

HUMAN RESOURCE ACCOUNTING: A REVIEW OF THE LITERATURE AND RESEARCH DIRECTION

OBAKPOLOR Kingsley* & IDUBOR Enaruna Ehimwenma (Ph.D)

Department of Human Resource Management

Faculty of Management Sciences

University of Benin, Edo State, Nigeria

*Corresponding Author: Obk217@gmail.com

Abstract

The effective management of human capital has become increasingly imperative in the knowledge-based economy where innovation, creativity, and talent acquisition play pivotal roles in organisational performance. This paper provides a comprehensive overview of human resource accounting (HRA) by highlighting its importance in organisational management and decision-making. The paper discusses the historical evolution and theoretical foundations of HRA and explores various methodologies and measurement techniques employed in the field, including cost-based, market-based, and value-based approaches. It identifies challenges and criticisms associated with HRA, such as measurement issues, subjectivity, and resistance from stakeholders. Furthermore, it outlines potential future directions for research and innovation in HRA which include the development of advanced measurement techniques, cross-disciplinary research, longitudinal studies, comparative studies across industries and countries, and exploration of ethical and social implications. This study concludes that HRA plays a critical role in organisational management and enhance decision-making, strategic planning, and long-term sustainability through effective human capital valuation. The study recommends that organisations and regulatory bodies should work towards establishing standardised measurement techniques and reporting guidelines for HRA. This will enhance comparability across industries and improve the credibility of human capital valuation in financial reporting

Keywords: Accountability, Decision-making, Human Resource, Organisation, Transparency

Introduction

In contemporary organisations, human resources are recognised as one of the most critical assets driving sustainable competitive advantage and organisational success (Adewoye, Ologe, & Agboola, 2024; Radiyah, Maisyarah & Purba, 2024). The effective management of human capital has become increasingly imperative in the knowledge-based economy, where innovation, creativity, and talent acquisition play pivotal roles in organisational performance (Radiyah, et al., 2024). However, despite the acknowledgment of the strategic importance of human resources, there remains a challenge in quantifying and evaluating their contributions to organisational value creation and financial performance (Bontis, Fitz-enz, & Serenko, 2003).

Human resource accounting (HRA) emerges as a methodology designed to address this challenge by systematically measuring, reporting, and valuing human resources within an organisational context (Adewoye, et al., 2024; Ananda & Kavitha, 2019). By treating human resources as tangible assets rather than mere expenses, HRA provides insights into the true worth of human capital and its impact on organisational outcomes (Kamath, 2011). This concept aligns with the broader principles of accounting, which seek to capture and communicate the value of assets and liabilities to stakeholders.

The significance of human resource accounting in modern business practices cannot be overstated. It offers decision-makers valuable information for strategic planning, resource allocation, performance evaluation, and risk management (Incise, 2018). Moreover, HRA enhances transparency and accountability in organisational reporting, facilitating better communication with investors, regulators, and other stakeholders (Hashem, 2015).

This paper aims to provide a comprehensive review of the literature on human resource accounting by examining its historical development, theoretical foundations, methodologies, empirical evidence, challenges, and future research directions. Specifically, the objectives of the paper are to:

- i) trace the historical evolution of human resource accounting and its theoretical underpinnings;
- ii) explore various methodologies and measurement techniques employed in human resource accounting; and
- iii) examine challenges and criticisms associated with human resource accounting.

The paper is structured as follows: Section one is the introduction, Section two conceptualises HRA, Section three provides an overview of the historical development of human resource accounting and its theoretical foundations. Section four reviews different methodologies and measurement techniques used in HRA, while Section four examines challenges and criticisms, and Section five outlines potential future research directions. The final part consists of the conclusion with a summary of key findings and recommendations for further study.

