Emilly Anyango Orwa¹, Denis Ouma², Emily Mokeira Okwemba³

¹(Department of Accounting and Finance, Kaimosi Friends University, Kenya) ²(Department of Business Administration and Management Science, Kaimosi Friends University, Kenya) ³(Department of Business Administration and Management Science, Kaimosi Friends University, Kenya) *Corresponding Author: EmillyAnyango Orwa¹

ABSTRACT: Personnel costs often constitute the major operational cost factor in most companies, and thus they need to be closely monitored and managed to maximize profitability. Their control is critical to ensuring the most effective and efficient use of finite resources. Despite heavy investment in human resources costs, some listed companies still face declining financial performance. The study established the effect of personnel costs on the financial performance of fifty-seven listed companies in Kenya. The study employed a resource-based view theory. The study adopted a longitudinal research design. Secondary panel data was collected from the published audited financial statements from 2017 to 2021. The study employed a random effect Generalized Least Square regression analysis technique with the aid of STATA to analyse data. Both descriptive and inferential statistics were obtained. Study findings indicated that personnel costs had a significant positive effect on financial performance with a p-value of 0.00<0.05 and a coefficient of 0.45. The study recommended that listed companies should carefully evaluate the costs incurred in paying staff salaries and wages. The findings will provide valuable information to accounting standard-setting bodies for reviewing current accounting procedures relating to human resource costs and provide standards for valuation, capitalizing, and reporting such expenditures in the statement of financial position.

KEYWORDS – *Financial performance, Human resource accounting, Human resource cost, Listed Companies, and Personnel costs.*

INTRODUCTION

I.

Personnel costs provide firms with information concerning the expenditures on employees. Personnel costs include expenses incurred on an organization's workforce for payment of salary and wages. HRC is becoming more important as a factor in both small-scale and large-scale economic success because it contributes positively to financial performance (Agbiogwu, Ihendinihu, & Azubike, 2016).

Personnel costs often constitute the main cost factor in most companies; thus, their control is necessary to ensure the most effective and efficient use of finite resources. It is also crucial to evaluate all human resource costs recorded under conventional accounting practices. Investment in human capital is the sum a company spends on activities that directly or indirectly improve the knowledge and abilities of its workforce. Employees' costs and worth to an organization should be calculated (Adhikari, 2020).

Accounting for human resources in organizations has been progressively recognized recently. As a result, the human resource accounting idea is gaining active consideration through validating and developing the concept. Companies give workforce reductions a favorable accounting treatment, treating them as a one-time operating expense and other restructuring costs, thus deducting from company earnings from revenues. This corresponds to the traditional accounting treatment of human capital in the organization, which treats all expenditures relating to human capital formation in an organization as expenses and is charged against the company's revenues in the profit and loss accounts for the current financial period. However, this treatment of human resources as expenses is inconsistent with the treatment accorded to other resources like physical and monetary resources in the financial statements (Alekhya & Lakshmi , 2020).

Unlike traditional accounting, human resource accounting treats costs associated with human resources as assets bymeasuring and valuing human resource costs. However, these assets are not yet present in the balance sheet (Salawudeen & Suleiman, 2018). The challenge of recording employees' value in the balance sheet is that they cannot be kept in one organization without the urge to transfer to another organization, unlike every tangible asset. Furthermore, it is challenging to estimate the depreciation rate employees value since it is difficult to predict the life span of employees in a company (Craig, et al., 2020).

Effective management of human resources and recognizing human resource costs is crucial for assessing the financial performance of small and medium enterprises. Employee productivity increases with

increased human resource expenditures because employees are motivated. With increased productivity, financial performance is improved. Firms consider factors like safety costs, welfare costs, retraining costs, and cost of staff development when strategizing their investment in human resource costs. These factors significantly influence firms' financial performance of firms and should therefore considered, accounted for, and disclosed in the annual reports(Minjo, 2018).

This limitation of capitalizing the cost of human resources and recording their value as an asset in a balance sheet should be thoroughly examined. Therefore, a major concern that must be addressed prior to the issue of capitalization and the reporting strategy used for human resource costs is determining whether there is a causal relationship between human resource costs and firms' financial performance.

