



Technological Infrastructure and Employee Capacity of Selected Tertiary Institutions in South-South Nigeria

AKHIGBE THOMPSON IKHIDE, OGBEIDE FREDERICK
Edo State University, Iyamho, Nigeria

Abstract. This paper's main goal is to investigate how technological infrastructure affects the development of staff capability in a few South-South Nigerian postsecondary institutions. Examining the connection between staff productivity and organisational structure at a few South-South Nigerian educational institutions is the particular goal. Resource Based Theory (RBT), created by Birge Wenefeldt in 1984, serves as the foundation for this investigation. For the study, a survey research design was chosen. 346 workers were included in the sample, which was taken from a primary source of data. The developed hypothesis was tested using regression analysis. According to the results of the test of the hypothesis, there is a positively significant correlation between employee productivity and organisational structure (F-statistics = 78.1; R-Squared = 0.793, $P > 0.05$). Based on the results, the study came to the conclusion that staff capability and technology infrastructure in South-South Nigerian tertiary institutions are strongly positively correlated. In conclusion, the study suggests that South-South Nigerian tertiary institutions should be well-structured since this would promote staff productivity and capacity building, which may ultimately result in better performance from these institutions.

Keywords: Technological Infrastructure, Employee Capacity, Organizational Structure, Employee Productivity, Tertiary Institutions

1. Introduction

The most valuable assets in any organisation are capable and competent workers who possess the necessary skills to perform their jobs. These workers have the ability to make a substantial contribution to the long-term positive outcomes of the organisation and help it move from its current state to its desired future state (Obiekwe, 2018). In educational institutions, where teachers are expected to be used to the current, expanded technical infrastructures

necessary for high-quality teaching, research, and administrative assistance to students, employee capacity is even more important. Every organization's ability and the calibre of work performed by its personnel determine how well it functions in achieving its aims and objectives (Nwaeke & Obiekwe, 2017). An organisation must give its personnel proper training if it hopes to increase and maintain productivity (Nwapi, 2023). Building employee capacity is one of the main ways that organisations invest in their workforce for higher returns both now and in the near future (Williams, 2017). Enhancing employees' technical expertise and abilities in their roles is the goal of employee capacity building (Akinola, 2015). Employee capacity building essentially entails giving staff members the information, abilities, and tools they need to improve their output, performance, and career development. The process of enhancing people's, organisations', and systems' capacity to carry out essential tasks in a sustainable manner while also continuing to evolve and grow over time is evidence-based (Okonkwo, 2022). The increasing advancement of an organization's technical infrastructures and capacities is a major factor that necessitates the development of staff capability (Appel-meulenbroek, 2022). Prior to 2019, several companies have nearly made some job descriptions obsolete due to improvements in technological advancements (Thorpe and Gordon 2015). It is noteworthy that organisations are using technology, especially information and communication technology (ICT), extensively to improve employee productivity, empowerment, and operational efficiency (Oluoch & Mengich, 2023). Teachers may expand their knowledge, expertise, and ability to communicate both within and outside of the classroom with the use of technology (Essien, et al, 2018).

There are no differences between South South Nigerian tertiary institutions and those in other

countries. It is essential for South South Nigerian tertiary institutions to comprehend the connection between staff capability and technology infrastructure. This is especially important because the region's higher education system has faced several depressing obstacles, such as inadequate facilities, inept staff, and poor organisational performance. The study found that the region's postsecondary institutions are poorly set up to support staff capacity building, which has a significant impact on organisational productivity. Employee inefficiency and low productivity may result from an organisation that is not technologically organised. Thus, the study's main goal is to investigate how organisational technology infrastructure and staff capacity building in South-South Nigerian postsecondary institutions relate to one another. This study specifically aims to investigate the connection between employee productivity and organisational structure.

2. Review of Related Literature

2.1 Technological Infrastructure

Workplaces will inevitably undergo a revolution due to the rapid advancement of technology over the past 20 years (Smith, et al, 2019). For example, social media's explosion and the fact that millions of people use it for communication (Smith et al., 2019). network connectivity capabilities, which increased from 2G to 4G (Tleuken, 2022). Since these and several other technology advancements have changed the nature of work and the organisational structure, it is now desired by households and organisations to increase productivity (Trede, et al, 2019). In many businesses, technological advancements have changed the credentials, abilities, and work history of individuals (Smith et al. 2019).

