airtel, Briclinks, CHAMS, Courteville, CWG, eTRANSACT, MTN, NCR, and OMATEK making up the Information Communication Technology sector.

The data were secondary data sourced from Nigeria Exchange Group. The data were subjected to statistical test and the findings provided valuable insight into the human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria.

The analysis provides the summary of descriptive statistics of human resource accounting and financial performance of listed Information Communication Technology Companies in Nigeria. The following are the mean: Human Capital Efficiency is 26.604, Number of Employee is 441.256, Organisational Profitability (net profit after tax) is 23249474.856, Gross Staff Costs is 29286322.077, Return on Assets is -17.707, Training, Development Cost Welfare Costs is 13262720.611, and Return on Equity is -0.345, with relatively high variability in the value.

Human Capital Efficiency, Number of Employee, Organisational Profitability (net profit after tax), Gross Staff Costs, Training, Development Cost Welfare Costs have positive skewness to the right, while Return on Assets, and Return on Equity have negative skewness, which was to the left. The kurtosis were leptokurtic distribution which is greater than 3, the results is a sharper peak with a lower likelihood.

From the analyses and interpretation of hypotheses, the following is the summary with the major empirical findings of this study:

1. Number of employees have a positive and significant effect on human capital efficiency ($R = .879$, $R^2 = .772$, $DW = .603$, $F = 298.714$, $B = .077$, $t = 17.283$, $p(0.00) < 0.05$).

2. Gross staff cost have a positive and significant influence on organisational profitability ($R = .591$, $R^2 = .349$, $DW = 1.408$, $F = 47.195$, $B = .499$, $t = 6.870$, $p(0.00) < 0.05$).
3. Human resources accounting-related costs (training, development, and welfare costs) have an insignificant influence on return on asset ($R = .040$, $R^2 = .002$, $DW = 2.062$, $F = .139$, $B = 6.73E-08$, $t = .373$, $p(0.710) > 0.05$).
4. Human resources accounting-related costs (training, development, and welfare costs) have an insignificant influence on return on equity ($R = .149$, $R^2 = .022$, $DW = .249$, $F = 2.007$, $B = 5.95E-09$, $t = 1.417$, $p(0.160) > 0.05$).
5. Human resources accounting variables jointly have a positive and significant influence on financial performance ($R = .926$, $R^2 = .857$, $DW = 1.53$, $F = 529.488$, $B = 2.489$, $t = 23.011$, $p(0.00) < 0.05$).

5.2 Conclusion

Based on the summary of findings in this study, the study conclude that:

1. Number of employees was significant on human capital efficiency of listed Information Communication Technology Companies in Nigeria.
2. Gross staff cost was significant on organisational profitability of listed Information Communication Technology Companies in Nigeria.
3. Return on asset have a positive insignificant relationship with human resources accounting-related costs (training, development, and welfare costs) of listed Information Communication Technology Companies in Nigeria.
4. Return on equity have a positive insignificant relationship with human resources accounting-related costs (training, development, and welfare costs) of listed Information Communication Technology Companies in Nigeria.

5. Human resources accounting variables jointly have a positive and significant influence on financial performance of listed Information Communication Technology Companies in Nigeria.

5.3 Recommendations

1. Firms in Information Communication Technology sector in Nigeria should invest more in human resources to enhance their productivity and competitiveness.
2. Firms in Information Communication Technology sector in Nigeria should disclose more information about their human resources accounting and practices to attract investors and stakeholders.
3. Firms in Information Communication Technology sector in Nigeria should monitor and evaluate the impact of human resources accounting and on their financial performance and make necessary adjustments.
4. Firms in Information Communication Technology sector in Nigeria should invest in the human resources in this sector, being service oriented for increased profitability and the success of the organization at large.
5. In addition, Board of Directors should ensure that necessary policies relating to HRA are not only established but, effectively implemented.

5.4 Contribution to Knowledge

This study contributes to the existing literature by examining the relationship between human resource accounting (HRA) and different measures of financial performance as moderated by Information Communication Technology (ICT) expenditure. The study provides a better understanding about human resource accounting and its benefits in ICT sector in Nigeria. The study also provides empirical evidence on the relationship between HRA disclosure and financial performance, and how this relationship is influenced by the

level of ICT adoption. The study adds to the knowledge of HRA and ICT as strategic intangible assets that can enhance the competitiveness and sustainability of firms in Nigeria.

5.5 Suggestion for Further Studies

Future studies can extend the scope of this study by using other measures of HRA and ICT, such as ICT intensity, ICT productivity, etc. Future studies can also explore the causal mechanisms that link HRA and ICT to financial performance, such as innovation, customer satisfaction, employee engagement, etc. Future studies can also compare the effects of HRA and ICT on financial performance across different sectors, regions, and countries.

Bibliography

Books

Kaur V., *Knowledge-Based Dynamic Capabilities: The Road Ahead in Gaining Organizational Competitiveness, Innovation, Technology and Knowledge Management*, 2019, Springer Nature Switzerland AG 2019, 27. <https://doi.org/10.1007/978-3-030-21649-8>

Internet

Almendarez. L., *Human Capital Theory: Implications for Educational Development*, No Date, [Global. uwiedu Link](#)

Anuradha, *What is the Difference Between Training and Development*, Updated on January 18, 2022, [Pediaa Link](#)

- Banton C., *Efficiency: What it Means in Economics, the Formula to Measure it*, Updated September 28, 2023, [Investopedia Link](#)
- Beaver S., *30 Financial Metrics and KPIS to Measure Success in 2023*, Updated March 22, 2023, [Netsuite Link](#)
- Behbahani N., *Organizations That Invest in Employee Training Help Reduce Costs in the Recruiting and Staffing Process By 49%*, 2023, Updated October 2, 2023, [LinkedIn Link](#)
- Boyce P., *Human Capital: Definition, Examples, Pros & Cons*, Updated February 7, 2023, [Boycewire link](#)
- Chron Contributor, *The Importance of Company Manpower*, Updated November 17, 2020, [Chron Link](#)
- Chron Contributor, *The Importance of Computer Training and the Workplace*, Updated October 29, 2020, [Chron Link](#)
- Cote C., *How to Determine Profitability and Drive Strategic Decisions*, 2020, [HBS Online Link](#)
- Culek C., *Dynamic Capabilities: The Source of Competitive Advantage*, Uploaded December 6, 2019, [Batonglobal Link](#).
- Dynamic capabilities, Updated June 21, 2024, [Wikipedia.Dynamic_Capabilities Link](#)
- Entrepreneurship Theories, *Dynamic Capabilities Theory and Entrepreneurship*, No Date, [Entrepreneurshiptheories Link](#)
- Enyota L., *The Key Role of Training in Creating A Competitive Advantage*, Updated July 15, 2021, [Enyota Learning Link](#)
- Fuchs J., *Revenue vs. Profit: the Difference & Why it Matters*, Published January 2022, [HubSpot Link](#)
- Furhmann R., *How to Calculate Return on Equity (ROE)*, Updated October 12, 2023, [Investopedia Link](#)
- Gordon J., *Theory of Firms (Economics) – Explained*, Updated March 26, 2023, [Business Professor Link](#)
- Health Assured Team, *Human Capital Theory*, Updated December 10, 2021, [Health Assured Team Link](#)
- Hendy N., *The Consequences of A Lack of Training in the Workplace*, Updated on April 5, 2023, [High Speed Training Link](#)
- Herrity J., *The Importance of Training Employees: 11 Benefits*, Updated March 29, 2023, [Indeed Link](#)