Conceptual Clarification

Concept of Human Resource Accounting

The concept of HRA encompasses various scholarly perspectives aimed at quantifying and measuring the value of human capital within organisations. HRA is often described as the measurement and reporting of the value of human resources to the organisation (Adewoye et al 2024; Bader, 2017). The definition highlights the importance of treating human resources as tangible assets. HRA is also seen as a process of identifying, quantifying, and communicating the value of human resources to organisational stakeholders (Ofurum & Adeola, 2018; Sunil, & Priyanka, 2018). These definitions underscore the significance of recognising human capital as a valuable asset that contributes to organisational success.

Therefore, HRA is a concept that involves measuring, quantifying, and communicating the value of human capital within organisations. The scholars have provided various definitions that highlight HRA's importance in recognising human resources as organisational assets. By integrating HRA into financial reporting and decision-making processes, organisations can better understand and leverage their human capital to achieve strategic objectives.

Historical Development of Human Resource Accounting

HRA has evolved significantly since its inception, with various milestones, theories, and methodologies shaping its development. The origins of HRA can be traced back to the early 1960s when Flamholtz introduced the concept of valuing human resources as organisational assets. Flamholtz's work laid the foundation for recognising the importance of human capital in organisational performance (Flamholtz, 1971).

In the 1970s, the interest in HRA grew as scholars and practitioners sought to find ways to measure and account for the value of human resources within organisations. Throughout the 1980s and 1990s, HRA continued to evolve, with researchers exploring different methodologies and approaches to measure human capital. One notable theory that emerged during this period was the Intellectual Capital (IC) theory, which expanded the scope of HRA to include not only the tangible aspects of human resources but also the intangible elements such as knowledge, skills, and abilities (Herawati, Wulandari, & Affandy, 2020).

In the 21st century, advancements in technology and data analytics have further revolutionised the field of HRA. Researchers and practitioners now have access to sophisticated tools and techniques for measuring and analyzing human capital's value (Anwar & Mulyadi, 2023; Bhooshetty, 2023; Radiyah, et al., 2024). Additionally, the growing recognition of the importance of human capital in driving organisational performance has led to increased adoption of HRA practices by companies worldwide (Bhooshetty, 2023).

Despite its evolution, HRA continues to face challenges such as standardisation of measurement techniques, data reliability, and integration with financial reporting (Aminu, 2022; Tanjung, Komardi, Renaldo, Reilly, & Yu, 2023). However, with ongoing research and development, HRA is poised to play an increasingly vital role in helping organisations understand and leverage their most valuable asset their people (Tanjung, et al., 2023).

Theoretical Foundations of Human Resource Accounting

The theoretical foundations of HRA draw from multiple disciplines, including economics, psychology, and sociology, each offering unique perspectives on how human capital contributes to organisational value. From an economic standpoint, HRA is rooted in the concept of human capital theory, which posits that investments in education, training, and development enhance individuals' productivity and, consequently, organisational performance (Bradley, 2021). This economic perspective emphasises the importance of measuring and valuing human resources as assets that generate returns for the organisation over time.

Psychological theories, such as expectancy theory and motivation theory, provide insights into how individuals' attitudes, behaviors, and performance contribute to organisational effectiveness (Bushi, 2021; Zboja, Jackson, & Grimes-Rose, 2020). These theories highlight the significance of factors like job satisfaction, motivation, and engagement in shaping human capital's value within organisations. By understanding the psychological aspects of human behavior, HRA can better measure and evaluate the impact of human resources on organisational outcomes.

Sociological perspectives, such as social exchange theory and organisational culture theory, focus on the social dynamics and relationships within organisations (McLeod, Jenkin, Walters, & Irving, 2021; Xu, Wang, & Ma, 2022). Social exchange theory suggests that individuals contribute to organisations based on the perceived benefits they receive in return (McLeod,

et al., 2021). Meanwhile, organisational culture theory emphasises the shared values, norms, and beliefs that shape employee behavior and organisational performance (Akpa, Asikhia, & Nneji, 2021). These sociological perspectives inform HRA by highlighting the importance of interpersonal relationships, organisational culture, and social networks in determining human capital's value.

