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**Cost Reduction Strategies and Effective Administration of Public Universities in Rivers State**

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Cost,  
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**Abstract**

This study examined cost reduction strategies and effective administration of public universities in Rivers State. The study was guided by three research objectives from which three research questions were posed and three hypotheses were tested. The study adopted a correlational survey design with a population of 93 staff comprising principal officers and management staff in the three public universities in Rivers State. The entire population of 93 staff was taken as census without sampling due to the manageable size of the population. The instruments for data collection were self-designed questionnaires titled: "Cost Reduction Strategies Questionnaire" and "Effective Administration Questionnaire" respectively. The instruments were validated by two experts, one expert in Educational Management, and one other expert in Measurement and Evaluation. The internal consistencies of the instruments were determined using the Cronbach Alpha method. Reliability coefficients of 0.77, 0.81 and 0.87 were obtained for the various clusters of the first instrument and 0.88 for the second instrument. The research questions were answered and the hypotheses tested using Pearson Product Moment Correlation statistics. The hypotheses were further subjected to t-transformation to establish the significance of the r-value at 0.05 level of significance. The result of the analyzed data revealed among others that respondents were of the opinion that there is a high and positive relationship between budgetary control and cash flow management services as cost reduction strategies and effective administration of public Universities in Rivers State. Based on the findings, it was recommended among others that management of public universities should pay more attention to proper budget preparation and ensure the budget is religiously followed throughout the fiscal year. This way, expenses not captured in a particular year can be moved to another year. This will leave administrators with enough resources to improve their administration.

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**Introduction**

Education is seen as an instrument par excellence for engendering national development. It is a vital instrument for socio-economic mobility at the personal level and an instrument for

transformation of society at the national level. Education is the cornerstone of a nation forming the basis for literacy, skill acquisition, technological advancement and ability to harness human and material resources towards the achievement of societal goals (Osuji & Nyebuchi, 2021)

University education is the pinnacle of formal education with multifaceted task of training capable individuals and imbibing into the society plans, programmes and policies that are sustainable (Tepper, 2017). Supporting this, Wey-Amaewhule and Ikogi (2021) asserted that university education is an indispensable tool for Nigeria's sustainable socio-economic development. It is a powerful means for manpower training and development. An individual receives tertiary education immediately after senior secondary schooling in order to acquire specific skills and competencies in specialized areas that will enable such individual participate actively in socio-economic activities of the society.

However, it is impossible for universities to achieve the above task without incurring cost. Educational cost may cover all forms of resources used up or foregone toward the achievement of stated educational goal at any level of education. Education cost is also perceived as all the monetary value of resources used in the production of human capital at a given period of time (Longe in Ebong, 2012). The school according to Longe in Ebong (2018) is engaged in the form of production process which is achieved by inevitably using certain resources that are available. Therefore, in more simple terms, school cost includes educational spending on current activities such as teachers' salaries and outlays for future period (Charles, 2017).

It is noteworthy that the cost of providing higher education continues to rise without a corresponding increase in funding. The scarcity of resources in the face of numerous demands to be met is quiet obvious in Nigerian public university administration (Omole, 2012). Owing to the scarcity, there is need for effective and judicious utilization of the available ones in order to promote quality educational delivery and make positive impact on national development. Thus, reducing cost becomes one of the fundamental needs of any educational institution.

Cost reduction is a term that explains the financial practice in an organization. It is a technique used to save the unit cost of the product, or the unit cost of an item that has been budgeted for, this is done without compromising the standard and quality.

According to Subho (2015) cost reduction provides the basis for more output to be achieved with fewer resources in the school and also create more bonuses to the staff and more retention of financial resources for expansion of the business which will create more employment and overall prospect. Pandey (2014), further viewed cost reduction as a technique that is used to regulate and control the expenditures in an organization. In the same vein Beaumont (2016) opined that cost reduction is the process that has to do with maintaining cost and decreasing per unit cost by applying new methods of ensuring that there is a reduction in the cost of administration. To this end, cost reduction in any tertiary institution is aimed at enhancing effective administration of universities which is necessary for the attainment of the institution's goals.