Hrlineup, *10 Benefits of Employee Training and Development in the Workplace in 2023*, Updated December 26, 2022, [HR Lineup Link](#)

Indeed, Editorial Team, *A guide: Cost of Training Employees With Types and Tips*, Updated March 23, 2023, [Indeed Link](#)

Jurevicius, O, *Resource-Based View*, Updated November 11, 2021, [Strategicmanagementinsight.com Link](#)

Kenton W., *Financial Performance: Definition, How it Works, and Example*, 2023, [Investopedia Link](#)

Mackenzie F., *What is Human Capital Efficiency and Why is it So Important?* Uploaded September, 2023, [Workable Link](#)

Marzullo D., *What is the Value of Employee Commitment?* Published April 10, 2019, [Zenefits Link](#)

Mind Tools Content Team, *The Resource-Based View of Strategy*, No Date, [Mindtools.com Link](#)

Mishra S., *Human Resources Accounting (HRA) – 2 Major Aspects Financial Analysis*, No Date, [Your Article Library Link](#)

NEG, *Listed Companies*, Nigerian Exchange Group, 2022, <https://ngxgroup.com/exchange/trade/equities/listed-companies/>

Nickolas. S., *What is the Relationship Between Human Capital and Economic Growth*, Updated October 28, 2023, [Human Capital Link](#)

Open Tuition, *Management Information (MAI)*, No Date, [Open Tuition Link](#)

Oregon State University, *Strategic Management- VRIO Analysis*, no date, [Open.oregonstate Link](#)

Orion Infinity HR Solutions, *Importance and Advantages of Manpower Supply for Businesses*, 2023, [LinkedIn Link](#)

Reay N., *The Hidden Costs of Workplace Accidents*, Updated March 16, 2023, [LinkedIn Article Link](#)

Riya B., *Objectives of Business*, 2023, [Economics Discussion Link](#)

Ross S., *What is the Human Capital Theory and How is it Used?* Updated September 17, 2023, [Human-capital-and-how-it-used Link](#)

Seismic, *The Difference Between Training and Development*, No Date, [Seismic Link](#)

Srivastav A. K., *Return on Equity (ROE)*, Updated May 14, 2024, [Wall Street Mojo Link](#)

Surbhi S., *Difference Between On-the-job and Off-the-job Training*, Updated on July 16, 2019, [Keydifferences Link](#)

Talent Garden, *The Benefits of Employee Training and Development in 2023*, No Date, [Talent Garden Link](#)

Teece D. J., *Dynamic Capabilities*, 2023, <https://www.davidjteece.com/dynamic-capabilities>

The Human Capital Hub, *Dynamic Capability: Everything You Need to Know*, Updated July 5, 2023, [Humancapitalhub Link](#)

Vicky, *Top 7 Methods of Human Resource Valuations*, No Date, [Your Article Library Link](#)

Journals

Abderraouf G., *Measuring Human Resources Value Using Human Resources Accounting Methods and Models-Theoretical Study*, **Elwihat for Research and Studies Review**, 13 (2), 2020, 1416-1431

Abiola J. O. & Adisa R. A., *Influence of Human Resource Accounting Practices on Managerial Decision-making*, **Archives of Business Review**, 8 (5), 2020, 8-18

Abolo A. P., *Human Assets Accounting and Financial Performance of Listed Commercial Banks in Nigeria*, **Management and Accounting Innovative Journal**, 8 (2), 2022, 96-122

Abraham E. O., Odobi O.D. & Enwuchola R.O., *Effect of Human Resources Accounting on Performance of Listed Deposit Money Banks in Nigeria*, **Journal of Accounting and Financial Management**, 8 (4), 2022, 80-132

Abu S. O. & Okpe J. U., *Dividend Policy and Profitability of Agro- Allied Companies in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 8 (8), 2020, 121-137

Adegbayibi A. T & Akinyemi O. M, *Human Resource Cost and Return on Assets of Listed Manufacturing Firms in Nigeria*, **European Modern Studies Journal**, 8 (2), 2024, 96-111

Adegbie F. F., Akintoye I. R. & Alu C.N.A., *Effect of Managerial Efficiency on Corporate Financial Performance of Quoted Nigerian Firms*, **European Journal of Accounting, Auditing and Finance Research**, 7 (6), 2019, 12-39

Adejuwon A. M., Olurankinse F. & Jinadu O., *Corporate Determinants and Human Resource Accounting Disclosure of Listed Banks in Nigeria*, **International Journal of Human Resource Studies**, 10 (4), 2020, 303 -317

Adekoya O. & Adeniji Y.A., *Impact of Social Costs on Financial Performance of Listed Firms in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 8 (11), 2020, 12-29

