

## Effect of Human Resource Development on Performance of Quoted Companies in Nigeria

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### **ABSTRACT**

*This work examined the effect of human resources development on the performance of quoted companies in Nigeria. The study is anchored on resources based view theory by Barney (1991). The study adopted ex post facto research design. A total of five companies quoted on the Nigerian Stock Exchange were examined using their 2014 to 2018 annual reports and accounts. Data were sourced on employee remuneration, training and development cost, size of the employee, and return on assets a proxy for performance. The data generated were analyzed using descriptive statistics, correlation test and ordinary least square estimation technique. The study found that employee remuneration and training and development cost have significant effect on performance of quoted companies in Nigeria. Size of employees was found to have insignificant effect on performance of quoted companies in Nigeria. The study concludes that human resources development has significant effect on performance of quoted companies in Nigeria. The study recommends systemic and continuous evaluation of the human resources to determine those that needs development.*

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**KEY WORDS:** *Human Resources Development, Performance*

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### **INTRODUCTION**

The importance of human resource cannot be over emphasized. Human resource is one of the intellectual assets of an organization (Oyewo, 2013). Human resource constitutes a valuable resource to every organisation. It is as important as the machines, materials and money without whom other resources cannot be blended and coordinated for the purpose of achieving profitability (Abubakar, 2011). Enofe, Mgbame, Sunday and Ovie (2013) noted that “the success of any

organization depends on the ability of the human resources to effectively and efficiently optimize other resources such as land, equipment and money hence human resources are the greatest assets at the disposal of businesses”. Human resource at macro level indicates the sum of all components such as skills, creative abilities, innovative thinking, intuition, imagination, knowledge and experience possessed by all the people. An organization with abundant physical resources may sometimes fail miserably unless it has the right people to manage its affairs. Thus, the importance of human resource cannot be ignored. Therefore, it becomes important to pay due attention on proper development of such an important resource of an organization.

Considering the valuable role of human resource within an organisation, it is important that human resource cost in terms of hiring, training and development are properly recorded and recognized in the balance sheet like other intangible assets that are usually disclosed in the balance sheet or statement of financial position of organisations. Oke (2010), highlighting the importance of human asset, stated that “successful and effective organizations understood that their success is directly related to the quality of their human capital”. However, the quality of human capital or human asset that Oke (2010) referred to “depends on the knowledge or the intellectual capability that the employees or managers of firms or organizations possessed”. Thus, there is an indication that the importance of human intellectual capability is indispensable in the assessment of corporate performance.

Human resources development is receiving broader consideration with the emergent of current globalization and unstable job market due to the present economic recession in Nigeria. “Developed and developing countries in the world have placed emphases on Human resources development as instrument geared towards improving employees’ performance by devoting necessary organisation resources towards manpower training and knowledge transfer” (Obi-Anike, Ofobruku & Okafor, 2017). Thus, “the pivotal role of human resources in an organisation, informed the importance that its development cannot be optional but something that must be done irrespective of the personnel previous training or experience. Human resources development is an indispensable component of strategic human resource management as well as a means of reducing inefficiency among organisational key asset- its human resources, and it is vital for workers’ productivity and organisational performance (Wabara, Chijindu & Emerole, 2017).

Since human resources development include all attempts to increase performance by increasing an employee’s ability to perform better, its importance need not to be under-rated as cost of human resources development is obviously an investment to the organization (Nwachukwu 2006). Human resources development is the crucial area of human resource management; it is the fastest growing segment of personnel activities. Human resources development is one of the most important organizational dynamics. It constitutes the pivot in which organizational survival is run. The development process is one of the most pervasive methods for enhancing the productivity of individuals and communicating organizational goals to personnel (Ezeani & Oladele, 2013).

