EFFECT OF EMPLOYEE MAINTENANCE AND TRAINING COSTS ON ORGANIZATIONAL PERFORMANCE

BY

Omorho Humphrey ONORIODE, Ph.D.

Department of Business Administration,
Delta State University of Science and Technology, Ozoro
EMAIL: onoriodehumphrey74@gmail.com
Phone Number: 08030720558.

and

Ajiri Peter SAMUEL, Ph.D.

Department of Entrepreneurship,
Delta State University of Science and Technology, Ozoro
EMAIL:samuelajiri@gmail.com
PHONE NUMBER: 08032710136.

This study examined the effect of employee maintenance and training cost on performance of firms in Delta State between 2016 -2020 financial years. The objectives of the study are to examine the extent to which employee maintenance cost affects financial performance of firms. Also, it looks at how employee training cost affects financial performance of manufacturing firms in Delta State. The study adopted the longitudinal research design and the data collected were analysed using ordinary least square regression analysis, descriptive statistics, and correlation analysis. However, the study used hausman effect test to check between fixed and random effect that play on the data. Employee maintenance and training costs were proxy; while firm performance was proxy by return on assets. The study found that employee maintenance cost (0.02) and training cost (0.01) has positive and significant effect on the financial performance of organization. The study concluded that manufacturing firms should invest on human resource development to be able to have competitive edge over competitors in order to achieve the wealth maximization objectives. Based on the findings, the study recommended among others, that management of firms operating in Delta state should reduce their funding of human resource maintenance, as increase may negatively and significantly impact on the performance of firms operating in Delta state. Also, that management of firms operating in Delta state should increase their spending on training their human resource.

Keywords: Employee, Maintenance Cost, Training Cost, Organization, Performance

INTRODUCTION

There is consensus in literature that physical resources and other factors are being activated by the human resources because, physical resources cannot act on their own. Good performance can be attributable to the quality of the human resource of the firm. Hence, the cost incurred on this vital asset should be considered and treated as investment. The cost incurred on human capital will increase the operating cost and reduce the financial performance of firms. However, most of the study done was carried out using firm quoted in the stock exchange. Study that focuses on quoted firms is lacking.

Most previous studies, linking human resources to organizational performance have mainly focused on manufacturing firms, in pre-recession era while scanty research evidence exist in the post - recession era using firms operating in Delta State.

Studies done in Nigeria were conducted using firms quoted in the banking sector, manufacturing and cross section of selected firms for instance, Samoei & Rono (2015), Bassey and Arinze (2012). Studies that had used employee motivation cost in Nigeria are scarce. To this end, this study sought to empirically examine the impact employee maintenance and training costs on the financial performance of manufacturing firms in Delta State. According to Onoriode (2022), the quality of human resource of any organization can differentiate it from others and provide strong basis for its competitive position among competitors. Similarly, Haper (2004) believed that a company can achieve a competitive advantage and reach its goals by adopting a human development program and efficient usage of its personnel. In the last two decades, an increasing interest in explaining the impact of human capital on the organization's performance has evolved in the accounting research (Emily et al, 2015). Firms seek to optimize their workforce through comprehensive human capital development programs not only to achieve business goals but most importantly, for the long term survival and sustainability of the organization. To accomplish this, firms invest resources to ensure that employees have the requisite knowledge, skills, and competencies they need to work effectively in a rapidly changing and complex environment (Zadeha & Ghahremani, 2016). Parham and Heling (2015) stated, that people and their collective skills, abilities and experience, coupled with their ability to deploy these in the interests of the employing organization, are now recognized as making a significant

contribution to organizational success and constituting a significant source of competitive advantage. Firms succeeding to attract, retain and motivate a skilled workforce help companies to improve their results. Thus, firms that can effectively manage their different human capital activities such as recruiting, selecting, hiring, safety, wellness, training, organization development, communication and rewarding personnel to ensure they help positively in their financial growth and meet their challenges in a fast-changing business environment will succeed.