- Adewole J.A., Ogunyemi J. K. & Ojo S.A., *Effect of Capitalising Human Resource Cost on Corporate Profitability in Ondo State, Nigeria*, **International Journal of Shariah and Corporate Governance Research**, 2 (1), 2019, 14-33
- Adhikari N., *Training and Development Costs, Staff Costs and Operational Profitability in Nepalese Commercial Banks*, **Management Dynamics**, 23 (2), 2020, 109-118
- Agusioma N., Nyakwara S. & Mwit E., *The Influence of Staff Welfare on Employee Performance at Public Service Commission in Kenya*. **Asian Journal of Business and Management**, 7 (10), 2019, 77-82
- Akbar J. S., *The Effect of Return on Assets and Return on Equity on Price to Book Value on Banking Companies Listed on the Indonesia Stock Exchange*, **International Journal of Economics, Business and Accounting Research**, 5 (2), 2021, 9-20
- Akinjare Y.S., Idowu M. A & Sule .T. O., *The Impact of Human Resources Accounting (HRA) on the Performance of Nigerian Firms*, **JABU International Journal of Social and Management Sciences**, 7 (1), 2019, 252-265
- Akinrinola O.O., *Non-financial Performance Indicators and Operational Efficiency of Deposit Money Banks in Nigeria*, **International Journal of Research and Scientific Innovation**, 6 (12), 2019,175 – 183
- Akintoye E. O. & Ofobruku S. A., *Staff Welfare Package and Organizational Performance: A Theoretical Discourse* **European Journal of Business and Management Research**, 7 (2), 2022, 155-159
- Alam M. J & Sharmin. D, *Skills Development for Graduate Employability in Bangladesh: Japanese Language in TVET Program*, **Journal of Technical Education and Training**, 15 (2), 2023, 72-91
- Alamelu, R. Amudha, R, Dinesh. S, Nalini R. & Parthasaarathy, A. K, *Block Chain Technology and Human Resource Accounting – An Insight*, **International Journal of Advanced Science and Technology**, 29 (5), 2020, 9839-9845
- Alekhy P. & Lakshmi V., *Impact of Human Resource Accounting on Companies Profitability*, **Test Engineering and Management**, (83), 0193-4120, 2020, 16048-16055
- Alfiero S., Brescia V. & Bert F., *Intellectual Capital-Based Performance Improvement: A Study in Healthcare Sector*, **BMC Health Services Research**, 21 (73), 2021, 1-15
- Ali, S, Murtaza. G., Hedvicakova M., Jiang J., & Naeem M, *Intellectual Capital and Financial Performance: A Comparative Study*, **Frontiers in Psychology**, 2022, 1-12
- Aljumah A., *The Impact of Job Training on Recruitment and Employability Skills Among Graduates*, **International Journal of Professional Business Review**, 8 (10), 2023, 1-32

- Alturiqi A. & Halioui K, *The Impact of Intellectual Capital on Firms' Performance: Evidence From Saudi Arabia*, **Accounting and Finance Research**, 9 (4) 2020, 44-69
- Aminu R., Shagari, S. L. & Abubakar A., *An Analysis of the Contribution of Human Resource Accounting Disclosure to the Qualitative Characteristics of Financial Reporting*, **International Journal of Advanced Academic Research**, 8 (3), 2022, 132-147
- Anikwe S. O., *Manpower Training and Development in Nigeria Public Organisations: A Study of Abia State Civil Service*, **International Journal of Scientific Research and Management**, 10 (1), 2022, 2871-2880
- Anil S., Sudharani R., & Suresh N., *A Study on the Impact of Human Resource Accounting on Firm's Value With Respect to Companies Listed in National Stock Exchange*, **Bulletin Monumental**, 21 (8), 2020, 38-43
- Anoke A. F., *Effect of Employees' Development on the Performance of National Assembly, Nigeria*, **Abuja Journal of Business and Economic Management**, 8 (10) 2020, 366-373
- Anwar G. & Abdullah N. N., *The Impact of Human Resource Management Practice on Organizational Performance*, **International Journal of Engineering, Business and Management**, 5 (1), 2021, 35-47
- Asein A., Soetan T.A. & Akintoye. I. R., *Implications of Human Resource Accounting on Human Capital Measurement in Financial Reports*, **International Journal of Advanced Research**, 7 (1), 2019, 287-295
- Astuti D. D. & Rachmawati L., *Factors Affecting Company Financial Performance Using Human Resource Accounting As An Intervening Variable Empirical Study on Service Companies Listed on the Stock Exchange of Thailand (Set)*, **Assets: JournalllmiahllmuAkuntansi, Keuangan Dan Pajak**, 6 (2), 2022, 86-99
- Atoyebi T. A., Itegebe, A. & Lasisi T. K., *The Influence of Human Resources Accounting on the Performance of Nigeria's Listed Consumer Goods Companies*, **International Journal of Research in Commerce and Management Studies**, 3 (3), 2021, 33-51
- Ayesan O.O & A. Salemcity, *A Human Capital Expenditure and Financial Performance of Selected Manufacturing Firms in Nigeria*, **African Journal of Accounting, Finance & Marketing**, University of Port-Harcourt Business School, University of Port-Harcourt, 7 (3), 2023, 48-59
- Balogun A. R, Omotoye O. O, Oluwoye A. M & Mojibola A. O, *Human Resource Accounting Disclosures and Financial Performance, Empirical Evidence From Manufacturing Companies in Nigeria*, **Lapai International Journal of Management and Social Sciences**, 12 (2), 2020, 42-51

- Bansal A.& Sharma P., *An Empirical Evaluation on Performance of Organisation Through Human Resource Accounting: A Study on Selected Corporate Units of India*, **Indian Journal of Finance and Banking**, 3 (1), 2019, 1-12
- Barney J .B, Ketchen D .J. & Wright.M, *Resource-Based Theory, and the Value Creation Framework*, **Journal of Management**, 20 (10), 2021, 1–20
- Binuyo A. O. & Durugbo C., *Employee Welfare and Intention to Leave Evidence From Lagos State Internal Revenue Service, Nigeria*, **International Journal of Innovative Research and Development**, 9 (2), 2020, 148-156
- Bonsu O .A. M, Dui L. K, Ruiwen L. ,Asare E .K.,Prempeh A. F. S, *Exclusion of Human Resource Accounting in Statement of Financial Position and Its Effects on Performance: Empirical Evidence of Ghana*, **Business and Economic Research**, 9 (2), 2019, 1 –17
- Cabanelas, P, Parkhurst G. Thomopoulos N. & Lampon J. F, *A Dynamic Capability Evaluation of Emerging Business Models for New Mobility*, **Research in Transportation Business and Management**, 47, 2023, 1-13
- Cera E. & Kusaku A., *Factors Influencing Organizational Performance: Work Environment, Training-Development, Management and Organizational Culture*, **European Journal of Economics and Business Studies**, 6 (1), 2020, 16-27
- Chowdhury H. J. & Uddin K., *Impact of Training and Development Program on Employee Performance: A Study on State Own Commercial Banks of Bangladesh*, **Journal of Asian and African Social Science and Humanities**, 8 (2), 2022, 1-30
- Chukwueloka C.S., Okeh N. G. & Chukwurah D. C, *Staff Benefits and Its Activities on Employee Productivity: A Study of Chukwuemeka Odumegwu Ojukwu University, Igbariam – Anambra State, Nigeria*, **International Journal of Academic Multidisciplinary Research**, 5 (2), 2021, 294-303
- Collis D. J. & Anand B. N., *The Virtues and Limitations of Dynamic Capabilities*, **Strategic Management Review**, 2 (1), 2021, 47-78
- Cyfert, S. Chwilkowska-Kubala, A. Szumowski W & Miskiewicz, R. *The Process of Developing Dynamic Capabilities: The Conceptualization Attempt and the Results of Empirical Studies*, **PLOS ONE**, 16 (4), 2021, 1-24
- Dagne Gebrehiwot G. & Elantheraiyan P., *A Study on the Effect of Training on Employee Performance in the Case of Mekelle City, Tigray, Ethiopia*, **Social Sciences & Humanities Open**, 8, 2023, 1-11
- Demeke B & Tao C., *Concept & Perspectives of Organizational Performance Measurement: Literature Review*, **International Journal of Academic Multidisciplinary Research**, 4 (8), 2020, 89-96
- Deval A., *Human Resource Accounting: The True Valuation of Human Asset*, **Inspira-Journal of Modern Management and Entrepreneurship**, 11 (1), 2021, 37-41