Effective administration is an indispensable part of tertiary institutions if the predetermined goals are to be attained. Administration is a social process which is designed to ensure the cooperation, participation, interaction and involvement of human, financial and materials resources in order to achieve organizational objectives. It is the total process through which appropriate human and material resources are made available and effective for accomplishing the purpose of an enterprise (Nwidedu, 2013). According to the Federal Republic of Nigeria in her National Policy of Education

(2014), the success of any system is hinged on proper planning, efficient administration and adequate financing.

Amadi Adeyemi, Ogundiran, and Awe (2016) noted that when he asserted that when setting up a map of priorities for investment in university education and training, policy makers must at the same time, take in to consideration the need for increasing efficiency in the use of resources as these essential educational resources would determine to a large extent, the quantity and quality' of other resources which are needed in the educational sector. Effective administration in this context refers to the judicious management of human, material and financial asset of the universities in order to ensure maximum realization of the goals and benefits of higher education. Effective administration is concerned with maximizing the supply of money, materials, staff, and other assets that can be drawn on by a person or organization in order to function effectively, with minimum wasted resource expenses. Resources are the assets (human and non-human) necessary for attaining educational objectives and effective teaching and learning processes at the school level.

According to Aliet (2012), resources are the only means through which organizational activities production, services and satisfactory ends are attainable. In other words, for the achievement of institutional objectives, effective utilization of resources plays a crucial role. Hence, there is need for special considerations in terms of cost reduction strategies for effective utilization of these resources.

Cost reduction strategies are carefully planned positive approaches to reduce expenditure and efficiently utilize available financial resources (Witten & David, 2013). It involves looking inwards to see how the university can continue to operate and achieve more with fewer resources. Rehkoft (2019) defined cost reduction strategy as practices and principles designed to optimize operational efficiency. Some of these cost reduction strategies for effective resources utilization includes budgetary control, cash flow management, collaborative procurement, digitization of academic libraries, termination of unnecessary programmes, outsourcing email services and value analysis among others.

Budgetary control as a cost reduction strategy is the process by which budgets are prepared for the future periods and compared with the actual performance for finding out variances, if any (Mkrue, 2013). The comparison of budgeted figures with actual figures will help the management to find out variances and take corrective actions immediately. CIMA, (2015), defined budgetary control as the establishment of budgets relating the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision. In a study carried out by (Pandey, 2014), it was revealed that budgetary control encourages taking action against any variance to keep one's organization running cost efficiently. This is because budgetary control helps to maximize profits, secures better co-ordination, provides specific aims, creates budget consciousness and most importantly, reduces cost of production by eliminating the wasteful expenditure.

Cash flow management on the other hand is another strategy of cost reduction as adopted in this study. Cash represents the basic input necessary to start and keep a business running. An organization needs to maintain sufficient cash to keep its business running smoothly. Cash shortage disrupts an organization's operation and can even lead to insolvency as cash shortages can indicate a problem in any organization as it is the lifeblood of an organization and running out of it prevents

the achievement of organizational goals (Akunwumi & Jayeoba, 2014). Thus maintaining positive cash flows will enhance effective resource utilization. Akunwumi, (2014) asserts that the success of any business venture is predicated on how the management has planned and controlled its cash flows. According to Sako (2016), cash management is concerned with the efficient management of cash so as to achieve an optimum level of cash in the firm's working capital.

Collaborative procurement also reduces the transaction and information costs associated with procurement. According to Jayaraman (2016), universities procure a wide range of goods and services, including office supplies, information technology, research materials, food and related services, waste management, employee benefits, marketing services, construction and repairs, and more. Collaborating with other institutions that are procuring similar goods and services increases buying power, due to a larger quantity of goods or services being purchased. As most shoppers are aware, the more you buy, the lower the price. This is because suppliers selling a larger quantity of goods are often able to achieve economies of scale. In the case of services, suppliers are willing to offer a discount to customers providing them with repeat business (Ebong, 2018). Collaborative procurement is an arrangement where two or more organizations join together, either formally, informally or through an independent third party, in order to combine individual requirements for purchased materials, services and capital goods (Mazzola & Perrone, 2019).