Objectives

The objectives of study are to:

- i. Evaluate the effect of employee maintenance cost on the financial performance of firms in Delta State.
- ii. Determine the effect of employee training cost on the financial performance of firms in Delta State.

Hypotheses

The following hypotheses were formulated in null form to guide the study.

H01: Employee maintenance cost has no significant effect on financial performance of firms in Delta State.

H0₂: Employee training cost has no significant effect on financial performance of firms in Delta State.

Conceptual Review

Employee Training Cost: This is the cost incurred on training and retraining program of the firm (Ifurueze & Odesa 2013). This is usually incurred to equip the staff with the requisite knowledge for executing the job at hand. Most firms have annual development/training program for all staff, this is done to equip the staff with the necessary knowledge and skill that will enhance their performance on the job.

Employee Maintenance Cost: This is the cost incurred by firm to reinforce employee performance level. This includes all costs incurred to drive employees to be more productive; to make employees pursue the organization's goal as their priority. Rajkumar (2004) posited that the concept of incentives practiced by organizations is like stock options and bonuses in particular, should help to reinforce employees' productivity. In line with this, Armstrong (2001) linked incentives to the achievement of previously set targets which are designed to motivate employees to be more productive, Uford and Duh (2021), by serving customers satisfactorily in order to achieve

high level of firm performance. This is further supported by Ian, Jim and Haper (2004) who noted that incentives should be incorporated to organization strategies as seen as a technique which organization can apply in order to achieve higher productivity in accordance with goals. Such cost includes: commission, bonuses and leave allowances.

Financial Performance:

Gordon (2021) sees financial performance as a subjective measure of how well a firm can use assets from primary mode of business and generate revenues. It is also used as a general assessment of a firm's overall financial health or wellbeing for a given period of time. Uford (2017) mentions that financial performance measurement of the worth of a firm's intangible assets. The notion performance is a controversial issue in finance largely because, of its multidimensional meanings (Zadeha & Ghahremani, 2016). Performance can be explored from two points of view: financial and agricultural (the two being interconnected); a company's performance can be measured based on variables that involve productivity, returns, growth or even customer satisfaction. There are various ways of measuring firm performance, they are grouped into Accounting and non-accounting performance measures; Accounting measures of firm performance includes: Return on Assets (ROA), Return on Equity (ROE), Profit Margin (PM), net operating profit etc. In this study, performance measure that reveals to the firms operating earnings capacity and shareholder performance evaluation is relevant. Hence, the study adopted the net operating earnings and return on equity. However, (2022) sees firm performance as the achievement task that are Onoriode measured specifically against identified or predetermined yardsticks or standard, cost spread and completeness. Again, they said performance can be seen in production improvement compliance to advanced technology and being motivated in getting things done.

Empirical Review

Parham and Heling (2015) investigated the efficiency of human capital and its impact on the financial performance of Dutch production companies. Using data from 33 Dutch production companies for a period of 6 years (2007-2012) and applying the Human Capital component of the VAIC methodology the monetary value created by the companies' knowledge workers is measured. The study results revealed that there is positive relationship between HCE and all three corporate performance measures, amongst which it should be referred to the strongly statistically significant relationship. Emily, Susan and Jacob (2015) investigated the effect of human capital management drivers on

organizational performance in using investment and mortgages bank ltd in Kenya as case study.

The study adopted a case study research design and stratified random sampling. Qualitative and quantitative technique of data analysis was used. The study concludes that it is possible to use human capital management drivers to benchmark organizational capabilities, identify human capital management strengths and weakness, and link improvements in specific human capital management practices with improvements in organizational performance and obtain sustainable competitive edge.

Samoei, and Rono (2015) evaluate human resource development and performance of the banking industry in Ogun State. Primary and secondary data were used in the study. Primary data were collected from the sampled commercial banks' staff in Abeokuta metropolis while secondary data were sourced from published in 2012 and 2013 Financial Statements of commercial banks. Data were analysed using Ordinary Least Squares and chi-square analyses. The study revealed significant positive relationship between expenditure on human development and each of the financial performance indicators. The study also showed that training programs have positive effect on the performance of commercial bank staff.