- Donnellan J. & Rutledge W. L., *A Case for Resource-Based View and Competitive Advantage in Banking*, **Managerial and Decision Economics**, 2019, 1–10
- Dyduch, W. Chudzinski, P., Cyfert S. & Zastempowski, M. *Dynamic Capabilities, Value Creation and Value Capture: Evidence From SMEs Under Covid-19 Lockdown in Poland*, **PLOS ONE**, 16 (6), 2021, 1-28
- Egolum P.C., *An Evaluation of Human Capital Efficiency on Performance of Listed Service Firm in Nigeria*, **Nigerian Journal of Social Development**, 10 (1), 2021, 63-73
- Ekere O. A. & Onuoha B. C., *Employee Welfare Practices and Work Performance of the Oil and Gas Industry in South Nigeria*, **EPRA International Journal of Business and Management Studies**, 8 (10), 2021, 59-69
- Eze, C. G., *Impact of Human Capital Investment on Economic Growth in Nigeria: Econometric Approach of Autoregressive Distributive Lag Model (Ardl)*, **World Journal of Advanced Research and Reviews**, 18 (2), 2023, 1096–1110
- Ezeala G. & Afolalu A. B., *Human Resources Accounting and Shareholders' Wealth of Deposit Money Banks in Nigeria*, **International Journal of Trend in Scientific Research and Development (IJTSRD)**, 6 (2), 2022, 1443-1450
- Gimba J. T. & Anyanwu C.C., *Effect of Human Capital Investment on Financial Performance of Listed Deposit Money Banks in Nigeria*, **Baze University Journal of Entrepreneurship, and Interdisciplinary Studies (BUJEIS)**, 1 (1), 2022, 5 - 103
- Godwin O. A. & F.N.P. Udeh, *The Effect of Human Resource Accounting (HRA) on Profitability: A Study of Selected Firms Quoted on the Nigerian Stock Exchange*, **International Journal of Economics, Business and Management Studies (EBMS)**, 8 (11), 2021, 61 -68
- Gupta A. K., *A Study of Human Resource Accounting*, **International Journal of Research in Engineering, Science and Management**, 4 (1), 2021, 10-12
- Helfat. C. E, Kaul. A., Ketchen. D. J. Jr, Barney. J. B, Chatain. O. & Singh. H., *Renewing the Resource-Based View: New Contexts, New Concepts, and New Methods*, **Strategic Management Journal, Special Release Article**, 44 (6), 2023, 1–34
- Hieu V. M., *A Review of Dynamic Capabilities, Innovation Capabilities, Entrepreneurial Capabilities and Their Consequences*, **Journal of Asian Finance and Business**, 7 (8), 2020, 485–494
- Ibarra M., Garcia M.R. & Perhines F.H., *Intellectual Capital: Organisational Performance and Competitive Advantage*, **European Journal of International Management**, 14 (6), 2020, 976-998
- Ibrahim A. & Bappi U., *Effect of Welfare Package on Workers Performance in the Federal Inland Revenue Service, Abuja*, **International Journal of Social Research and Development**, 1 (4), 2019, 11-16

- Idowu T. & Ajape M., *Conceptual Analysis of Policy Challenge of Implementing Human Resource Accounting in Nigeria*, **Journal of Management and Innovation**, 5 (1), 2019, 1-18
- Ilemona, S. A. & Oyedokun G. E., *Human Resource Accounting and Its Influence on Organisational Profitability*, **SAU Journal of Management and Social Sciences**, 5 (2), 2021, 45-52
- Ivungu J. A., Agbo .A. & Bula. J. T, *A Review of Literature Regarding the Connection, Between Human Resource Accounting and Corporate Performance of Firms*, **The International Journal of Business and Management**, 8 (1), 2020, 146-152
- Jayathilaka A. K. K. R., *Operating Profit and Net Profit: Measurements of Profitability*, **Open Access Library Journal**, 7 (12), 2020, 1-11
- Jena B. M, Maharana N, Chaudhury S. K, & Mohanty S, *Human Resource Accounting and Financial Performance of Selected Small-Scale Industries of Odisha: An Empirical Analysis*, **Orissa Journal of Commerce**, 43 (1), 2022, 80-92
- Kalkhoran S. M. A., Rabiei, .K, Alizadeh. S .M. S., Heravi. H. M. & Rouzpeykar. Y. *Analyzing Impact of Intellectual Capital on Business Performance Using Structural Models Based on Customer Knowledge Management*, **Hindawi Discrete Dynamics in Nature and Society**, 7453565, 2022, 1-10
- Kamardi, A.A. Mahdiraji, H. A, Masoumi. S. & Jafari-Sadeghi. V., *Developing Sustainable Competitive Advantages From the Lens of Resource-Based View: Evidence From IT Sector of an Emerging Economy*, **Journal of Strategic Marketing**, 2022, 1-24
- Kanapathipillai, K., Kumaran S. & Narayanan S., *The Mediating Effect of Entrepreneurial Marketing Strategy Between Dynamic Capabilities and Competitive Advantage in the Women-Owned Enterprises in Malaysia*, **European Journal of Management and Marketing Studies**, 7 (3), 2022, 1-35
- Karim M., Choudhury M. M. & Latif W. B., *The Impact of Training and Development on Employees' Performance: An Analysis of Quantitative Data*, **Noble International Journal of Business and Management Research**, 3 (2), 2019, 25-33
- Karimi-Alaghehband F. & Rivard S., *IT Outsourcing Success: A Dynamic Capability-Based Model*, **Journal of Strategic Information Systems**, 29 (10159), 2020, 1-20
- Kashanipour M. & Farooji R. Z, *The Impact of Human Resource Accounting on Financial Performance (Case Study: Industry-Oriented Companies Admitted to the Tehran Stock Exchange*, **International Journal of Health Sciences**, 6 (7), 2022, 6549-6558
- Kataria M., *A Study on Human Resource Accounting Practices in India*, **International Journal of Trend in Scientific Research and Development (IJTSRD)**, 6 (4), 2022, 1550-1556