In order to effectively utilise technology advantage in organisational operations, businesses must constantly adapt their policies, procedures, and processes (Green, 2022). The fundamental hardware, software, and services that facilitate the creation, implementation, and use of technology inside an organisation are referred to as technological infrastructure. According to Mauerhoefer, Strese, and Brettel (2017), it includes everything from the software that powers computers and network equipment to the services that offer internet access. In essence, it serves as the "backbone" of technology, allowing educators and learners to use it to enhance their education. Any organization's productivity in achieving innovation management is greatly influenced by technology (Adamides & Karacapilidis 2016).

The diverse range of hardware, software, and other technological tools that can be integrated into the overall technological platforms, distribute any kind of information to any location within or outside the organisation, and facilitate the design, development, and deployment of a variety of institutional applications are known as an organization's infrastructure tools (Byrd, 2014). Knowledge seekers today have more options to study thanks to technology, which has made the globe a smaller place (Samson, et al, 2014; Ojerinde, et al, 2014).

The 21st century educational system has seen a significant shift in improved instructional delivery due to technology, which has given people several chances to succeed in their careers. The use of online learning was made possible by technological infrastructure, which allows students to receive instruction from the comfort of their homes. Educational institutions are also required to give instructors access to online resources, such as hardware and software components, to improve the educational experience, particularly in light of the growing number of students and the need to offer them flexible learning opportunities (Eynon, 2015). The internet offers instructors and students a wealth of technology tools for learning in addition to in-person interactions in a typical classroom (Ornstein & Levine, 2006; UNESCO, 2020).

Additionally, access to electronic materials is made easier by the usage of infrastructure technology in higher education libraries (Balaji & Kumar, 2019). Additionally, the quick developments in IT improved the exchange of publications and information (Ranjan, 2018). After acknowledging the commendable role that technology infrastructure plays in improving employee performance in postsecondary institutions, these institutions can now enhance their current resources to increase employee commitment by allowing them to work from any location, regardless of distance, as this will ensure a consistent, seamless, and uninterrupted school calendar. (Karacapilidis & Adamides, 2016).

2.2 Organizational Structure

An organisational structure is a framework that shows the departments, divisions, or units that comprise the organisation. These are arranged in a pyramidal fashion, with each level above the others and connected to an official authority. It may also be described as the internal organisation structure that encompasses all of the divisions that make up the organisation. The structure shows how these divisions relate to one another in terms of power, responsibility, and the decentralisation of each division and its

constituent parts from the lower divisions. Asri (2016). The rules governing the interactions between individuals or groups working to accomplish organisational objectives can be viewed as organisational structure. The duties of employees are often determined by their work, their supervisors, and, in the case of managers, their subordinates, regardless of the size or complexity of the organisation. The formal system of task and reporting linkages that establishes how people utilise resources to accomplish organisational goals is known as organisational structure (Sunday, Adenike & Anthony). A university's organisational structure is the hierarchy that allows for the distribution of duties and provides direction to both staff and students. It includes assigning, coordinating, and supervising tasks with the aim of achieving the aims and objectives of the organisation. It may also be thought of as the prism through which people interpret their surroundings and organisation (Zziwa, 2014).

2.3 Employee Capacity

Since capable and competent workers are an organization's most important asset, they may greatly contribute to long-term beneficial organisational results when managed well. To put it another way, workers are essential to an organization's ability to perform better, meet its stated or emerging goals, and assist it in moving from its current condition to its desired future state (Obiekwe, 2018). According to Nwaeke and Obiekwe (2017), the ability and calibre of work performed by the individuals inside an organisation determines how well it functions. Establishing a system that guarantees regular in-service training, the provision of essential working tools, and a work environment that inspires courage, strength, and empowerment in employees is crucial to ensuring that they perform at their best and are dedicated to long-term organisational improvements (Obiekwe & Ejo-Orusa, 2019). One of the main strategies used by organisations to invest in their workforce for higher returns both now and in the near future is capacity building (Williams, 2017).