Hence, the theoretical foundations of HRA integrate economic, psychological, and sociological perspectives to understand how human capital contributes to organisational value. By drawing insights from these diverse disciplines, HRA can develop comprehensive frameworks for measuring and valuing human resources, taking into account factors such as productivity, motivation, and social dynamics within organisations. This interdisciplinary approach enhances our understanding of the complex relationship between human capital and organisational performance, facilitating informed decision-making and strategic management of human resources.

Measurement Techniques in Human Resource Accounting

HRA involves quantifying and reporting the value of human resources within an organisation (Adewoye et al., 2024; Ananda, 2019; Okpala & Chidi, 2010). Various approaches and methods have been developed to accomplish this. Three main approaches: cost-based, market-based, and value-based methods.

Cost-Based Methods

Cost-based methods focus on quantifying the historical costs associated with acquiring, training, and developing human resources (Aljamaan, 2017). These costs include recruitment expenses, training costs, and salaries. The most common cost-based method is the historical cost approach, which involves calculating the total investment made in human resources over time. Cost-based methods are simple to implement and understand, making them accessible to a wide range of organisations regardless of their size or complexity. By focusing on historical costs associated with acquiring, training, and developing human resources, cost-based methods provide a clear picture of past investments in human capital (Aljamaan, 2017). However, the cost-based methods ignore the current market value of human resources, which may not accurately reflect the true worth of employees to the organisation.

Market-Based Methods

Market-based methods determine the value of human resources by referencing external market data, such as salaries, wages, and benefits for similar positions in the industry or region. This approach assumes that the market value of employees reflects their contribution to the organisation.

Market-based methods align human resource valuation with market realities by referencing external market data such as salaries, wages, and benefits for similar positions in the industry or region. By anchoring human capital valuation to prevailing market rates, organisations can ensure that their compensation practices remain competitive, helping to attract and retain top talent in a competitive labor market. However, market-based methods may not accurately reflect the unique value of employees to the organisation, particularly in industries where specialised skills or knowledge are highly valued. This limitation can result in disparities between market-based valuations and the actual contributions of employees to organisational performance, potentially leading to misalignment between compensation and performance.

Value-Based Methods

Value-based methods assess the economic value of human resources based on their contribution to the organisation's objectives, such as revenue generation, cost savings, and innovation (Flamholtz et al 2002). This approach considers both quantitative and qualitative factors to determine the value added by employees. Value-based methods of HRA offer significant strengths that can provide valuable insights for organisations (Gaponenko, Dovbysh, Filin, & Bulatova, 2021). These methods directly link human capital to organisational performance and strategy by assessing the impact of employee skills, knowledge, and creativity on key business outcomes. By quantifying the contribution of human resources to strategic objectives such as revenue generation, cost savings, and innovation, value-based methods enable organisations to align their human capital management practices with broader organisational goals and priorities.

However, value-based methods of HRA also come with several limitations that need to be addressed. Firstly, these methods require sophisticated measurement techniques and data analysis, which may be challenging for organisations with limited resources or expertise in quantitative analysis. The subjective nature of human capital valuation can also introduce biases into the process, as different stakeholders may have varying perspectives on the value

of intangible assets. Additionally, it can be difficult to quantify the value of intangible assets accurately, as they may not have readily observable market prices or objective measures of value. Despite these limitations, value-based methods of HRA hold promise for providing organisations with valuable insights into the strategic management of human capital and its impact on organisational performance.

Challenges Associated with Human Resource Accounting

HRA has faced several challenges and criticisms, stemming from measurement issues, subjectivity, and resistance from stakeholders. One common challenge is the difficulty in accurately measuring the value of human capital. Human resources are complex and multifaceted, comprising various attributes such as skills, knowledge, experience, and motivation, which are challenging to quantify objectively (Bontis, 2018). Traditional accounting methods often struggle to capture the full spectrum of human capital, leading to underrepresentation or oversimplification of its value (Abdullah & Valentine, 2009).