1.1 Statement of the Problem

Evaluating human resource costs is indispensable because an organization's success is largely dependent on the contributions and ability of its employees to effectively and efficiently mobilize other finite resources. Human resource costs often constitute the major operational cost factor in most companies, and thus they need to be closely monitored and managed to maximize profitability (Olajumoke, 2020). Companies offer competitive salaries and wages to their employees to build their morale because competitively compensated employees tend to be more productive and motivated to achieve results. Thus, firms expect employees to be highly productive and contribute to firms' improved financial performance. Despite heavy investment in human resources costs, some listed companies still face declining financial performance. In 2017, Kenya Airways spent Ksh15,448 million on employee costs and key management compensation, including salaries, wages, and other benefits. However, despite this heavy expenditure on employees, Kenya Airways recorded 10,202 million shillings loss in 2017(Nairobi Securities Exchange, 2017). This poor performance has put some listed companies at risk of suspension, delisting on the NSE, and investor dissatisfaction. Besides, these heavy human resource costs are not revealed in the balance sheet; instead, they are charged against income for the period. As such, the major problem to be addressed before the issue of capitalization and reporting method to be used for human resource costs is determining whether there is a contributing link between human resource costs and a firm's financial performance. Studies have been done on the effect of human resource costs on financial performance. Some studies have yielded either a positive or no relationship between HRC and financial performance, thus conflicting results (Omodero, Alpheaus, & Ihendinihu, 2016; Ofurum & Adeola, 2018). In addition, many studies have been done in developed countries. Studies done in Kenya have focused on human resource practices and employee performance but not on the accounting perspective of personnel costs. Therefore, the study sought to determine the effect of personnel costs onfinancial performance of listed companies in Kenya.

1.2 Research Question

To establish the effect of personnel costs on the financial performance of listed companies in Kenya.

1.3 Research Hypothesis

H0₁: There is no significant effect of personnel costs on the financial performance of listed companies in Kenya.

II. LITERATURE REVIEW

2.1 Empirical Review

Amahalu, Abiahu, Obi, and Okika (2016) studied the effect of staff cost on return on assets of listed banks in Nigeria. This study used an ex-post-facto research design. Secondary data for the study were generated from financial statements published on the Nigeria Stock Exchange. OLS regression technique was used to analyze the research data. According to the study findings, staff costs positively affect banks' financial performance.

Ofurum and Adeola (2018) investigated the effect of staff remuneration on the profitability of quoted firms in Nigeria. The target population consisted of thirty quoted firms on Nigeria Stock Exchange. The study applied an arbitrary inspecting procedure to select a sample size of nine quoted firms. Secondary data for the study was obtained from audited financial reports of sampled companies. The analysis of data was performed using OLS regression. The study findings indicated no significant effect of staff remuneration on the profitability of quoted service firms.

Adhikari (2020) established the effect of staff costs on the operational profitability of Nepalese commercial banks. The study targeted twenty-seven commercial banks. The study used a purposive sampling technique and selected six banks. The study adopted descriptive and causal-comparative research designs. The research used secondary data acquired from the annual financial reports of the banks for the financial years 2016 to 2020. Study findings revealed that staff costs positively influence the operational profit of banks.

Ndum and Oranefo (2021) examined the effect of human resource costs on financial performance. The study was conducted on the quoted brewery firms Nigeria. The researchassessed personnel costs and reported them in the financial statements. The study population comprised five quoted brewery firms. The research

employed ex-Post-Facto research design. Secondary data from the five companies' published annual reports were obtained for the study. Multiple regression analysis and SPSS were used to analyze data. The findings showed that personnel costs significantly and positively affect profitability.

Onyeukwu, Ihendinihu, and Nwachukwu (2021) evaluated the effect of personnel costs on the financial performance of microfinance banks in Nigeria. The study targeted and sampled two microfinance banks listed on the Nigeria Stock Exchange. The study adopted Ex-post research design and obtained secondary data from banks' annual reports. The study used simple regression analysis to analyze data. The study findings showed that personnel costs have no significant effect on financial performance.

2.2 Theoretical Review

2.2.1 Resource-Based-View Theory

Barney propounded the theory in 1991. The theory posits thata firm's resources can provide a competitive edge only if they are valuable, scarce, imperfectly imitable, and in short supply. Not all firms' resources have the capacity to enable a firm to gain a competitive edge. Competitive edge is achieved by employing a value-creating strategy that is difficult for a company's competitors to replicate and sustain and that has no readily available substitutes (Barney, 1991).