- Kero. C. A & Bogale, A. T., *A Systematic Review of Resource-Based View, Dynamic Capabilities of Firms and Future Research Avenues*, **International Journal of Sustainable Development and Planning**, 18 (10), 2023, 3137-3154
- Khan S., *Impact of Human Resource Accounting on Organisation's Financial Performance in the Context of SMEs*, **Growing Sciences, Accounting**, 7, 2021, 621-628
- Khawaldeh E. A., *The Impact of Training on Improving Employee Performance: A Case Study on Employees in the Directorate of Education of Ma'an District*, **International Journal of Professional Business Review**, 8 (10), 2023, 1-24
- Koleosho A. O., Adegbe F. F. & Ajayi-Owoeye A. O., *Stock Market Returns and Shareholders' Wealth Sustainability of Companies Listed on the Nigerian Stock Exchange*, **Asian Journal of Economics, Business and Accounting**, 16 (2), 2020, 27-45
- Kumar M. & Agrawal, U. K, *A Study of Human Resource Accounting Practices in India*, **International Journal of Research Publication and Reviews**, 4 (4), 2023, 475-480
- Kusuma M., *Measurement of Return on Assets (ROA) on Comprehensive Income and Its Ability to Predict Investments Returns: An Empirical Evidence on Go Public Companies in Indonesia Before, and During the Covid-19 Pandemic*, **Jurnal Ilmiah Bidang Ilmu Ekonomi**, 16 (1), 2021, 94-106
- Kusumastuti, S., *Company Characteristics, Performance, and Disclosure of Human Resource Accounting: Empirical Study of Banking Companies in Indonesia*, **International Journal of Economics, Business, and Accounting Research**, 5 (1), 2021, 306-319
- Kutieshat R. & Farmanesh, P. *The Impact of New Human Resource Management Practices on Innovation Performance During, the COVID 19 Crisis: A New Perception on Enhancing the Educational Sector*, **Sustainability**, 14 (2872), 2022, 1-21
- Lan H. V., *Factors Which Affect the Effectiveness of the Training Program for School Managers in Vietnam*, **Palarch's Journal of Archaeology of Egypt/Egyptology**, 18 (4), 2021, 1912-1926
- Lanre-Babalola, F. O, Oginni, B. O, Ajibade, K. S, Olowu, A. E, Balogun, R.A, Tewogbade, S. O Ilori. O. A & Gbotosho, A. S, *Human Capital Development and Employee Performance: Evidence from Osun State Ministry of Human Resource and Capacity Building, Nigeria*, **Journal of Behavioural Studies**, 4 (2), 2023, 1-18
- Lee, D. W, Lee, J., Kim. H. & Kang, M. *Health-Related Productivity Loss According to Health Conditions Among Workers in South Korea*, **International Journal of Environmental Research and Public Health**, 18 (14), 2021, 1-11
- Liu Y., Kim J. & Yoo J, *Intangible Resources and Internationalisation for the Innovation Performance of Chinese High-Tech Firms*, **Journal of Open Innovation, Technology, Market and Complexity**, 5 (52), 2019, 1-17

- Makanjuola E. P., Shaibu M.T. & Isijola O., *Effects of Welfare on Employees Commitment in Public Service Organisation: A Case Study of Nesrea Southwest Zone, Nigeria*, **Global Journal of Human Resource Management**, 9 (3), 2021, 12-36
- Martínez-Peláez, R., Ochoa-Brust, A., Rivera. S., Felix, V. G., Ostos, R., Brito, H. R. A. Felix R.A, & Mena, L. J., *Role of Digital Transformation for Achieving Technology Sustainability: Mediated Role of Stakeholders, Key Capabilities, and Technology*, **Sustainability**, 15 (14), 2023, 11221, 1-27
- Matashu, M., *Education, Human Capital Formation and Economic Growth in Sub-Saharan African Countries: A Conceptual Analysis*, **Bulgarian Comparative Education Society**, (20), 2022, 80-85
- Met D. I, Erkog A., Ipek B. & Kizildere N. A., *Being A Game Changer with Happy Workers: the Ziraat Bank Example*, **Heliyon**, 9 (7), 2023, 1-12
- Minanari M. & Rahayu A., *The Effect of Profit Management, Good Corporate Governance Mechanism and Investment Decisions on Firm Value*, **Advances in Economics, Business and Management Research**, (120), 2020, 258-263
- Mohammad. H. S, Bujang I. & Hakim T.A, *Capital Structure and Financial Performance of Malaysian Construction Firms*, **Asian Economic and Financial Review**, 9 (12), 1306 -1319
- Mohanty, P. C, Dash M., & Das, S., *A Study on Factors Influencing Training Effectiveness*, **Espacios**, 40 (2), 2019, 7
- Mpofua Q. & Sebele-Mpofub F. Y, *Conceptualising A Human Capital Measurement and Reporting Framework*, **Journal of Accounting, Finance and Auditing Studies**, 9 (2), 2023, 137-157
- Muhic, M. & Bengtsson L., *Dynamic Capabilities Triggered by Cloud Sourcing: A Stage-Based Model of Business Model Innovation*, **Review of Managerial Science**, 15, 2021, 33–54
- Mukolo S. I., Jeroh E. & Ideh A. O., *Human Resource Accounting and Financial Performance of Selected Quoted Nigerian Food and Beverages Firms*, **Finance and Accounting Research Journal**, 4 (3), 2022, 51-57
- Na K., *The Effect of On-the-Job Training and Education Level of Employees on Innovation in Emerging Markets*, **Journal of Open Innovation: Technology, Market and Complexity**, 7 (47), 2021, 1-20
- Ndum, N. B. & Oranefo P., *Human Resource Cost and Financial Performance: A Study of Quoted Brewery Firms in Nigeria*, **International Journal of Innovative Finance and Economics Research**, 9 (2), 2021, 73-84
- Ngatno A. & Dewi R. S., *The Role of Adaptive Ability in Firm Performance: Moderating Effect of Firm Size and Age*, **Asian Economic and Financial Review**, 9 (7), 2019, 807-823