Subjectivity is another significant concern in human resource accounting. The valuation of human capital involves subjective judgments and assumptions, which can introduce bias and inconsistency in the measurement process (Lev & Schwartz, 2019; Radiyah, et al., 2024). Different stakeholders may have varying perspectives on the value of human resources, leading to conflicts and disagreements (Bebchuk & Fried, 2013). Moreover, subjective valuations may undermine the credibility and reliability of HRA as a decision-making tool, as they lack objectivity and verifiability (Cascio, 2010).

Resistance from stakeholders poses a substantial barrier to the adoption and implementation of human resource accounting practices. Some managers and employees may be skeptical about quantifying human capital, viewing it as dehumanising or reductionist (Branham, 2015). Resistance may also arise from concerns about accountability, privacy, and the potential consequences of measuring human capital, such as performance-based compensation or layoffs (Nadler & Wiggs, 2016). Overcoming resistance requires effective communication, stakeholder engagement, and a clear understanding of the benefits of HRA (Kamoche & Cunha, 2011).

Furthermore, the lack of standardised measurement techniques and reporting guidelines is a significant criticism of human resource accounting. Unlike financial assets, which have well-established accounting principles and

standards, human capital lacks uniform valuation methods and disclosure requirements (Stiles & Kulvisaechana, 2023). This lack of standardisation hampers comparability across organisations and industries, hindering the usefulness of HRA for benchmarking and performance evaluation (Stewart, 2017).

Conclusion and Recommendations

This review provides valuable insights into its historical evolution, theoretical foundations, methodologies, challenges, and future directions of HRA. The historical development of HRA reflects the growing recognition of human capital as a critical driver of organisational success, with scholars and practitioners seeking to quantify and manage human resources more effectively. The theoretical foundations have provided conceptual foundations for understanding the value of human capital and its impact on organisational performance.

Various methodologies and measurement techniques have been employed in HRA, including cost-based, market-based, and value-based approaches. Each approach has its strengths and limitations, highlighting the complexity of valuing human capital and the need for comprehensive and nuanced measurement frameworks. Challenges and criticisms associated with HRA include measurement issues, subjectivity, resistance from stakeholders, and the lack of standardised reporting guidelines. Despite these challenges, the importance of human resource accounting in organisational management and decision-making cannot be overstated. Human capital is increasingly recognised as a key driver of competitive advantage and long-term sustainability, with organisations seeking to optimise their investments in human resources to achieve strategic objectives. HRA provides valuable insights into the value of human capital, enabling organisations to make informed decisions about recruitment, training, development, compensation, and performance management.

Moreover, HRA plays a crucial role in fostering a culture of accountability, transparency, and continuous improvement within organisations. By quantifying the value of human capital and integrating it into strategic planning and performance evaluation processes, HRA helps align human resource management practices with organisational goals and objectives. Furthermore, by highlighting the link between human capital investment and organisational performance, HRA can facilitate better resource allocation, risk management, and value creation.

Hence, HRA represents a dynamic and evolving field that holds significant promise for enhancing organisational management and decision-making. By addressing the challenges and embracing emerging trends and methodologies, organisations can leverage human capital more effectively to drive innovation, growth, and competitive advantage in an increasingly complex and dynamic business environment.

This study recommends the followings:

- Organisations and regulatory bodies should work towards establishing standardised measurement techniques and reporting guidelines for HRA. This will enhance comparability across industries and improve the credibility of human capital valuation in financial reporting.
- Companies should leverage emerging technologies such as machine learning, econometric modelling, and blockchain to enhance the accuracy and reliability of HRA. These tools can help quantify human capital more effectively and support data-driven decision-making.
- Organisations should implement training and awareness programmes to educate managers, employees, and investors on the benefits of HRA. Addressing resistance and misconceptions about human capital valuation will facilitate better adoption and implementation of HRA practices.

Future Research Directions

Future research and innovation in HRA could explore several promising areas to address existing challenges and enhance the value of human capital management. One potential area for future research is the development of advanced measurement techniques that integrate both quantitative and qualitative measures of human capital. This includes exploring methodologies such as econometric modeling, machine learning algorithms, and psychometric assessments to capture the multidimensional nature of human resources more accurately (Bontis, 2018). By leveraging emerging technologies and analytical tools, researchers can develop more sophisticated models for valuing human capital and predicting its impact on organisational performance.