### **Statement of the Problem**

Effective administration is critical to the success of tertiary institutions, especially in low income countries such as Nigeria where funding of education is abysmal. That is, it is important that the available resources be utilized in line with proper management and best practices to avoid wastage, and mismanagement. However, the challenge of funding rocking public universities in Rivers State can be better appreciated by noting the meager budgetary allocation to the education sector. Education was allocated 6.1%, 5.4% and 7.04% in Nigerian annual budget in the year 2016, 2017 and 2018 respectively (Businessday Newspaper, 2022).

This allocation grossly fell short of the United Nations Educational Scientific and Cultural Organization (UNESCO) benchmark of 26%. This development has put strain on the resources the education sector has to operate with. Consequently, universities are sometimes unable to provide facilities and materials needed to enhance teaching, learning and other activities within the university environment. For example, payment of electricity bills, continuous purchase of diesel to generate power for the university, provision of support for conferences, buying of office furniture and so on. It is a common practice to see lecturers and different departments in public universities in Rivers State running generators that cause noise pollution within learning environment, furnishing their offices themselves and paying through their noses to attend conferences and so on.

This underscores the need for effective utilization of the available resources through cost reduction strategies. Furthermore, although a number of studies have been carried out on the use of various strategies in enhancing utilization of resources in organizations, there is scarcely any available research on the relationship between the cost reduction strategies adopted in this study and effective utilization of resource. This study is therefore carried out to close the gap in knowledge in this area.

### **Purpose of the Study**

The purpose of the study was to examine cost reduction strategies and effective administration of public universities in Rivers State. Specifically, the objectives of the study were to:

1. find out the relationship between budgetary control strategy and effective administration of public Universities in Rivers State;
2. determine the relationship between cash flow management strategy and effective administration of public Universities in Rivers State;
3. ascertain the relationship between collaborative purchasing strategy and effective administration of public Universities in Rivers State.

### Research Questions

The following research questions guided the study:

1. What is the relationship between budgetary control strategy and effective administration of public Universities in Rivers State?
2. What is the relationship between cash flow management services strategy and effective administration of public Universities in Rivers State?
3. What is the relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State?

### Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant relationship between budgetary control strategy and effective administration of public Universities in Rivers State.
2. There is no significant relationship between cash flow management strategy and effective administration of public Universities in Rivers State.
3. There is no significant relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State

### Method

The study adopted a correlational survey design with a population of 93 staff comprising principal officers and management staff in the three public universities in Rivers State. These include 37 staff from University of Port Harcourt, 31 from Rivers State University and 25 from Ignatius Ajuru University of Education. The sample size of the study was ninety three (93) staff comprising principal officers and management staff in the three public universities in Rivers State. These include 37 staff from University of Port Harcourt, 31 from Rivers State University and 25 from Ignatius Ajuru University of Education. The entire population of 93 staff was taken as census without sampling due to the manageable size of the population.

The instrument for data collection in the study were two sets of questionnaires titled: "Cost Reduction Strategies Questionnaire" (CRSQ) and "Effective Administration Questionnaire"(EAQ). Each questionnaire was divided into two sections. Section A of the instrument was for demographic data of the respondents while section B was structured in four clusters to elicit data from the respondents based on the research questions of the study. Responses to the questionnaire were structured on a 4-point rating scale of Strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points; and Strongly Disagree (SD) = 1 point respectively.

The instruments were validated by the two experts, one expert in Educational Management, and one other expert in Measurement and Evaluation. The internal consistencies of the instruments were determined using the Cronbach Alpha method. Copies of the instrument were administered on

a sample size of 10 management staff of Niger Delta University, Wilberforce Island, Bayelsa State who are not part of the study area. Their responses to the questionnaire were computed using the Cronbach Alpha method. Reliability coefficients of 0.77, 0.81 and 0.87 were obtained for the various clusters of the first instrument and 0.88 for the second instrument. The research questions were answered using Pearson Product Moment Correlation Coefficient (PPMC) or “r”. The relationship value of 0.1 – 0.4 were counted as low correlation, 0.5 denote moderate correlation while 0.6 – 1.0 denote high correlation. While the null hypotheses were tested using t-test transformation at 0.05 level of significance with a critical value of  $\pm 1.96$ . When the calculated t-value is less than the t-critical value of  $\pm 1.96$ , the null hypothesis were not rejected. However, the null hypothesis is rejected when the calculated t-value is greater than the t-critical value of  $\pm 1.96$ .