- Nwachukwu C. & Chladkova H., *Firm Resources, Strategic Analysis Capability and Strategic Performance: Organizational Structure as Moderator*, **International Journal for Quality Research**, 13 (1), 2019, 75-94
- Nwauzor C. O. & Tamunoemi B. L., *Human Capital Accounting and Firm Performance: A Study of Oil and Gas Firms in Nigeria*, **Journal of Economics, Management & Social Science**, 6 (2), 2020, 1-22
- Oginni B.O., Olowookere J. K. & Ikotun A. O., *Human Resource Accounting and Financial Performance of Deposit Money Bank in Nigeria*, **Nigerian Defence Academy Journal of Economics and Finance**, 4 (1), 2020, 329- 341
- Ogodor B. N. & Olaniyi A. R., *Effect of Human Resource Accounting on Corporate Performance of Nigerian Listed Consumer Products Firm (2013- 2018)*, **ACU Journal of Social and Management Sciences**, 3 (1), 2022, 212-225
- Ogunbiyi-Davies B. A, Alao M. E., Aremu P. O & Olalere M. D., *Human Resources Accounting and Financial Performance of Some Food and Beverages in Nigeria*, **Open Access Library Journal**, 10 (8), 2023, 1-17
- Ogundajo G. O., Kujore O. A & Kassim S. K., *Human Resource Accounting, Information Disclosure and Firm Value*, **South Asian Research Journal of Business Management**, 4 (5), 2022, 182-187
- Okafor U. I., Ohachosim C. I. & Oji R. N., *Expenditure in Human Resource and Financial Performance of Quoted Manufacturing Companies in Nigeria*, **East African Scholars Journal of Economics, Business and Management**, 5 (2), 2022, 48-80
- Okolie U.C & Udom I. D, *Challenges of HRM in a Global Business Environment: A Review and Research Agenda (International Approach)*, **International Journal of New Economics and Social Sciences**, 1 (9,) 2019, 181-194
- Okon E. E., Otuza C. E., & Dada S. O., *Effect of Human Resource in Accounting Information System on Management Decision-Making in Seventh-day Adventist Institutions in Eastern Nigeria*, **Advances in Social Sciences Research Journal**, 8 (6), 2021, 117-129
- Oladejo K.S. & Ojokuku R. M., *Human Resource Accounting Practices and Financial Performance of Nigerian Quoted Manufacturing Companies*, **Journal of Management and Entrepreneurship**, 11 (7), 2019, 147-167
- Olalere, M. D, Oyegoke K. S, Olorundare K. J. & Alao.M., *Human Resource Accounting and International Financial Reporting Standards (Pros and Cons)*, **International Journal of Management Studies and Social Science Research**, 5 (2), 2023, 111-117
- Olaoye C. O. & Afolalu A. B., *Effect of Human Capital Accounting on Earning Per Share of Equity Owners of Deposit Money Banks in Nigeria*, **African Journal of Business Management**, 14 (1), 2020, 485-497

- Olayemi O. & Fakayode P. O., *Effect of Capital Structure on Financial Performance of Quoted Manufacturing Companies in Nigeria*, **European Journal of Accounting, Auditing and Finance Research**, 9 (5), 2021, 73-89
- Olayinka A.O. & Adegbie F. F., *Human Resource Accounting and Quality of Financial Reporting of Quoted Oil and Gas Companies in Nigeria*, **International Journal of Accounting, Finance and Risk Management**, 5 (4), 2020, 195-206
- Oncioiua, I., Kandzija, V., Petrescu, A., Panagoret, I. & Petrescu, M. *Managing and Measuring Performance in Organizational Development*, **Economic Research-Ekonomska Istraživanja**, 35(1), 2022, 915 –928
- Onyekwelu C.O. & Akanni F.N., *Human Resource Costs and Financial Performance of Quoted Companies in Nigeria*, **Research Journal of Management Practice**, 7 (3), 2021, 1-19
- Onyekwelu C.O. & Ironkwe U.I., *Human Resource Accounting and Corporate Financial Performance of Quoted Insurance Companies in Nigeria*, **Research Journal of Management Practice**, 7 (3), 2021, 20-39
- Onyeukwu M. I., Ihendinihu O. O, & Nwachukwu J. U., *Human Resource Accounting and Financial Performance of Listed Microfinance Banks in Nigeria*, **Quest Journal of Research in Humanities and Social Services**, 9 (5), 2021, 9 – 16
- Opoku P., *Awareness of Human Resource Accounting in Ghana: Evidence From Tertiary Students*, **International Journal of Research, and Innovation in Social Science (IJRISS)**, 5 (7), 2021, 437 -441
- Orishede .F. *Relationship Between Competitive Advantage and Value Creation and Profitability in the Firm*, **African Journal of Social and Behavioural Sciences**, 11 (2), 2021, 1-16
- Pathak A. A., *Human Resource Accounting: An Exemplary Case Study*, **International Journal of Creative Research Thoughts (IJCRT)**, 11 (6), 2023, b700 - b703
- Pertheban T. R, Thurasamy, R., Marimuthu, A., Rajah, K., Annamalah, S., Paraman, P. & Chee Hoo W., *The Impact of Proactive Resilience Strategies on Organizational Performance: Role of Ambidextrous and Dynamic Capabilities of SMEs in Manufacturing Sector*, **Sustainability**, 15 (16), 2023, 1-32
- Poi G., *Employee Welfare Packages and the Performance of Public Organizations in Rivers State, Nigeria*, **European Journal of Research and Reflection in Management Sciences**, 8 (2), 2020, 58-79
- Prasanna S. D., *A Study on Human Resource Accounting Methods and Practices in India*, **Journal of Emerging Technologies and Innovative Research**, 8 (10), 2021, 113-119
- Quintero-Quintero W., Blanco-Ariza A. B., & Garzón-Castrillón M. A., *Intellectual Capital: A Review and Bibliometric Analysis*, **Publications**, 9 (46), 2021, 1-23