Another area of interest is the exploration of intangible assets beyond traditional measures of human capital. This includes investigating the value of organisational culture, employee engagement, and social capital in driving business outcomes (Stewart, 2017). Researchers could develop frameworks and metrics to quantify these intangible assets and assess their impact on

innovation, collaboration, and resilience within organisations (Branham, 2015). Understanding the interconnectedness of human capital with other intangible assets can provide deeper insights into the drivers of organisational success and inform strategic decision-making.

The integration of HRA with other management disciplines, such as sustainability and corporate social responsibility (CSR), presents another avenue for future research and innovation. Researchers could explore how investments in human capital contribute to broader societal goals, such as environmental stewardship, ethical governance, and community development (Kamoche & Cunha, 2011). By incorporating social and environmental metrics into HRA frameworks, organisations can assess their impact on multiple stakeholders and demonstrate their commitment to sustainable development.

The adoption of blockchain technology and distributed ledger systems holds promise for enhancing the transparency, security, and traceability of HRA data. Blockchain-based platforms can facilitate the recording and verification of human capital transactions, such as training certifications, performance evaluations, and career progression (Abdullah & Valentine, 2019). By providing a tamper-proof and decentralised infrastructure for managing human capital data, blockchain technology can improve the accuracy and reliability of HRA practices while ensuring privacy and data integrity.

Hence future research and innovation in human resource accounting could focus on developing advanced measurement techniques, exploring intangible assets beyond traditional human capital measures, integrating HRA with sustainability and CSR initiatives, and leveraging emerging technologies such as blockchain. By addressing these areas, researchers can advance the field of HRA and provide organisations with valuable insights into the strategic management of their human capital.

Other suggested areas are:

- Future research could focus on developing and testing alternative valuation methods for human capital, beyond the traditional cost-based, market-based, and value-based approaches. This could include exploring novel approaches such as contingent valuation, real options analysis, or network analysis to capture the multidimensional nature of human resources more accurately.

- There is a need for cross-disciplinary research that integrates insights from fields such as economics, psychology, sociology, and information technology to advance our understanding of human resource accounting. For example, researchers could explore how behavioural economics principles influence human capital valuation, or how advances in artificial intelligence and big data analytics can enhance the measurement and management of human resources.
- Longitudinal studies tracking the impact of human capital investments on organisational performance over time could provide valuable insights into the causal relationships between human resource management practices and business outcomes. By examining how changes in human capital investments influence productivity, innovation, and profitability, researchers can identify best practices and strategies for maximising the return on investment in human resources.
- Comparative studies across industries and countries can help identify contextual factors that influence the valuation and management of human capital. By examining how human resource accounting practices vary across different sectors and cultural contexts, researchers can develop insights into the determinants of successful human capital management strategies and their implications for organisational performance.
- Finally, future research should explore the ethical and social implications of human resource accounting practices. This could include investigating the potential consequences of using HRA for performance evaluation, compensation decisions, and employee relations. Researchers could also examine the impact of HRA on diversity, equity, and inclusion initiatives within organisations, ensuring that human capital valuation practices promote fairness, transparency, and social responsibility.

References

- Abdullah, Z., & Valentine, B. (2019). Human capital accounting: A literature review. *International Journal of Accounting and Information Management*, 17(3), 198–219.
- Adewoye, J. O., Ologe, C. A., & Agboola, O. S. (2024). Human resource accounting and performance of civil servant in Osun State, Nigeria. *British Journal of Multidisciplinary and Advanced Studies*, 5(2), 13-25.
- Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organisational culture and organisational performance: A review of literature. *International Journal of Advances in Engineering and Management*, 3(1), 361-372.