The goal of capacity development is to improve people's technical knowledge and abilities in their individual roles while also giving them the knowledge they need to be qualified for any job (Akinola, 2015). Building capacity is similar to honing an existing ability to reflect changes in an organization's social and cultural environment as well as technological advancements. In today's cutthroat corporate environment, increasing capacity might serve as a launching pad for increasing production. The goal is to empower them to fully contribute to the organization's

welfare, health, and development (Onah, 2017). Capacity building and development enhances employees' ability to carry out the tasks that an organisation requires of them, and organisations have an interest in advancing their careers so that they can be retained and perform more effectively and efficiently. Graham (1955). According to Walker (2016), companies increased their investments in employee training, retraining, and talent development in 2004 and the first part of 2005. Organisations use capacity building and development as a technique to prepare their personnel to achieve predetermined goals and objectives. An organization's internal structure consists of socio-technical arrangements that are purposefully created to accomplish the organization's goals by acting appropriately at the appropriate moment.

2.4 Employee Productivity

The amount or degree of output obtained from a specified input is implied by employee productivity. It is the connection between the input used to produce an output and the output produced by a production or service system (Barzoki & Sarand, 2014). Firm-level aggregate metrics, such as value-added per worker, are used to calculate employee productivity (Anitha, 2014). Productivity, according to Mathis and Jackson (2018), is a measure of the amount and quality of work completed while accounting for the cost of the resources used. The ratio of output volume to input volume is known as employee productivity. To put it another way, it assessed how effectively labour and capital, two production inputs, are employed in an economy to generate a specific amount of output (Oduyoye, et al, 2019). Thus, an employee's productivity at a company might be calculated as an output (like sales or units produced) divided by an input (such the number of hours worked or labour costs).

2.4 Empirical Review

The impact of technology infrastructure on worker performance in Kenya's Kisumu County Government was examined by Oluochi and Mengich (2023). The study's premise, which was based on resource-based theory, was that employee performance and technology adoption variables were positively correlated. A descriptive study strategy using a quantitative method was used. A standardised questionnaire was used to survey 375 participants in the research. A noteworthy 36.1% variation in employee performance was explained by technology adoption, according to the study ($R^2 = 0.361$, $F(1, 367) = 68.885$, $p < .05$). Notably, staff

performance was positively improved by technology infrastructure. The idea was tested using regression analysis.

Kimani (2015) studied how information technology affects organisational effectiveness using Kenyan population services as an example. The survey was descriptive. Utilising a semi-structured questionnaire, primary data was gathered. This study's population consisted of all 438 employees of PS Kenya. A statistical package for social sciences (SPSS) computer application was used to import the study's data and analyse it using descriptive statistics such as averages, percentages, and frequency distributions. Regression analysis and other inferential statistics were used, and the standard deviation was calculated to check for consistency. To collect data, the questionnaire was sent electronically. According to the study's findings, the majority of respondents had access to a variety of IT firm gadgets that allowed them to carry out their jobs. The results of the study also showed that Population Services Kenya's organisational effectiveness and the degree of IT use were positively correlated.

Jabbouria, Zahari, and Khalid (2015) examined the influence of information technology (IT) infrastructure on employee innovativeness as a crucial problem in Iraqi private universities. A self-reported questionnaire, five information technologies as the independent variable, and subjective assessments of innovation performance as the dependent variable were all required of participants in the suggested design strategy. To determine which banks' IT infrastructure with innovation performance needed testing, factor analysis was done. Six private universities in Iraq made up the study population. Seventy-five faculty members were selected from these. The statistical method used to assess the proposed hypothesis was regression analysis. The analysis's findings showed a statistically significant and favourable correlation between innovation success and IT infrastructure.

Bakare (2025) investigated staff performance and technological development at private institutions in North-Central Nigeria. A structured questionnaire was used to gather data from 543 individuals at seven private universities using a descriptive survey study methodology. Multiple regression and other statistical analysis were used to evaluate the connection between employee happiness and technology. The findings showed that implementing digital infrastructure had a substantial beneficial impact on employee satisfaction ($\beta = 0.229$, $p = 0.001$), indicating that well-integrated technology improves employee engagement and work

performance. Kumar (2021) investigated how technology advancements affected the work effectiveness of instructors at South Asian higher education institutions in Nepal. The study design employed was a descriptive survey. 105 academic staff members from two reputable, approved higher education institutions in province 2 made up the study's population. 57 academic staff members were chosen from the population using convenience sampling procedures.