## Results

**Research Question 1:** What is the relationship between budgetary control strategy and effective administration of public Universities in Rivers State?

**Table 1: Pearson Product Moment Correlation on Relationship between Budgetary Control Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X$	$\sum Y$	$\sum X^2$	$\sum Y^2$	$\sum XY$	r-cal	Remarks
Budgetary Control (X)	89	755.10	2108.10			2245.02	0.77	High positive
Effective Administration (Y)	89	2015.14	3109.07					

The analyses from Table 1 revealed a correlation value of  $r = 0.77$ . This value is high and positive, thus indicating that there is high and positive relationship between budgetary control strategy and effective administration of public Universities in Rivers State. This result indicated that the adoption of budgetary control strategy leads to more effective administration of public Universities in Rivers State.

**Research Question 2:** What is the relationship between cash flow management services strategy and effective administration of public Universities in Rivers State?

**Table 2: Pearson Product Moment Correlation on Relationship between Cash Flow Management Services Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X$	$\sum Y$	$\sum X^2$	$\sum Y^2$	$\sum XY$	Rcal	Remarks
Cash flow management services(X)	89	856.02	2056.02			2618.02	0.80	High Positive

Effective Administration (Y)	89	1001.04	3040.02
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The analyses from Table 2 revealed a correlation value of  $r = 0.80$ . This value is high and positive, thus indicating that there is high and positive relationship between cash flow management services strategy and effective administration of public Universities in Rivers State. The relationship here being positive implied that the adoption of cash flow management services strategy leads to more effective administration of public Universities in Rivers State.

**Research Question 3:** What is the relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State?

**Table 3: Pearson Product Moment Correlation on Relationship between Collaborative Procurement Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X \sum Y$	$\sum X^2 \sum Y^2$	$\sum X \sum Y$	Rcal	Remarks
Collaborative procurement (X)	89	726.03	2562.01	2603.21	0.88	High positive
Effective Administration (Y)	89	1206.20	3117.02			

The analyses from Table 3 revealed a correlation value of  $r = 0.88$ . This value is high and positive, thus indicating that there is high and positive relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State. This result implied that the adoption of collaborative procurement strategy leads to more effective administration of public Universities in Rivers State.

#### Test of Hypotheses

**H<sub>01</sub>:** There is no significant relationship between budgetary control strategy and effective administration of public Universities in Rivers State.

**Table 4: T-test Summary Analysis between Budgetary Control Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X \sum Y$	$\sum X^2 \sum Y^2$	$\sum X \sum Y$	Df	$\alpha$	r <sub>cal</sub>	t <sub>cal</sub>	t <sub>crit</sub>	P-value	Rmk
Budgetary control (X)	89	755.10	2108.10	2245.02	87	0.05	0.77	18.20	1.96	0.02	Sig. Reject H <sub>0</sub>
Effective Administration (Y)	89	2015.14	3109.07								

The analysis on Table 4 showed Pearson correlation summary between budgetary control strategy and effective administration of public Universities in Rivers State. The correlation coefficient is 0.77 and the p-value is 0.02 which is less than 0.05 level of significance. Therefore, the

null hypothesis of no significant relationship between budgetary control strategy and effective administration of public universities in Rivers State is rejected. This implied that there is a positive relationship between budgetary control strategy and effective administration of public Universities in Rivers State.

**H<sub>02</sub>:** There is no significant relationship between cash flow management strategy and effective administration of public Universities in Rivers State.

**Table 5: T-test Summary Analysis between Cash Flow Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X \sum Y$	$\sum X^2 \sum Y^2$	$\sum X \sum Y$	Df	$\alpha$	$r_{cal}$	$t_{cal}$	$t_{crit}$	P-value	Rmk
Cash Flow Management (X)	89	856.02	2056.02	2618.02	87	0.05	0.80	20.12	1.96	0.02	Sig. Reject H <sub>0</sub>
Effective Administration (Y)	89	1001.04	3040.02								

The analysis on Table 5 showed Pearson correlation summary between cash flow management strategy and effective administration of public Universities in Rivers State. The correlation coefficient is 0.80 and the p-value is 0.02 which is less than 0.05 level of significance. Therefore, the null hypothesis of no significant relationship between cash flow management strategy and effective administration of public Universities in Rivers State is rejected. This indicates that there is a positive relationship between cash flow management strategy and effective administration of public Universities in Rivers State.