- Aminu, R. (2022). Impact of human resource accounting on the quality of financial reports of non-financial companies in Nigeria: possibilities and challenges. *Journal of Human Resource Management*, 2(3), 26-40.
- Anwar, Y., & Mulyadi, M. (2023). Beyond traditional analysis: using machine learning to investigate intellectual capital disclosures. *Corporate Ownership & Control*, 20(3), 437-446.
- Bebchuk, L. A., & Fried, J. M. (2013). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17(3), 71–92.
- Bhooshetty, L. (2023). Rejuvenating human resource accounting research: a review using bibliometric analysis. *Management Review Quarterly*, 1-34.
- Bontis, N. (2018). Intellectual capital: An exploratory study that develops measures and models. *Management Decision*, 36(2), 63–76.
- Bradley, E. A. (2021). *Human Capital Evaluation: determining both the cost and value of a firm's human* (Doctoral dissertation, North-West University (South Africa)).
- Branham, L. (2015). The 7 hidden reasons employees leave: How to recognise the subtle signs and act before it's too late. AMACOM.
- Bushi, F. (2021). An overview of motivation theories: The impact of employee motivation on achieving organisational goals. *Calitatea*, 22(183), 8-12.
- Cascio, W. F. (2010). Costing human resources: The financial impact of behavior in organisations (4th ed.). PWS-Kent Publishing Company.
- Flamholtz E., Bullen M., & Hua (2002). Human Resource Accounting: A historical perspective and future implications. *Management Decision*, 947- 954.
- Gaponenko, T., Dovbysh, V., Filin, N., & Bulatova, R. (2021). Building a value-based human resource management system. In *E3S Web of Conferences* 273, 08010,. EDP Sciences.
- Herawati, T., Wulandari, P. P., & Affandy, D. (2020). Determined factors of human capital valuation: An empirical study in higher education institution, *Journal of Management*, 9(1), 53–76.
- Kamoche, K., & Cunha, M. P. (2011). Towards a theory of human resourcelessness: The undermining effects of HRM on organisational performance in the UK. *Management Decision*, 39(10), 853–866.
- Lev, B., & Schwartz, A. (2019). On the use of the economic concept of human capital in financial statements. *The Accounting Review*, 46(1), 103–112.
- McLeod, J., Jenkin, A., Walters, G., & Irving, R. (2021). The role and performance of supporter directors: A social exchange theory perspective. *Sport Management Review*, 24(5), 862-885.
- Nadler, D. A., & Wiggs, G. (2016). Future directions in organisation development. *Journal of Applied Behavioral Science*, 22(3), 189–202.

- Okpala P. & Chidi O. (2010). Human capital accounting and its relevance to stock investment decisions in Nigeria, University of Lagos, Nigeria. *The European Journal of Economics, Finance and Administrative Sciences*, 21 64-76
- Radiyah, F. T., Maisyarah, R., & Purba, R. B. (2024). Application of Human Resources Accounting in the International World (Period 2019 to 2022). *Asian Journal of Management Analytics*, 3(2), 449-458.
- Stewart, T. A. (2017). Intellectual capital: The new wealth of organisations. Doubleday/Currency.
- Stiles, P., & Kulvisaechana, S. (2023). Human capital reporting: Does it add value? Accounting, *Auditing & Accountability Journal*, 16(1), 125–148.
- Tanjung, A. R., Komardi, D., Renaldo, N., Reilly, W., & Yu, H. (2023). Exploring the human element: A qualitative study of the use of human resources accounting in an organisational context. *Interconnection: An Economic Perspective Horison*, 1(3), 171-180.
- Xu, S., Wang, Y. C., & Ma, E. (2022). A workplace-driven model on the formation of OCB-C: perspectives of social exchange theory and agency theory. *International Journal of Contemporary Hospitality Management*, 34(7), 2684-2703.
- Zboja, J. J., Jackson, R. W., & Grimes-Rose, M. (2020). An expectancy theory perspective of volunteerism: the roles of powerlessness, attitude toward charitable organisations, and attitude toward helping others. *International Review on Public and Nonprofit Marketing*, 17, 493-507.