Empirically, Ezejiofor, John-Akamelu and Iyidiobi (2017) found that staff salary and staff retirement benefits have positive effect on organizational profitability. Ekundayo and Odhigu (2016) found that welfare and training cost and size of employee impact positively on the efficiency and profitability of the firm. Also, Omodero, Alpheaus and Ihendinihu (2016) found that benefit costs have positive and significant effect on Profitability. Edom, Inah, and Adanma (2015) study revealed that there is a positive relationship between the indicators of human resource cost (training cost, development cost and number of staff) and the profit of the organization. On

the contrary, Omodero, Alpheaus and Ihendinihu (2016) found that personnel benefit costs has no significant effect on firm turnover. Edom, Inah, and Adanma (2015) found that the number of staff does not have a significant effect on profit of the bank. The empirical evidence reveal conflicting findings and the timeframes considered in these studies were short resulting to knowledge gap in literature. This warrants a more systematic and comprehensive study. This study improved on the previous studies by making use of broad data set which is more than those used in the previous studies. Against this back drop, this study is designed to examine the effect of human resource resources development on performance quoted companies in Nigeria. Specifically, the study examined the effect human resources development cost on performance of quoted companies proxied by return on assets.

## LITERATURE REVIEW

Human Resources development as a concept seems to be giving way to concepts such as human resource development, manpower development and human resource management in most literature. Olusoji and Adedayo (2017) defined human resources development as a form of activities undertaken to expose an employee to perform an additional duties and assume positions of importance in the organisational hierarchy. Human resources development involves preparing employees for higher responsibilities in future. Organization for Economic Co-Operation and Development (2001) defined human resources development as the improvement of skills, knowledge, capabilities, and qualities personified in persons that enable the making of personal, societal and commercial well-being. This implies that human resources development could lead to better employees' productivity and ultimately improve organisation productivity. Sowunmi, Eleyowo, Salako and Oketokun (2015) see human resources development as the continuous process of improving the skill content of staff members of an organisation which is a function of 'job change. In this study, human resources development was proxied by human resources development cost.

Human resources development cost represents sacrifice that was incurred today in order to train and develop employee. It refers to the sacrifice that must be made to train a person either to provide the expected level of performance or to enrich the individual's skill (Aguinis & Kraiger, 2009). Abubakar (2008) noted that Human resources development cost includes the following: formal training cost, on the job training cost, special training cost, and development programmes cost. To be more specific, Adebawojo, Enyi and Adebawo (2015) noted that human resources development costs include "cost for induction period, cost of remuneration for the trainee and trainer, cost of travel for the trainee and the trainer, if any, cost of training materials, imputed cost of machines and equipments, used during the training, cost for development of training modules, cost of training evaluation, cost of material wastage during training, if any, cost of production loss for the trainee and the trainer (if he is within the organization, for in-house training), etc". To accurately ascertain cost of training and development, it is necessary to develop a checklist or a worksheet, delineating all direct and indirect costs of training. Similarly, Basseyy and Tapang (2012) noted that the "costs associated with the development and delivery of training programmes are labour, materials and overheads. Media and materials costs may vary substantially from one program to another. Some programs require most extensive data collection and analysis than others, while still others accrue large publishing costs. Cost questions always arise while considering training program development".

The most important part of an organization is the performance, where performance is viewed as the success of an organization in achieving valuable outcomes, such as high returns (Memon & Tahir, 2012). According to Smith & Reece (1999), performance is defined as “the organization's ability to meet the desire result as determined by the company’s major shareholders”. On the other hand, it is to determine whether the actual output of an organization is as what has been targeted (AlQudah, Osman & Safizal, 2014). In this study return on assets was used to measure performance.

Return on asset measure the effectiveness of the economic unity in using its assets to generate profit especially manufacturing, the higher this ratio, the better the economic unity of them as it indicates the management efficiency in using its assets to generate profit and also it represents the ratio of how much a has earned on its assets base, and the return on assets (ROA) is can be obtained by dividing net profit with total assets. Micah, Ofurum and Ihendinihu (2012) noted that return on Asset (ROA) is measured as Profit before Tax/Average Total Assets. ROA is a measure of profitability that takes into consideration the assets necessary to produce income.