- Raghavendra K. S., *Human Resource Accounting Practices and Its Impact on Managerial Performance: A Study*, **The Review of Contemporary Scientific and Academic Studies An International Multidisciplinary Online Journal**, 2 (8), 2022, 1-10
- Rana S. & Hossain S. Z., *Intellectual Capital, Firm Performance and Sustainable Growth: A Study on DSE-Listed Non-financial Companies in Bangladesh*, **Sustainability**, 15 (7206), 2023, 1-23
- Refmasari V. A. & Supriyono R. A., *The Effect of Non-Financial Performance on Financial Performance Moderated by Information Disclosure*, **Journal of Economics, Business, and Accountancy Ventura**, 22 (2), 2019, 248 – 263
- Rehman F. U, Gyamfi, S., Rasool, S. F., Akbar F., Hussain K. & Prokop, V., *The Nexus Between Circular Economy Innovation, Market Competitiveness, and Triple Bottom Lines Efficiencies Among SMES: Evidence From Emerging Economies*, **Environmental Science and Pollution Research**, 30, 2023, 1-19
- Roztock N. Soja P. & Weistroffer, H. R., *The Role of Information and Communication Technologies in Socioeconomic Development: Towards A Multi-Dimensional Framework*, **Information Technology for Development**, 25 (2), 2019, 171–183
- Sairmaly F. A., *Human Capital Development and Economic Growth: A Literature Review on Information Technology Investment, Education, Skills, and Productive Labour*, **JurnalMinfoPolgan**, 12 (2), 2023, 679-693
- Sajuyigbe A. S., Ikotun A.O., & Obi J. N., *Human Resource Accounting and Organizational Performance: Empirical Investigation of Nigerian Banks*, **International Journal of Economic Research**, 17 (1), 2020, 11-22
- Samartha, V., Rajesha T. M, Hawaldar I. T, & Sousa. L. J. D., *Application of Lev, and Schwartz Compensation Model on the Accounting Practices of MCF Limited*, **International Journal of Scientific and Technology Research**, 8 (8), 2019, 355-360
- Samsudin Z. & Ismail M. D., *The Concept of Theory of Dynamic Capabilities in Changing Environment*, **International Journal of Academic Research in Business and Social Sciences**, 9 (6), 2019, 1071 – 1078
- Saputra K. A. K & Manurung D.T, *The Role of Human Resource Accounting and the Synergy of Village Government in Village Fund Management*, **Journal of Adv. Research in Dynamical & Control Systems**, 11 (11), 2019, 303-309
- Saunila, M., Ukko, J., Rantala, T., Nasiri M. & Rantanen. H., *Preceding Operational Capabilities As. Antecedents for Productivity and Innovation Performance*, **Journal of Business Economics**, 90 (3), 2020, 537–561
- Saxena S. & Verma D., *Human Resource Accounting: Basic Introduction*, **International Journal of Education, Modern Management, Applied Science and Social Science**, 03 (2), 2021, 197-200

- Setiawan, R., Hassan, M., Cavaliere L. L. & Sankaran, D., *The Impact of Human Resources Practices on SME's Sustainability*, **Productivity Management**, 25 (I5), 2020, 728-751
- Shandilya, S. S., *A Behavioural Economic Perspective on Global Migration and Human Capital Shifts With Special Consideration for Sectoral Development and Industry Specific Innovation*, **International Journal of Social Science and Economic Research**, 6 (10), 2021, 4011-4017
- Shodeinde A. D. & Taiwo T. N., *Absorptive Capabilities As Determinants of Economic Sustainability of Small and Medium-Scale Enterprises*, **Business Perspective Review**, 5 (1), 31-45
- Singh S., Mohanty R. P, Mangla S. K & Agrawal. V., *Critical Success Factors of Additive Manufacturing for Higher Sustainable Competitive Advantage in Supply Chains*, **Journal of Cleaner Production**, 425, 2023, 1-18
- Skhvediani, A., Koklina, A., Kudryavtseva T. & Maksimenko D., *The Impact of Intellectual Capital on the Firm Performance of Russian Manufacturing Companies*, **Risks**, 11 (76), 2023, 1-25
- Supriya G. K., *The Role of HRA for Gaining Competitive Advantage*, **International Journal of Trend in Scientific Research and Development**, 3 (2), 2019, 1020
- Switter J., *FASB Conceptual Framework- Elements*, **Accounting Standards Advisory Forum Meeting Agenda**, 3, 2020, 1-17
- Tadic I. & Barac Z. A., *The Role of Human Capital Investments in Business Excellence of Croatian Companies*, **Economic and Business Review**, 24 (3), 2022, 161-170
- Taouab O. & Issar Z., *Firm Performance: Definition and Measurement Models*, **European Scientific Journal**, 15 (1), 2019, 93-106
- Thorsen, S. V., *Associations Between Physical and Psychosocial Work Environment Factors and Sickness Absence Incidence Depend on the Lengths of the Sickness Absence Episodes: A Prospective Study of 27 678 Danish Employees*, **Occup Environ Med**, (78), 2021, 46–53
- Thwin, N. P. Z., Janarthanan M. & Bhaumik., A., *Impact of Career Advancement on Employee Retention*, **International Journal of Latest Engineering and Management Research**, 8 (1), 2023, 106-109
- Tran N.P. & Vo D.H., *Human Capital Efficiency and Firm Performance Across Sectors in Emerging Market*, **Cogent Business and Management**, 7 (1), 2020, 1-15
- Tudose, M. B. Rusu V. D. & Avasilcai S., *Financial Performance – Determinants and Interdependencies Between Measurement Indicators*, **Business, Management and Economics Engineering**, 20 (1), 2022, 119–138
- Ufoaroh E. T., Udemezue A. & Anyadufu A. O., *Employee Welfare Package and Its Impact on Productivity (A Case Study of Roesons Industries Ltd Enugu- Ukwu,*

- Anambra State, Nigeria*, **Asian Journal of Economics, Business and Accounting**, 11 (1), 2019, 1-15
- Ugochukwu C. E., Onwunyi U. M., & Amah S. A., *Human Capital Development and Organizational Productivity in Selected Manufacturing Firms South-East*, **International Journal of Academic Management Science Research**, 3 (12) 2019, 9-19
- Varadaraj A. & Charumathi D., *Impact of Welfare Measures on the Quality of Employees Performance With Special Reference to Construction Industry*. **International Journal of Management Science and Business Administration**, 5 (2), 2019, 30 – 36
- Vasanthi, S. & Basariya S., *On the Job Training Implementation and Its Benefits*, **International Journal of Research and Analytical Reviews**, 6 (1), 2019, 210-215
- Veselinović N., Krstić B. & Veselinovic M., *Measuring the Efficiency of Human Capital*, **Economics of Sustainable Development**, 5 (2), 2021, 1-17
- Vincent O. A., Ledibabari, P. & Egbuhuzor C. A., *Human Resource Cost and Financial Performance: Evidence From Listed Pharmaceutical Companies in Nigeria*, **European Journal of Accounting, Finance and Investment**, 8 (5), 2022, 1-8
- Wiyadi,W, Meilani, S. E. R. Pertiwi I & Trisnawati, R *Practices of Human Resource Accounting Disclosure: A Comparative Study Across ASEAN Countries*, **Universal Journal of Accounting and Finance**, 9 (3), 2021, 306 – 315
- Worimegbe T.M., Akinyede, O. M. & Ojedele M.I., *Human Resource Accounting and Profitability of Deposit Money Banks in Nigeria*, **International Journal of Research Publication and Reviews**, 4 (6), 2023, 3437-344
- Yimam M. H. , *Impact of Training on Employees Performance: A Case Study of Bahir Dar University, Ethiopia*, **Cogent Education**, 9 (1), 2022, 1-57
- Yulianeu D. A.,*The Development of Capacity Building to Improve the Quality of Human Resources Among Small and Medium Enterprises*, **ManajemenBisnis**, 9 (01), 2019, 75-83
- Zhou S. S, Zhou A. J., Feng J. & Jiang S., *Dynamic Capabilities and Organizational Performance: The Mediating Role of Innovation*, **Journal of Management and Organization**, 25 (5), 2019, 731–747
- Zvarimwa C & Zimuto, J., *Valuable, Rare, Inimitable, Non-Substitutable, and Exploitable (VRINE) Resources on Competitive Advantage*, **International Journal of Business and Management Science**, 8 (1), 2022, 1-14