The data was analysed using regression analysis utilising a standardised questionnaire with a five-point Likert scale. The findings demonstrated that instructors' job effectiveness has been significantly improved by technology. The impact of organisational structure on employee performance at telecommunications businesses in Enugu, Nigeria, was investigated by Agu, et al (2023). Oral interviews and questionnaires were used to gather data. The data was analysed using the Simple Linear Regression approach at a significance level of 5%. Additionally, the investigation showed that MTN Telecommunications Enugu employees' dedication is positively impacted by organic structure.

2.5 Theoretical Framework

The Resource Based Theory (RBT) is the foundation of this investigation. This idea was developed in 1984 by Birge Wenefeldt. According to the notion, businesses use a synergistic mix of resources that are valuable, uncommon, hard to replicate, and non-replaceable to get a competitive edge and perform better (Barney, 1991). Furthermore, firms use these resources to carry out plans by effectively and efficiently developing skills that may be used to sustain a competitive edge, according to RBT (Barney, 1991). The role that resources play in helping organisations achieve better organisational performance is emphasised in the RBT model. Since physical resources are easily purchased on the market, they don't give organisations a long-term competitive edge because competitors may easily get equivalent assets. Conversely, everything that an organisation owns but does not physically exist is considered an intangible asset (Anand, et al, 2013).

Intangible assets include things like trademarks, brand recognition, technology infrastructures, and intellectual property. Brand reputation, which is based on the institution's technology resources, develops gradually and is not something that other institutions can buy on the market like material resources can. This theory is pertinent to the study because the ability of institutions to obtain and use better technological

infrastructure for teaching, learning, and administrative tasks is what gives them a competitive edge over their rivals. This, in turn, will improve the employees' capacity to carry out their assigned responsibilities.

3. Methodology

3.1 Research Design

Survey research design was adopted for this study, which enabled the researcher to observe what happens to the sample subjects without manipulating them.

3.2 Population of Study

The three selected Federal Universities in South-South, Nigeria that were used in this study are: University of Benin (1,340), University of Port-Harcourt (1,180) and University of Uyo (940). This gives a total population of 3,460.

3.3 Sample Size and Sampling Technique

The Krejcie and Morgan (1970) sampling technique was used for this study. The formula is:

$$S = \frac{x^2 NP(1-P)}{d^2 (N-1) + x^2 P(1-P)}$$

Where S = Sample Size
 X^2 = Table value of chi-square for 1 degree of freedom 0.05 confidence level (3.84)

N = population Size (3,460)
 P = Population proportion (0.5)
 d^2 = Degree of accuracy (0.05)

$$S = \frac{3.84 (3,460) (0.5) (1-0.5)}{(0.05)^2 (3,460-1) + (3.84) (0.5) (1-0.5)}$$

$$= \frac{3,321.6}{8.6475 + 0.96}$$

$$= \frac{3,321.6}{9.6075}$$

$$S = 345.7298$$

$$= 346$$

The questionnaire was created using a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Strongly Disagree (SD), and Disagree (D). 346 copies of the questionnaire were sent at random to respondents from the targeted tertiary institutions. The copies to be distributed at random to each organisation were determined using Bowley's (1926) allocation formula as follows:

$$N_h = \frac{n(n_h)}{N}$$

Where N_h = Number of units to be distributed to each group.

n_h = Number of respondents in each group.

N = Total Sample Size.

N = Total Population Size.

University of Benin	-	$346(1340)/3,460 = 134$
University of Port-Harcourt:	-	$346(1180)/3,460 = 118$
University of Uyo	-	$346(940)/3,460 = 94$

4. Data Presentation and Analysis

Table 1: Tabular representation of returned and unreturned questionnaires

Questionnaire	Number	%
Returned Valid	309	89.31
Unreturned (unfilled)	37	10.69
Total No. of questionnaire Administered	346	100.00%

Source: Field work, 2025

Table 1.1 above shows that out of three hundred and forty-seven (346) questionnaires that were administered to the researched institutions, three hundred and nine (309) copies representing 89.31% were returned legitimate, while thirty-seven (27) copies representing 10.69% were unreturned. The data analysis was conducted using 309 copies of the returned surveys.