This research work is anchored on resources based view theory. Barney (1991) formalised this theory, although it was Wernerfelt (1984) who introduced the idea of resource position barriers being roughly analogous to entry barriers in the positioning school. This theory was adopted for the study because it is centered on the important resources of the organization which can help to gain and maintain competitive advantage. Of the three important resources of the organization, human resources (Human (employees' experience and knowledge) still remain an important one because the other cannot function without the human resources. Human resource greatly influences the organization's resources and can be used to gain competitive advantage. This theory considers human resources in a more explicit way. This theory considers that the competitive position of a firm depends on its specific and not duplicated assets. The most specific (and not duplicated) asset that an enterprise has is its personnel. It takes advantage of their interdependent knowledge. That would explain why some firms are more productive than others. With the same technology, a solid human resource team makes all the difference.

Empirically, Olayinka and Olayiwola (2017) investigated human capital reporting and corporate earnings using empirical evidence from Nigeria using 50 listed manufacturing companies. Findings revealed that the measure of human capital cost exerts a positive and significant impact on corporate earnings, which therefore implies that the capitalization of human resource investment in the annual reports has the propensity to increase corporate earnings. Ifurueze, Odesa and Ifurueze (2014) examined the impact of aggregated cost of human resources on profitability using time series data from 2002 to 2011. The findings show that there is a positive relationship between profitability and human resource cost.

Ekundayo and Odhigu (2016) investigated the determinants of human capital accounting in Nigeria. The study reveals that welfare and training cost has a significant impact on human capital in Nigeria. Edom, Inah, and Adanma (2015) examined the impact of human resource accounting on the profitability of a firm using empirical evidence from Access Bank of Nigeria Plc. It was also discovered that there was a significant relationship between training cost, development cost and the profit of the bank.

Young, Sun and Jin (2011) surveyed the effect of human resources development on operational and financial performance of manufacturing companies using 207 manufacturing companies at three time points over a five year period. The finding revealed that financial

investment and managerial support for HRD have direct effect on operational performance. Anastesia (2008) researched on the impact of human resources development on organizational performance. The results indicated that the impact of HRD on organizations performance is positive

## METHODOLOGY

Ex-post facto research method was employed in this study. Data from secondary sources were employed in this study. The population for this study comprises of the companies quoted on the Nigerian Stock Exchange. Purposive sampling method was used in selecting five companies for this study. The companies selected cut across the diverse sector of the Nigerian Economy. The companies selected include First Bank of Nigeria Plc representing the financial sector; Nestle Nigeria Plc representing the consumer goods sector; Total Nigeria Plc representing the oil and gas sector; Nigerian Wire And Cable Plc representing the industrial goods sector; and May and Baker Nigeria Plc representing the health sector.

A model was formulated to capture the effect of human resources development on performance of quoted companies in Nigeria. The linear regression model is stated in a functional form as;

$$ROA = f(ER, TDC, SE) \quad (1)$$

Where

- ROA = Return on Assets  
ER = Employee Remuneration  
TDC = Training and Development Cost  
SE = Size of Employees

This equation can be restated in an econometric form as:

$$ROA = a_0 + a_1ER + a_2TDC + a_3SE + \mu \quad (2)$$

Where

- $a_0$  = Autonomous or intercept  
 $a_1$  = Coefficient of parameter ER  
 $a_2$  = Coefficient of parameter TDC  
 $a_3$  = Coefficient of parameter SE  
 $a_4$  = Coefficient of parameter SE  
 $\mu$  = Stochastic variable or error term

The data generated were be subjected to descriptive statistics which analyze the individual characteristics of the variables used in the study. Also correlation analysis was run in order to determine the extent of association and presence or otherwise of multicollinearity. In this work, the estimate technique used is Ordinary Least Square (OLS), which would be engaged to establish the existence of relationship through the application of the econometric software (E- view).

## DATA PRESENTATION AND ANALYSIS

### Descriptive Analysis

This section presents the descriptive statistics on the effect of human resources accounting on profitability of quoted companies in Nigeria. The aim of the analysis is to examine the performance of the variables during the period under review. The analysis of the individual characteristics of these variables is presented in the table below:



**Table 1 Descriptive Statistics**

	<b>ROA</b>	<b>ER</b>	<b>TDC</b>	<b>SE</b>
Mean	0.132788	108053.1	13134.52	2756.800
Median	0.078000	72542.00	405.0000	681.0000
Maximum	0.778000	406992.0	78074.00	7616.000
Minimum	0.001000	3973.000	108.0000	356.0000
Std. Dev.	0.166964	103868.6	23906.85	2833.232
Skewness	2.467154	1.342420	1.820587	0.606183
Kurtosis	9.953294	4.165351	4.828068	1.613795
Jarque-Bera	75.72468	8.923340	17.29165	3.532703
Probability	0.000000	0.011543	0.000176	0.000956
Sum	3.319700	2701327.	328363.0	68920.00
Sum Sq. Dev.	0.669046	2.59E+11	1.37E+10	1.93E+08

Source: E-View Version 8.0

This table present the summary of statistics used in the analysis. It provides information about the mean, median, maximum and minimum value, standard deviation, skewness, Kurtosis and Jarque Bera of the variables used in the study. The mean rate for return on assets which is the proxy for profitability stood at 0.132788, while those of employee remuneration (ER), training and development cost (TDC), and size of the employee (SE) stood at 108053.1, 13134.52 and 2756.8 respectively. The median which is a robust measure of the centre of the distribution that is less sensitive to outliers than the mean shows that return on assets, employee remuneration, training and development cost and size of the employee have median series of 0.078, 72542.0, 405.0 and 681.0 respectively. Some of these variables recorded values of standard deviation that is higher than the values of their respective means. This implies that there is a wide variation between these variables in the respective companies.

Another important statistics is skewness which measures the asymmetry of the distribution of series around its mean, the result of the descriptive statistics shows that all the variables are positively skewed. The positive values for the skewness reveals that the data are skewed right this means that the right tail is long relative to the left tail. The Kurtosis statistic is calculated at 52.467154, 1.342420, 1.820587 and 0.606183 respectively for return on assets, employee remuneration, training and development cost and size of the employee

The Jarque-Bera statistics measures the difference between skewness and kurtosis of the series to determine whether the series is normally distributed. The Jarque-Bera statistics shows that return on assets, employee remuneration, training and development cost and size of the employee have the values of 75.72468, 8.9233340, 17.29165 and 3.532703 respectively. All the variables have Jarque-Bera probability that is less than 0.05%. This implies that they are normally distributed. The result shows that all the variables are normally distributed and the variables are suitable for the conducting of the analysis. Finally, the total number of observations for each of the variables is 25.

### **Correlation Analysis**

One of the ways to detect the presence of multi co-linearity in a model is through the use of correlation matrix table. Here, the independent variables are tested to see if they are correlated and the result is represented in a matrix form. Since multi co-linearity is a question of degree and

not of existence, a matrix coefficient above 0.8 indicates a high degree of multi co-linearity in the model. The correlation matrix table is shown below:

**Table 2 Correlation Matrix**

	ROA	ER	TDC	SE
ROA	1.000000			
ER	0.025716	1.000000		
TDC	0.146489	0.643345	1.000000	
SE	0.381998	0.205363	0.490106	1.000000

Source: E-View Version 8.0

The correlation matrix shows that the degree of correlation between the independent variables is either low or moderate, which suggests the absence of multicollinearity between independent variables. As suggested by Wan, Shahnaz and Nurasyikin (2008), the Pearson's *R* between each pair of independent variables should not exceed 0.80; otherwise, independent variables with a coefficient in excess of 0.80 may be suspected of exhibiting multicollinearity. The highest correlation as disclosed in the table is between training and development cost and employee remuneration with the value of 0.643345. This confirms that there is no multicollinearity among the variables.

**Interpretation of Regression Result**

The regression result is presented in the table 3 below. To analyze this table, we shall employ two criteria which are statistical criteria and econometric criteria.

**Table 3 Estimation Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.808888	14.14473	2.127884	0.0006
ER	0.266233	0.378621	2.703165	0.0005
SE	1.617669	0.749805	0.157453	0.1440
TDC	0.564862	0.420305	2.343933	0.0348
R-squared	0.639327	Mean dependent var	-2.866197	
Adjusted R-squared	0.565466	S.D. dependent var	1.636468	
F-statistic	32.51714	Durbin-Watson stat	1.963805	
Prob(F-statistic)	0.000733			

Source: Authors Computation from E-View Version 8.0

The regression result shows that employee remuneration has a positive and significant effect on return on assets. This implies that a unit increase in employee remuneration will bring about 0.266233 increase in return on assets. It also shows that training and development cost has a positive and significant relationship with return on assets. This implies that a unit increase in employee training and development cost will bring about 0.564862 increase in return on assets (proxy for profitability) holding other factors constant. Also, size of the employee was found to have a positive and insignificant effect on return on assets.