**H<sub>03</sub>:** There is no significant relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State.

**Table 6: T-test Summary Analysis between Collaborative Procurement Strategy and Effective Administration of Public Universities**

Variable	N	$\sum X \sum Y$	$\sum X^2 \sum Y^2$	$\sum X \sum Y$	Df	$\alpha$	$r_{cal}$	$t_{cal}$	$t_{crit}$	P-value	Rmk
Collaborative Procurement (X)	89	726.03	2562.01	2603.21	87	0.05	0.88	17.01	1.96	0.01	Sig. Reject H <sub>0</sub>
Effective Administration (Y)	89	1001.04	3040.02								

The data analysed in Table 6 revealed the Pearson correlation summary between collaborative procurement strategy and effective administration of public Universities in Rivers State. The correlation coefficient is 0.88 and the p-value is 0.01 which is less than 0.05 level of significance. Therefore, the null hypothesis of no significant relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State is rejected. This indicates that there is a positive relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State.

### **Discussion of Findings**

The result of the study for research question one revealed that respondents were of the opinion that there is a high and positive relationship between budgetary control strategy and effective administration of public Universities in Rivers State. It was revealed that universities that prepare annual budget for each fiscal year or academic session, ensures expenses made within the year are strictly based on provisions in the budget and carries out periodic assessment of the performance of their budget before the year runs out often have improved administration. Similarly, the result of hypothesis one revealed that there was a significant relationship between budgetary control strategy and effective administration of public Universities in Rivers State. This finding is in line with the findings of Omole (2012) who assessed strategic budgeting system and management of public resources in Nigeria. He reported that there is a significant relationship between budgeting practices and management effectiveness of public resources in Nigeria. He stated that Nigeria economy is not developing due to financial indiscipline and wastages in the system because of poor budgeting in the public sector, hence, the need for all stakeholders in the system to pay attention to budgeting with a view to improving on its practices. Tertiary institutions comprise universities, polytechnics, and colleges of education. Tertiary institution is a community of scholars, free to pursue knowledge without undue interference from anywhere.

The result of the study for research question two revealed that respondents were of the opinion that there is a high and positive relationship between cash flow management services strategy and effective administration of public Universities in Rivers State. It was revealed that universities that have department that audits the amount of cash expended weekly on running cost of the university, unit that monitors the amount of income received weekly and put on precautionary measures to ensure adequate cash levels are maintained often have better administrative system. The result of the corresponding hypothesis two showed that there was a significant relationship between cash flow management as a cost reduction strategy and effective administration of public Universities in Rivers State. This agrees with the findings of Olowe (2008) which revealed that cash flow management is concerned with the efficient management of cash so as to achieve an optimum level of cash in the university's working capital. Therefore, the university needs to maintain sufficient cash flow to keep its business running smoothly as cash shortage will disrupts her operation and can even lead to insolvency.

The result of the study for research question three revealed that respondents were of the opinion that there is a high and positive relationship between collaborative procurement strategy and effective administration of public Universities in Rivers State. The study showed that collaborative procurement involves university joining other organizations to purchase materials in the school to reduce cost, universities getting ICT equipment at discounted rate by buying it in collaboration with other institutions; universities collaborating with relevant waste management agencies in the state to reduce the cost of waste management services provided among others. The adoption of this strategy enhances administrative delivery in institutions. The result of the corresponding hypothesis three revealed that there was a significant relationship between collaborative procurement as a cost reduction strategy and effective administration of public Universities in Rivers State. The findings of this study agrees with the findings of Procurement Strategy Blog (2022) which revealed that private companies like Wall-Mart use their enormous purchasing power to negotiate low prices from

suppliers. However, universities that band together to buy goods and services can often obtain lower prices on goods and services used than if they buy separately. Agreements can be made between institutions on a bilateral or multi-lateral basis, through statewide agreements, or even by regional agreements involving schools in many states.

### Conclusion

Based on the findings of the study it was concluded that the adoption of cost reduction strategies such as budgetary control, cash flow management services and collaborative procurement has a high and positive relationship with the administration of public universities. In other words, the adoption of these strategies by the management of public universities will lead to more effective administration of these universities. This way, universities are able to achieve their predetermined goals and objectives.