Table 2: Descriptive Statistics on Technological Infrastructure and Employee Capacity

S/N	Technological Infrastructure	SA	A	UD	SD	D	Total	Mean	Remark
1.	The technological infrastructure in my organization makes me to work tirelessly.	123	82	44	28	32	309	3.76	Accepted
2.	The technological gadgets in my organization makes work to be stresslessly carried out.	98	103	43	39	26	309	3.67	Accepted
3.	There is regular in-service training in my organization.	104	108	43	31	23	309	3.77	Accepted
4.	My organization uses modern technological gadgets for her operation.	113	98	36	31	31	309	3.75	Accepted
5.	I am satisfied and at home with the technological infrastructures in my organization.	78	115	49	32	35	309	3.55	Accepted
Employee Capacity		SA	A	UD	SD	D	Total	Mean	Remark
6.	The employees in my institution are very competent in the discharge of their responsibilities.	99	102	41	38	29	309	3.66	Accepted
7.	Competent staff are appreciated and rewarded in my institution.	119	81	33	41	35	309	3.67	Accepted
8.	There is quality performance of staff in my institution.	124	96	31	33	25	309	3.84	Accepted
9.	The employee in my institution are less supervised in the discharge of their responsibilities	102	94	42	38	33	309	3.63	Accepted
10	The employees in my institution are well equipped with the necessary tools needed to carry out their responsibilities.	99	112	34	35	29	309	3.70	Accepted

Source: Field Work, 2025

The descriptive analysis, which uses a baseline of 3.0 for the research, reveals that respondents affirm all questions about personnel capability and technical infrastructure, with mean scores ranging from 3.55 (the lowest mean score) to 3.84 (the highest mean score). This suggests that staff capability is a result of the technological infrastructure in South South Nigeria's understudied higher institutions.

Table 3: Correlation between technological infrastructure and employee capacity

Correlations

		Technological Infrastructure	Employee Capacity
Technological Infrastructure	Pearson Correlation	1	.786**
	Sig. (2-tailed)		.000
	N	309	309
Employee Capacity	Pearson Correlation	.786	1
	Sig. (2-tailed)	.000	
	N	309	309

With r value = 0.79 (79%), Table 3 shows a high positive correlation between personnel capacity and technology infrastructure. The result is statistically significant since the P value is 0.00<0.05. Oluochi and Mengich's (2023) study, which looked at how technical infrastructure affected employee performance in Kenya's Kisumu County Government,

found a high positive correlation between the two. This result supports their findings. Additionally, the results are consistent with the research of Jabbouria, et al (2015), who examined how information technology (IT) infrastructure affects innovation performance as a crucial concern at private universities in Iraq. According to the study's findings, staff innovativeness and technological infrastructure have a substantial beneficial correlation.

Test of Hypothesis

Regression analysis was used to test the hypothesis with the aid of SPSS version 20.

H₀: There is no significant positive relationship between technological infrastructure and employee capacity.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.889 ^a	.793	.776	1.88863	.776	78.099	1	23	.000	1.654

Predictors: (Constant), Organizational Structure

Dependent Variable: Employee Productivity

The findings showed that staff productivity at the tertiary institutions under study is significantly impacted by organisational structure ($\beta = 1.89$, $p < 0.05$). Employee productivity is predicted by organisational structure (F-statistics = 78.1; R-squared = 0.776; $p < 0.05$). The predictor variable alone accounted for 79.3% of the variation in work satisfaction; the impact of the extraneous factors may have contributed the remaining 20.7%. The absence of first-order serial correlation is indicated by the Durbin Watson value of 1.7.