To determine the statistical relevance of the regression result, diagnostic tests like the t-statistic, f-statistic, t-prob,  $R^2$  (coefficient of determination) and  $R^2$  adjusted shall be used.

**T-Statistic:** The t-statistic measures the individual significance of the independent variables on the dependent variable. It shows how the independent variables explain the dependent variable individually. The rule here is that when the value of the t-statistic is equal to or greater than 2, it is significant, otherwise, it is not significant. From the regression result obtained, all the variables with the exception of size of the employee have significant effect on performance in companies studied.

**F-Statistic:** The f-statistic measures the joint significance of the independent variables on the dependent variable shows that that the independent variables have joint significant effect on the dependent variable.

**Coefficient of Determination:** The coefficient of determination ( $R^2$ ) measures the overall goodness of fit of the model. From the regression results above, the  $R^2$  is about 63.9%. This means that the variations in the independent variables jointly explain about 63.9% of the variations in the dependent variable which is profitability.

**T-Probability:** The t-probability, also known as t-prob, always agrees with the t-statistic. If the value of the t-prob is less than 0.05 at 5% level of significance, then it is significant, otherwise, it is not significant. From the results obtained above, all the variables are significant with the exception of size of the employees.

To determine the econometric relevance of the regression result, diagnostic tests like the serial correlation test was carried out.

**Serial Correlation Test:** One of the assumptions of the Classical Linear Regression Model (CLRM) is that the disturbances of the independent variables are not serially correlated. When this is violated, there is autocorrelation. The technical way to detect the presence of autocorrelation is by the use of the Durbin Watson D-Statistic. If the value of the d-statistic can be approximated to 2, then there is no autocorrelation.

From the regression result, the Durbin Watson D-Statistic obtained was 1.963805 which can be approximated to 2. This means that there is no autocorrelation in the model. Hence, the model can be used for realistic forecasts.

## DISCUSSION OF FINDINGS

The study investigated the effect of human resource development on performance of quoted companies in Nigeria. The study found that training and development cost has a significant effect on the performance of quoted companies in Nigeria. This finding agrees with that of Edom, Inah and Eyisi (2015) whose findings indicates a positive relationship between the indicators of human resource cost (training cost, development cost and number of staff) and the profit of the organization. This agrees with the findings of Ekundayo and Odhigu (2016) that welfare and training cost has a significant impact on human capital in Nigeria.

The study also found that employee remuneration has a significant effect on the performance of the company. It agrees with the findings of Olayinka and Olayiwola (2016) that salaries and wages exerts a positive and significant impact on corporate earnings. It is also in line with the findings of Ezejiofor, John-Akamelu and Iyidiobi (2016) that increase in staff salary has contributed positively on organizational profitability. Size of the employees was found to have



insignificant effect on return on assets. This agrees with the findings of Edom, Inah, and Adanma (2015) that the number of staff does not have a significant effect on profit of the bank.

## CONCLUSION

This work examined the effect of human resources development on performance of quoted companies in Nigeria. A total of five companies quoted on the Nigerian Stock Exchange were examined using their 2014 to 2018 annual reports and accounts. Data were sourced on employee remuneration, training and development cost and size of the employee in order to ascertain its effect on performance of companies proxied by return on assets. The study revealed that all the variables with the exception of size of the employees have significant effect on performance of quoted companies in Nigeria. The study therefore concludes that human resources development has significant effect on performance of quoted companies in Nigeria. In light of this, the understanding of performance in relation to human resources development should not be regarded as a phenomenon that only adds 'more zeros' in a firm's profits; it is rather transforming the entire workforce as the most 'valuable assets' in order for the organization to pave ways for greater performance but also it ensures firms to remain competitive for their long term survival.

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