Lead City University Ibadan DO NOT COPY

Appendix 1

APPENDIX 5												DATE LISTED	-
NCR	ANNUAL REPORT TILL 31 DECEMBER YEARLY											DATE	DEC.
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	INCORPORA	9.
	N'000	N'000	N'000	N'000	N'000	N'000	N'000	N'000	N'000	N'000	N'000		
HUMAN CAPITAL EFFICIENCY	0	0	24.9585054	13.1175892	13.2141499	10.6274657	10.8500496	8.786593457	8.994820017	3.344057877	4.450787456		
ORGANISATIONAL PROFITABILITY(NET PROFIT	-1065176	-19373	157388	18610	66490	150668	25907	-949662	-291130	7552	-1010525		
RETURN ON ASSETS	-19.8789024	-0.34948112	2.34923592	0.23500513	0.5660594	1.67979328	0.2654517	-11.271095	-4.55315919	0.147257715	-23.4456042		
RETURN ON EQUITY	-7.51818182	-0.14008258	0.60547353	0.07059216	0.20296341	0.33955418	0.05661779	1.767260181	0.344876605	-0.00900276	0.54766194		
NUMBER OF EMPLOYEE	0	0	47	62	104	123	113	119	116	153	139		
GROSS STAFF COSTS	0	0	274325	492979	553234	666709	651682	677505	729346	717109	615971		
TRAINING , DEVT & WELFARE CC	0	0	22760	24684	33970	73969	62294	52967	63166	35227	36227		
REVENUE	6463898	6107931	6642862	6303787	7058196	6907926	6621647	6067675	5125508	2540792	3269459		
OPERATING EXPENSES	225824	105217	70445	330070	300913	489208	202547	792219	-705482	859847	1143874		
TOTAL ASSETS	5358324	5543361	6699540	7918976	11746117	8969437	9759591	8425641	6394022	5128424	4310083		
TOTAL EQUITY	141680	138297	259942	263627	327596	443723	457577	-537364	-844157	-838854	-1845162		
Human capital Efficiency =	(VA) Value added												
	(HC) Human Capital												
organisational profitability	NET Profit after tax												
RETURN ON EQUITY	NET PROFIT AFTER TAX												
	SHAREHOLDERS EQUITY												
RETURN ON ASSETS	NET PROFIT AFTER TAX												
	TOTAL ASSETS												
			X		100								

Appendix 6

													APPENDIX 8	
BRICLINKS													ANNUAL REPORT TILL 31 DECEMBER YEARLY	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	DATE LISTED	FEB.	
	N	N	N	N	N	N	N	N	N	N	N	DATE	JULY	
												INCORPORATED	30,2015	
HUMAN CAPITAL EFFICIENCY	0	0	0	0	0	0	0	451.4924068	501.479641	124.960308	96.157			
ORGANISATIONAL PROFITABILITY(NET PROFIT	0	0	0	0	0	0	0	-7316716	1098569	14419997	5898437			
RETURN ON ASSETS	0	0	0	0	0	0	0	-0.88184228	0.13623431	1.83500136	0.74974214			
RETURN ON EQUITY	0	0	0	0	0	0	0	-2.72677659	0.29048432	0.792227	0.24993073			
NUMBER OF EMPLOYEE	0	0	0	0	0	0	0	0	0	0	0			
GROSS STAFF COSTS	0	0	0	0	0	0	0	295000	365000	2459000	780000			
TRAINING , DEVT &WELFARE CC	0	0	0	0	0	0	0	0	0	0	0			
REVENUE	0	0	0	0	0	0	0	165600000	215860000	341733000	107312000			
OPERATING EXPENSES	0	0	0	0	0	0	0	32704740	33184931	36914603	33089540			
TOTAL ASSETS	0	0	0	0	0	0	0	829708010	806382012	785830318	786728755			
TOTAL EQUITY	0	0	0	0	0	0	0	2683284	3781853	18201850	23600287			
Human capital Efficiency =	(VA) Value added													
	(HC) Human Capital													
organisational profitability	NET Profit after tax													
RETURN ON EQUITY	NET PROFIT AFTER TAX													
	SHAREHOLDERS EQUITY													
RETURN ON ASSETS	NET PROFIT AFTER TAX													
	TOTAL ASSETS													
	176													

Appendix 9

APPENDIX 9													AIRTEL AFRICA		
AIRTEL														AIRTEL AFRICA	
ANNUAL REPORT TILL 31 MARCH YEARLY														DATE LISTED	JULY 9,2019
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		JULY 12,2018	
	US\$MILLION	US\$MILLIO	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	US\$MILLION	DATE INCORPORATED		
HUMAN CAPITAL EFFICIENCY	0	0	0	0	0	0	0	4	4.78	5.03	6.13	7.08			
ORGANISATIONAL PROFITABILITY(NET PROFIT AFTER TAX)	0	0	0	0	0	0	0	426	408	415	755	750			
RETURN ON ASSETS	0	0	0	0	0	0	0	4.68	4.38	4.15	7.28	6.72			
RETURN ON EQUITY	0	0	0	0	0	0	0	0.18	0.12	0.12	0.21	0.20			
NUMBER OF EMPLOYEE	0	0	0	0	0	0	0	3075	3363	3525	3757	4000			
GROSS STAFF COSTS TRAINING, DEVT &WELFARE COSTS	0	0	0	0	0	0	0	236	234	275	297	287			
REVENUE	0	0	0	0	0	0	0	3077	3422	3908	4714	5255			
OPERATING EXPENSES	0	0	0	0	0	0	0	2369	2538	2800	3189	3511			
TOTAL ASSETS	0	0	0	0	0	0	0	9106	9325	9992	10364	11166			
TOTAL EQUITY	0	0	0	0	0	0	0	2430	3281	3353	3649	3808			
Human capital Efficiency	(VA) Value added														
	(HC) Human Capital														
organisational profitabili	NET Profit after tax														
RETURN ON EQUITY	NET PROFIT AFTER TAX														
	SHAREHOLDERS EQUITY														
RETURN ON ASSETS	NET PROFIT AFTER TAX														
	TOTAL ASSETS														

Lead City University

Lead City University Ibadan DO NOT COPY