The key idea behind the RBV is that firms differ in the types and quality of their resources and that managers need to identify and develop their firm's unique resources and capabilities to attain a sustainable competitive advantage. The theory stresses that firms that want to foster a productive and successful workforce invest in training and developing their employees. Additionally, offering attractive salary and compensation packages is crucial for a company's ability to attract and retain top staff. By investing in their human resources, firms can increase their financial performance and create a competitive edge (Barney, 2001).

The resource-based theory stresses that an individual employee significantly contributes to achieving the organization's corporate goal. Therefore, organizations should adequately develop employees' skills, competence, and experience to achieve their corporate goals. The theory emphasizes that human resources in organizations are critical resources and that firms can gain a competitive advantage through effectively utilizing and developing their human resources. As such, firms must sustain a competitive advantage by appreciating the individual contributions of their human resources, whose value significantly influences the company's sustainable competitive advantage (Odhong & Were, 2013).

Human capital is an inexhaustible resource that gives a company an edge over the competition. Companies have human resources that they can use to gain an edge in the market and ensure their continued success. Competitive advantage can be created using scarce and valuable resources. As long as the company can prevent resource imitation, transfer, or substitution, this competitive advantage can be sustained over extended periods (Hitt, Xu, & Carnes, 2016). The theory shows that valuable resources and distinctive competencies preserve an organization's competitive advantage and cannot be replaced (Dubey, Gunasekaran, Childe, & Blome, 2019).

Human capital theory was appropriate for the study since it identifies valuable, rare, and imperfectly imitable resources. The resource-based view theory emphasizes that human resources possess the attributes of the valuable resources. The approach also highlights the effective utilization of organizations' resources to achieve and sustain a competitive edge and increase financial performance. In the study, listed companies have human resources as valuable assets that they can utilize to gain a competitive advantage. Firms can achieve this by investing in human capital development and accounting for expenditures incurred on their human resources. Human resource costs help gain a competitive advantage and improve the financial performance of listed companies.

III. RESEARCH METHODOLOGY

The study adopted a longitudinal research design. The target population consisted of fifty-seven (57) listed companies in Kenya that had been trading between 2017 to 2021. Secondary panel data was acquired from the financial statements of listed companies in Kenya for the financial year periods covering 2017 to 2021. Published audited annual reports of listed companies in Kenya for the financial years 2017 to 2021 were downloaded from the Nairobi securities exchange website. Data collected included total assets, net income, sales, staff salaries, and wage costs. Study data was cleaned and processed. Both descriptive statistics and inferential statistics were obtained. Descriptive statistics comprised mean minimum, maximum, and standard deviation. Inferential statistics comprised correlation analysis and a random effect model.

3.1: Model Specification $FP_{it} = \beta_0 + \beta_1 P C_{it} \dots + e_{it}$ Where: FP = Financial performance. PC: Personnel Costs β_0 : constant.

*Corresponding Author: Emilly Anyango Orwa¹

34 | Page

 β_1 : Panel regression coefficient *i*: observations *t*: time from 2017 -2021 e: error term

IV. RESULTS AND FINDINGS

This section outlines the data analysis and findings of the study. It presents descriptive statistics, diagnostic tests, and inferential statistics results.

4.1 Descriptive Statistics

Table 4. 1: Descriptive Statistics								
Variable	Observations	Mean	Std. Dev.	Min	Max			
ROA	245	2.590735	.6421624	.587645	4.70757			
PC	245	2.857352	.6259858	.7781512	4.948608			

Financial performance measured by ROA had a mean of 2.59 with a standard deviation of 0.64. This implies a high variation in the financial performance of listed companies between 2017 and 2021. This was further evidenced by the minimum value of ROA of 0.59 and the maximum of 4.71. The wide variance of return on assets indicates that some listed companies have had greater financial performance than others during the study period.

Personnel costs (PC) had a 2.86 mean with a standard deviation of 0.63. It means there was a wide variation in personnel costs across the listed companies between 2017 and 2021. Further, this wide variation was evidenced by the minimum value of personnel costs of 0. 78 and the maximum value of 4.95. The wide variance means that some listed companies pay very high salaries and wages while others pay low salaries and wages to employees.