### Recommendations

The following recommendations were made based on the findings of the study:

1. Management of public universities should pay more attention to proper budget preparation and ensure the budget is religiously followed throughout the fiscal year. This way, expenses not captured in a particular year can be moved to another year. This will leave administrators with enough resources to improve their administration.
2. University management should sponsor the training of internal auditors and accounts to improve their knowledge on innovative cash flow management strategies. This way, they can put a check on expenses made and reduce unnecessary expenditures.
3. University administrators in all the public universities in Rivers State should come together to agree on collaboratively purchasing instructional materials and other products constantly used in universities. This collaborative purchasing reduces the cost of purchase and leaves them with more money to meet other needs of their institutions.

### References

- Akunwumi, O. J. (2014). Effect of cash management on profitability of Nigerian Manufacturing firms. *International Journal of Marketing and Technology* 4(1):129-140.
- Amadi, M. N., Adeyemi, J. K., Ogundiran, S. O., & Awe, B., (2016). *Issues and problems in higher education in Nigeria*. Lagos. NOUN Press.
- Aliet, N. (2012). Cash management and profitability of corporate firms. A case study: MTN Uganda Ltd. Bachelor's degree – Business Administration . Bishop Stuart University.
- Beaumont, N. (2016). Service level agreements: An essential aspect of outsourcing. *Service Industries Journal*.26 (4), 381-395.
- Charles, T. H. (2017). *Cost Accounting Managerial Emphasis*. Prentice hall international Inc, London.
- CIMA Official Terminology (2015). CIMA management accounting fundamentals publishing. London, available online from [www.cimapublishing.com](http://www.cimapublishing.com).
- Ebong, J. M. (2018). Benchmark influence on educational resource provision. In J.M. Ebong & J.D. Asodike (Eds). *Economics of education: trends in Nigeria* (pp. 218-225). Port Harcourt: Eagle Lithograph Press.

- Federal Republic of Nigeria (2013) *National Policy on Education*. Lagos: FRN.
- Jayaraman (2016), Appraising the Impact of Budgeting and Planning on the Performance of Financial Institutions in Nigeria. *Research Journal of Finance and Accounting*, 5 (16), 12 - 26.
- Mazzola, E. and Perrone G. (2009) "A framework for public Purchasing under a decentralized organization: an empirical study in the healthcare sector in Italy," Proceedings of the 16th International Annual EurOMA Conference, June 14-17, 2009, Göteborg, Sweden.
- Nwideedu, S. O. (2013). *Trends and issues in managing universities in Nigeria*. Port Harcourt: Springfield Publishers Ltd.
- Osuji, C.U. & Nyebuchi Q. (2021) Administrators Financial Management Strategies for Effective Administration of Public Secondary School in Port Harcourt Metropolis, Rivers State. *International Journal of Innovative Education Research* 9(2):163-171
- Olowe. R. A. (2008). Financial management: concepts, analysis and capital investments. Lagos:
- Omole, B. (2012). VCs can't succeed solely on government funding for universities. Business Day Newspaper, p. 44.
- Pandey I. M. (2014). Fundamentals of Financial Management. Villas Publishing House, New Delhi. Pogue
- Rehkoft, E. (2019). *Labour cost control*. Texas: Club Resources International.
- Sako, M. (2016). Outsourcing and offshoring: Implications for productivity of business services. *Oxford Review of Economic Policy*, 1(4), 499-512.
- Subho, S. (2015). Cost reduction: Meaning, techniques and advantages. Retrieved from <https://www.yourarticlelibrary.com>.
- Tepper, D. (2017, February 1). What is the reason for price increase of a product? Retrieved January 25, 2018, from Quora: <https://www.quora.com/What-is-the-reason-for-price-increase-of-a-product>
- Wey-Amaewhule, B. & Ikogi, R.J. (2021) Assessment of the utilization of modern technology in the management of tertiary institutions in Bayelsa State (Education Lecturers Perspective). *British Journal of Education* 9 (10)43-50
- Witten, I.H and David, B. (2013). *How to build a digital library*. London: Morgan Kaufman Publishers.