Methods

The study used pool data and was based on longitudinal research design. The effect of maintenance and training cost on organisation study evaluates the financial performance using already existed data that the study made no attempt to manipulate its nature or value. The choice of ex-post facto design was based on the data used which has the characteristics of time series and cross sectional. This study used eight manufacturing companies operating in various part of Delta State. These Companies are located in the three senatorial districts of the state and belong to different sector grouping in line with the Nigeria stock exchange. The sample size and population are all the manufacturing companies operating in Delta state as at December 2020. The study used all the firms, as they have the required data needed within the period under study. The companies used are: Nefkom Aluminium Company Ltd (Asaba), Smithex Paints (Asaba), Coleman Technical Industries Ltd (Asaba), Olite Manufacturing Company (Asaba), Gboco Polybag and Packaging Company (Warri), Osecul Nigeria Ltd (Warri), Top Feeds Ltd (Sapele), Eternit (Sapele), Ughelli Power Plant (Ughelli), Beta Glass (Ughelli). The cross-sectional data was also used for the study. The data collected were analysed using appropriate descriptive and

inferential statistics.

Results and Discussion

Descriptive Analysis: The descriptive statistics result shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and the Jarque-Bera (JB) statistics (normality test). Table 1 below provides the summary of the descriptive statistics of the data covering the period of five years (2016 - 2020).

Table 1: Descriptive Statistics Variables.

	ROA	EMC	ETC				
Mean	0.593665	5.633484	6.544667				
Maximum	9.541000	7.426700	7.580470				
Minimum	0.296400	4.676500	11.85160				
Std. Dev.	3.287878	0.704893	0.887740				
Skewness	-5.023832	-0.597368	3.234979				
Kurtosis	43.49709	3.173321	-0.615336				
Jarque-Bera	160317.4	13.42055	12.56311				
Probability	0.000000	0.001218	0.001870				

Source: E-view 8, 2023

The descriptive statistics result in Table 1 shows the mean average for each of the variables. The maximum values, minimum values, standard deviation and Jarque-Bera (normality test). The result provides some insight into the nature of the data collected from the companies used in the study. Firstly, it was observed that over the period under review, the firms have average positive performance of firm of (0.59). The large difference between the maximum (9.54) and minimum (0.30) value of performance of firms shows that the firm used, made positive performance (profit), these value indicates that performance of firm used for the study differs greatly within the period under review, it shows the presence of heterogeneity among the firms used in the study (this justifies the use of hausman effect analysis).

The result also reveals that employee maintenance cost has an average positive value of 5.63, maximum value of 7.43 and minimum value of 4.68. This shows that the costs of employees' maintenance among the companies are similar. Employee training cost has average value of 4.49, maximum value of 5.05 and minimum value of 3.25. Lastly, the Jarque -Bera (JB) which test for normality or existence of outlier shows that all the variables are normally distributed at 1% level of significance except firm size.

Table 2: Pearson Correlation Analysis

	ROA	ETC	EMC
ROA	1.000000		
ETC	0.016983	1.000000	
EMC	0.022043	0.308459	1.000000

Source: E-view 8, 2023

The findings from the correlation analysis show a positive relationship exist between performance of firm, employee maintenance cost (0.02), and employee training cost (0.01). This means the selected human resource development components are positively related to performance of the organisation. Thus, employee development is related to the performance of the firm. Employee maintenance cost has a positive relationship with employee training cost (0.31). In checking for multi-colinearity, the study observed that no two variables were perfectly correlated. This means there is absence of multi-co linearity problem in our model.