4.2 Diagnostic Tests

4.2.1 Normality Test

Table	4. 2:Normality	Test Results

Variable	Obs	W	V	Z	Prob>z
ROA	245	0.99108	1.589	1.076	0.14101
PC	245	0.98936	1.896	1.486	0.06858

From table 4.2, the p-value of return on assets is 0.14, and personnel costs is 0.07. The study failed to reject the null hypothesis because the p-values of all the study variables were greater than 0.05. Additionally, the z-critical value for return on assets was 1.076, and personnel costs was 1.486, which were less than the acceptable value of 1.96. Further, the w-values of return on assets and personnel costs were all 0.99, close to 1. This implies that study data was normally distributed.

4.2.2 Heteroscedasticity Test

Table 4. 3:Heteroscedasticity Test Results

Breusch-Pagan/Cook-Weisberg test for heteroscedasticity
H0: Constant variance
Variables: fitted values of ROA
Chi2(1)=0.85
Prob>chi2=0.3571

The heteroscedasticity test results show a p-value of 0.36>0.05. This implies that there is no heteroscedasticity in the study data. Thus, the study failed to reject the null hypothesis because the data is homoscedastic. 4.2.3 Multicollinearity Test

Table 4. 4:Multicollinearity Test Results					
Variable	VIF	1/VIF			
PC	2.13	0.469399			

From the test results, PC has a VIF of 2.13, TDC (1.83), and EBC (1.53). The VIF values fall within the acceptable range of 1-10, showing that the variables were moderately correlated. Thus, there was no multicollinearity in the dataset.

4.2.4 Autocorrelation Test

Table 4. 5:Autocorrelation Test Results						
lags(p)	Chi2	df	Prob>chi2			
1	0.068	1	0.7945			
H0: no serial corr	elation					

*Corresponding Author: Emilly Anyango Orwa¹

www.aijbm.com

The test results in table 4.5 show a p-value of 0.7945, which is greater than 0.05. This means that there was no serial correlation in the study data.

4.2.5 Stationarity Test Table 4 6:Stationarity Test Posults

Table 4. 0:Stationa	rity Test Results	6			
H0: Panels contains unit roots			Number of panels=	49	
Ha: Panels are statio	nary		Number of periods=	5	
ADF regression: 1 la	ıg				
Variable	Period	Panel	T statistic		P-value
PC	5	49	-7.2354		0.0012
ROA	5	49	-3.5764		0.0000

From the test results table, the p-values are less than 0.05. In addition, test statistic values are less than the critical value of -2.028. This denotes that the dataset was stationary.

4.3 Inferential Statistics

The inferential statistics included correlation analysis, fixed effects model, and random effects model. The study also conducted the Hausman Test to determine the suitable model between fixed and random effects models. The test showed that the random effects model was the most appropriate for the current study.

Table 4. 7:Correlation Analysis Results

	ROA	PC
ROA	1.0000	
	0.7670*	1.0000
PC	0.0000	

Star (0.05) sig

From the correlation analysis results, the study found a strong positive correlation between personnel costs and the financial performance of listed companies in Kenya. The correlation factor was 0.77. This strong relationship was statistically significant with a p-value of 0.00<0.05. This implies a positive and significant association between PC and ROA. These results are consistent with Amahalu et al. (2016), which established a positive and significant relationship between personnel costs and financial performance. The findings also agree with Adhikari (2020), which found a positive and significant association between personnel costs and the profitability of Nepalese commercial banks.

Table 4. 8: Fixed Effect Model Results

Fixed-effects (within) regression			N	umber of obs-245	5	
Group variable: ID			Number of groups-49			
R-sq.				Obs per gr	roup:	
withi	in- 0.5000			n	nin=5	
betw	een-0.8685			avg= 5.0		
overa	all-0.6860			n	nax = 5	
				F(3,193) =	64.34	
corr(u_i,xb)=	0.0393			Prob>F =	=0.0000	
ROA	Coef.	Std. Err.	t	P > t	[95% Conf.	Interval]
PC	.4348975	.063103	6.89	0.000	.3104376	.5593575
_cons	.0209344	.2423864	0.09	0.931	457132	.4990007
Sigma-u	.16697623					
Sigma_e	.35931471					
rho	.17759982 ((fraction of var	iance due to	u_i)		
Prob>F = 0.36	558					
Table 4. 9: R	andom Effect 1	Results				
Random-effect	cts GLS regress	ion	Number of	obs-245		
Group variabl	e: ID		Ν	umber of groups-	49	
R-sq.			0	bs per group:		
withi	n- 0.4996			min=5		
betw	een-0.8705		av	y = 5.0		
overa	all-0.6865			max = 5		
			W	vald chi2(3) -	504.44	
$corr(u_i,x) - 0$) (assumed)		P	rob>chi2 - 0	.0000	
ROA	Coef.	Std. Err.	Z	P > z	[95% Conf.	Interval]
PC	.4465682	.0541125	8.25	0.000	.3405097	.5526267
*Correspond	ling Author: E	Emilly Anyang	o Orwa ¹	www.a	iibm.com	36 Page

Personnel Costs and Financial Performance of Listed Companies in Kenya							
_cons	.0182126	.1281264	0.14	0.887	2329105	.2693358	
Sigma-u	.05354262						
Sigma_e	.35931471						
rho	.02172258	(fraction of varia	nce due to u	_i)			
Table 4. 10:	Hausman Test	Results					
	(b)	(B)		(b-B)	sqrt (diag(V	/_b-V_B))	
	Fixed	random		Difference	S.E.		
PC	.4348975	.446568	2	0116707	.0324626		

b = consistent under H0 and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under H0; obtained from xtreg

Test: H0: difference in coefficients not systematic

Chi2 (3) = (b-B)' $[(V_b-V_B)^{(-1)}]$ (b-B)

= 1.23 Prob>chi2= 0.7469

The results of the Hausman test observed a p-value of 0.7469, which is greater than 0.05, thus statistically insignificant at a 5% significance level. This implies that the difference in coefficients is not systematic. The study failed to reject the null hypothesis that differences in coefficients are not systematic; thus, the random effect was preferred. Therefore, the study adopted a random effect Generalized Least Square regression model to establish the effect of human resource costs on the financial performance of listed companies in Kenya. The study used the following model;

 $ROA_{it} = 0.0182126 + 0.4465682PC_{it}$

4.4 Discussion

The study examined the effect of personnel costs on the financial performance of listed companies in Kenya. The first null hypothesis was that there is no significant effect of personnel costs on financial performance. Statistically, there was a strong positive connection between financial performance and personnel costs (r = 0.77, p 0.00). This suggests a direct relationship between the companies' ROA and personnel costs. The results from the random effect GLS regression model indicated that the regression coefficient for personnel costs was 0.45 and a p-value of 0.00, suggesting a significant positive effect of personnel cost on the return on assets of companies in Kenya. The results indicate that listed companies would have a 45% improvement in financial performance for every unit rise in personnel costs. Thus, the study rejected the null hypothesis.

The findings concur with Ndum and Oranefo (2020). They found that personnel costs significantly positively affect financial performance of quoted brewery firms in Nigeria. The findings further concur with Adhikari (2020) that staff costs positively affect Nepalese banks' profitability.

The findings of this objective are in line with the resource-basedview theory, which stresses that an individual employee significantly contributes to achieving the organization's corporate goal. Resource-basedview theory emphasizes that human resources are critical and companies can gain a competitive advantage by utilizing their human resources effectively. Companies should appreciate the individual contributions of their human resources, whose value significantly influences companies' sustainable competitive advantage. This would be in the form of payment of favorable salaries and wages to employees to retain them in the company, boost productivity, and consequently lead to improved financial performance.

V. CONCLUSION

The study established the effect of personnel costs on the financial performance of listed companies in Kenya. The objective was based on the null hypothesis that personnel cost has no significant effect on the financial performance of listed companies in Kenya. Based on Pearson correlation results, the study found a significant and strong positive correlation coefficient between financial performance measured by ROA and personnel costs of listed companies in Kenya with a correlation coefficient of 0.77 and p-value of 0.00, which is less than the significance level of 0.05. In addition, the GLS random effect regression model results also established a significant positive effect of personnel costs on financial performance. The coefficient of the regression model was 0.45, and a significant value of 0.00<0.05 between personnel costs and ROA. This implies that an increase in personnel costs would subsequently increase the financial performance of listed companies in Kenya. Therefore, the study rejected the null hypothesis. The study concluded that personnel costs positively and significantly affect the financial performance of listed companies in Kenya.