Table 3: Cross-Section Random Effects Test

Table 5: Cross-Section Random Effects Test								
Variable	Coefficient	Std. Error	t-Statisti	c Prob.				
С	7.282104	2.229949	3.67953	2 0.0076				
ETC	2.139184	2.825473	0.75710°	7 0.4499				
EMC	-0.206330	0.773826	-0.26663	6 0.7900				
Effects Specification								
Cross-section fixed (dummy variables)								
R-squared	0.471688	Mean deper	ndent var	0.893665				
Adjusted R-squared	0.435827	S.D. dependent var		3.287878				
S.E. of regression	3.228443	Akaike info criterion		5.315054				
Sum squared resid	1969.918	Schwarz criterion		5.807096				
Log likelihood	555.3135	Hannan-Quinn criter.		5.513732				
F-statistic	9.263705	Durbin-Watson stat		2.327620				
Prob(F-statistic)	0.001365							

Source: E-view 8, 2023

In table 3 above, the study observed from the result the R. squared value of 47 (47%) and R-squared (adj) 43.6 (44%) this indicates that all the human capital development cost components jointly explain about 44% of the variation in performance of firm used in the study. Thus about (44%) of the performance of

firms can be attributable to employee development cost components. The F-statistics value of 9.26 and its probability value of 0.001 shows that the model formulated are appropriate and statistically significant at 1% levels. The Durbin Watson statistics result was 2.3, this value can be approximated into two, and this reveals the absence of auto correlation in our model.

Hypothesis 1:

Employee maintenance cost has no significant effect on financial performance of firms operating in Delta state. The regression analysis result shows a coefficient value of -0.21, t-statistics value of -0.27 and probability value of 0.7900. The coefficient value shows that employee maintenance cost has negative effect on the performance of firms operating in Delta state. The probability value reveals that the effect of employee maintenance cost on performance of firms operating in Delta state is statistically insignificant. Based on the analysis result, the study accept the null hypothesis which states that employee maintenance cost has no significant effect on performance of firms operating in Delta state. The study therefore, concludes that employee maintenance cost has insignificant effect on performance of firms operating in Delta state.

Hypothesis 2:

Employee training cost has no significant effect on financial performance of firms operating in Delta state. The regression analysis result gives coefficient value of 2.14, t-statistics value of 0.76 and probability value of 0.4499. The coefficient value shows that Human capital training cost has positive effect on performance of firms operating in Delta state. The probability value reveals that the effect of Human capital training cost on performance of firms operating in Delta state is statistically insignificant even at 10% level. Based on the analysis result, the study rejects the alternate hypothesis. The study therefore concludes that employee training cost has insignificant effect on performance of firms operating in Delta state.

Discussion

The study examines the effect of employee maintenance and training costs on performance of firms operating in Delta state between 2016 and 2020. The data used was analysed using ordinary least square regression analysis, however some preliminary analysis like descriptive statistics, and correlation were carried out. The correlation analysis result reveals that employee maintenance cost has Negative insignificant effect on the performance of firms operating in Delta state. The finding is in line with that of

Bouaziz (2012). Human capital training cost has positive significant effect on performance of firms operating in Delta state. This shows that the more amount spent on training, the higher the possibility of its been significant on financial performance of firms operating in Delta state. This finding is in line with the finding of study done by Temple, Ofurum and Egbe (2016).

Conclusion

The quality of the human resource depends on the amount spent on development of the employee by the firm. These amounts spent on the development of the employee under the accounting practice are treated as expense in the year they are incurred without minding the nature of the cost. Firm that spent much in the development of the human resource stand the chance of withstanding high level competition and survives any changes in the business environment. The amount spent on the human resource increases the total expenses of the firm which reduces the financial performance. This study was carried out to examine the effect of employee maintenance and training costs have on the financial performance of firms under the recess recovering economy.

Recommendations

- 1. Employee maintenance cost has negative but insignificant effect on the performance of firms operating in Delta state. The study recommends that management of firms operating in Delta state should reduce their funding of Human capital maintenance, as increase may negatively and significantly impact on the performance of firms operating in Delta state.
- 2. Human capital training cost has positive but insignificant effect on performance of firms operating in Delta state. The study recommends that management of firms operating in Delta state should increase their spending on training their human capital.

References

- Afshan, S., Sobia, I., Kamran, A. & Nasir, M. (2012). Impact of Training an Employee Performance: A Study of Telecommunication Sector in Pakistan. Interdisciplinary Journal of Contemporary Research in Business. 4 (6).
- Armstrong, M. (2012). A Handbook of Human Resource Management Practice, (12th edn.), London, Kogan Page Publishers.
- Baron, H. (2002). Accounting for the cost of intellectual resources and

- disclosed in financial reports of the banks of Japan. European. Journal of economics finance and administrative sciences, 46, 13-25.
- Bassey & Arinze, (2012). Intellectual Capital ROI: A Current Map to Human Capital Antecedents and Consequences. Journal of Intellectual Capital, 3(3), 223-247.
- Becker, B., & Huselid, M. (2006). Strategic Human Resource Management: where do we go from here? Journal of Management, 32, 898-925.
- Biswas, M. (2012). Human Resources Management in Hospitality. New Delhi: India: Oxford University Press.
- Bouaziz, F. (2012). Human asset accounting and corporate performance. American International Journal of Contemporary Research 5(1)45 Emily A. & Jacob O (2015). Effect of human capital investment on organizational Performance of pharmaceutical companies in Kenya. Global Journal of Human Resource Management 3 (6).1-29, Haper, (2004).
- Human resource management and performance: a review and research agenda, International Journal of Human Resource Management' 8(3), 263-276. http://www.praclo.cpjgemployeespending.htm http://www.europeaninsituteforadvancestudies.com.htmpp.
- Ifurueze, M. & Odesa, J. (2013). The Impact of human resource investment on profit. Canadian Journal of management and finance Kaplan, C & Norton, D. (2004). Impact of human capital variables on the effectiveness of the organizations. Pakistan Journal of Commerce and Social Sciences 9 (1), 228-240
- March, J.G. & Sutton, R.I. (1997). Organizational performance as a dependent variable, organization Science, 8, 698-706.
- Marimuthu, A., Arokiasamy, E., & Ismail, H. (2009). Intellectual resource accounting: a critique of research objective for the development of intellectual resource accounting model. A paper presented at a seminar on intellectual resource accounting held at the Europe institute for advance studies in management, Brussels. Retrieved on May 16. 2016 from:
- Onoriode, O.H. (2022). Effect of human capital development cost on firm financial performance of listed manufacturing companies in Delta state, Nigeria. Fuoye journal of management, innovation and entrepreneurship vol. 1 no 1; 77-85.
- Parham, S. &Heling, G. (2015). The Relationship between Human Capital Efficiency and Financial Performance of Dutch Production Companies. Research Journal of Finance and Accounting, 6(8); 76-88
- Paul O. & Nealia S. (2015) Human resource management and organizational

- performance of small and medium enterprises (SMEs) in Nigeria. The International Journal of Human Resource Management, 6(1); 34-51.
- Samoei, E & Rono, H (2015). An empirical analysis of human capital development and organizational performance in banking sector: a Nigerian experience. International journal of Economics, Commerce and Management United Kingdom II, (7)
- Sanchez H. & Soriano, C. (2011). A Study of the organizational Competitiveness and intellectual capital indicators of international tourist hotels, Human Resource Management Student Newspaper, 10 (1), 1026-5309.
- Temple, C., Ofurum, C & Egbe, S (2016). Human capital attributes and financial performance of quoted Nigerian banks. International Journal of Advanced Academic Research, Social & Management Sciences 2(5), 1-12
- Uford, I. C. (2017). Customer and Employee-based Brand Equity Driving United Bank for Africa's Market Performance (Doctoral dissertation, University of the Witwatersrand, Faculty of Commerce, Law and Management, School of Economic & Business Sciences).
- Uford, I., & Duh, H. I. (2021). Measuring the Sources and Outcomes of Customer Based Brand Equity in a Service Industry. *African Journal of Business & Economic Research*, 16(2).
- Zadeha, L.K and Ghahremanib, M. (2016). Factors Affecting Organizational Development (Case Study: Welfare Office of East Azerbayain Province). International Academic Journal of Organizational Behaviour and Human Resources Management 3 (5), 46 51.