**Corresponding Author: Emilly Anyango Orwa*¹

www.aijbm.com

ACKNOWLEDGEMENTS

I would like to express my profound appreciation and deep regards to God for enabling me to carry out and accomplish this research. I would like to thank my supervisors, Dr. Denis Ouma and Dr. Emily Okwemba, who have been an integral part of guiding me throughout this study, encouraging me, and providing valuable feedback from the beginning to the finish of this work. I am deeply indebted to Dr. Margaret Omondi and Mr. Robert Opanyi for their exemplary assistance, criticism, monitoring, and constant encouragement throughout this study. I am thankful to the lecturers of the School of Business and Economics at Kaimosi Friends University, who continually imparted their knowledge and skills throughout this research. Lastly, I would like to acknowledge my parents and classmates for their constant support and encouragement, without which this assignment would not have been possible. May God's blessings be with you all.

REFERENCES

- [1] Agbiogwu, A. A., Ihendinihu, J. U., & Azubike, J. B. (2016). Effects of Human Resource Cost on Profitability of Banks in Nigeria. *Expert Journal of Finance*, 10-18.
- [2] Adhikari, N. R. (2020). Training and Development Costs, Staff Costs and Operational Profitability in Nepalese Commercial Banks. *Management Dynamics*, 109-118.
- [3] Alekhya, P., & Lakshmi , V. P. (2020). Impact of Human Resource Accounting on Companies Profitability. *TEST Engineering and Management*, 16048 16055.
- [4] Craig, A. O., Job, K., Peters, S. O., Dairo, O., Adedamola, M., & Shorinmade, G. A. (2020). Employee Remuneration and the Financial Performance of Selected Manufacturing Companies in Nigeria. *International Accounting and Taxation Research Group*, 54-65.
- [5] Minjo, W. (2018). Effects of Owner Accounting Practice Competencies on the Financial Performance of Small and Medium Enterprises in Kenya. A Case of Kasarani Sub-County, Nairobi City County. 1-96.
- [6] Olajumoke , B. T. (2020). Human Resource Cost's Influence on Financial Performance of Nigerian Consumer Goods Company. *American International Journal of Business Management*, 31-40.
- [7] Nairobi Securities Exchange. (2017). *Listed Companies Disclosures*.
- [8] Omodero, C. O., Alpheaus, O. E., & Ihendinihu, J. U. (2016). Human Resource Costs and Financial Performance: Evidence From Selected Listed Firms in Nigeria.*International Journal of Interdisciplinary Research Methods*, 14-27.
- [9] Amahalu, N. N., Abiahu, F. M., Obi, C. J., & Okika, C. E. (2016). Effect of Human Resource Accounting on Financial Performance of Quoted Deposit Money Banks in Nigeria. *Global Journal of Human Resource Management*, 1-10.
- [10] Ofurum, C. O., & Adeola, S. O. (2018). Human Resource Accounting and Profitability of Quoted Firms in Nigeria. *International Journal of Advanced Academic Research*, 58-73.
- [11] Adhikari, N. R. (2020). Training and Development Costs, Staff Costs and Operational Profitability in Nepalese Commercial Banks. *Management Dynamics*, 109-118.
- [12] Ndum, N. B., & Oranefo, P. (2021). Human Resource Cost and Financial Performance: A Study of Quoted Brewery Firms in Nigeria. *International Journal of Innovative Finance and Economics Research*, 73-84.
- [13] Onyeukwu, O. O., Ihendinihu, J. U., & Nwachukwu, M. I. (2021). Human Resource Accounting and Financial Performance of Micro Finance Banks in Nigeria. *Journal of Research in Humanities and Social Science*, 9-16.
- [14] Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 99-120.
- [15] Barney, J. B. (2001). Resource-Based Theories of Competitive Advantage: A ten-year Retrospective on the Resource-based view. *Journal of Management*, 643-650.
- [16] Odhong, E. A., & Were, S. (2013). Human Capital Management as a tool for value creation. Proceedings of First SHRD Annual Research Conference (pp. 13-19). Nairobi: Jomo Kenyatta University of Agriculture and Technology main campus.
- [17] Hitt, M. A., Xu, K., & Carnes, C. M. (2016). Resource Based theory in Operations Management Research. *Journal of Operations Management*, 77-94.
- [18] Dubey, R., Gunasekaran, A., Childe, S. J., & Blome, T. (2019). Big Data and Predictive Analytics and Manufacturing Performance: Integrating Institutional Theory, Resource-Based View and Big Data Culture. *British Journal of Management*, 30.

*Corresponding Author: Emilly Anyango Orwar¹ ¹(Department of Accounting and Finance, Kaimosi Friends University, Kenya

*Corresponding Author: Emilly Anyango Orwa¹

www.aijbm.com

38 | Page