5. Discussion of Finding

According to the research currently available on organisational technology infrastructure, technological tools and knowledge inside an organisation significantly improve employee capability, especially in a developing region like South-South Nigeria. According to the results, an organisational structure that improves staff competences and productivity can boost employee capacity building and overall organisational performance. The results of the hypothesis test show a considerable positive correlation between employee productivity and organisational structure. This supports the research conducted in 2023 by Agu, Ero, Okoro, and Chike-Aliozor, who looked at how organisational structure affected the performance of workers at telecommunications firms in Enugu, Nigeria. According to the study's findings, MTN Telecommunications' organic structure in Enugu State, Nigeria, has a favourable impact on employees' dedication.

6. Conclusion

Based on the results, the study comes to the conclusion that staff productivity at the chosen tertiary institutions in South-South Nigeria is strongly positively correlated with organisational structure. Employees will be productive in carrying out their duties in well-structured companies. Thus, organisational technology infrastructure plays a major role in staff capacity building. This indicates that when an organisation is technologically well-structured and its personnel are exposed to the ways in which technology may be used to do their duties, their capacity increases at tertiary institutions.

7. Recommendations

According to the report, South-South Nigerian tertiary institutions should be well-structured in order to promote staff productivity and capacity growth. Higher education institutions, especially those in South-South Nigeria, will become more effective and efficient as a result of increased employee productivity. As a result, tertiary institutions in South-South Nigeria must be well-structured in order to increase staff productivity and enhance their overall performance. In order to effectively use technology advances and gain a competitive advantage, tertiary institutions must modify their policies, procedures, and processes.

References

- Anand, A., Wamba, S., & Sharma, R. (2013). The effects of firm IT capabilities on firm performance: The mediating effects of process improvement. 24th Australasian Conference on Information Systems (pp. 1-10). Australia: RMIT University.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308-323.
- Agu, J. C., Ero, K. A., Okoro J. C. & Chike-Aliozor, V. U. (2023). Effect of organizational structure on performance of telecommunication companies in Enugu, Nigeria. *International Journal of Management Studies and Social Science Research*. 5(4) DOI: <https://doi.org/10.56293/IJMSSSR.2022.4673>.
- Akinola, C.A. (2015). The role of bilateral donors in capacity building: The Techno serve Experience. Paper presented at a Workshop on Capacity building and Utilisation by Federal Ministry of Finance in collaboration with World Bank PACT Workshop. Abuja, Nigeria.
- Asri A. S., (2016). Measuring the Effect of Organization Structure on the Institution' Performance Efficiency: Empirical Study. *International Journal of Social Science Studies*. 4(10)
- Bakare, A.A. (2025). Technological Change and Employee Performance in Private Universities in Nigeria: An Empirical Analysis. *Journal of Informatics Education and Research*. 5(2), DOI: 10.52783/jier.v5i2.2595
- Barzoki, A.S., & Sarand, V.F. (2014). Investigating the relationship between organisational justice, organisational commitment and staffs quality of work life (case study: Islamic Azad University employees Shabestar). *Journal of Management Studies*, 3(4), 43-61.
- Jabbouria, I., Zahari, S., & Khalid, M. (2015). Impact of information technology (IT) Infrastructure on Innovation performance as a critical issue in the Iraqi private Universities. *Procedia Economics and Finance*, Vol. 39. 861 – 869
- Kimani, K. (2015). Impact of information technology on organizational performance, a case of population services Kenya. *Journal of Technology*, Vol. 3. 125-134.
- Kumar, C. J. (2021). Impact of Technological Changes on Job Performance of Teachers in Higher Education Institutions in Nepal, South Asia. *Research Journal on Multi-disciplinary Issues*. 3(1)
- Mathis, R. L., & Jackson, J. H. (2018). The role of human resource management information system in the process of manpower activities. Greater Region (Ghana). *American Journal of Industrial and Management Science*, 5(6), 20-28.
- Obiekwe, O. & Ejo-Orusa, H. (2019). Impact of employee performance appraisal on performance of business organisations: A theoretical review. *EPRA International Journal of Economic and Business Review* 7(9)
- Oduyoye, O., Ashikia, O. U., Adefulu, D & Abimbola, M. M. (2019). organisational learning and employee productivity of selected private universities in Lagos and Ogun States, Nigeria. *International Journal of Advanced Research in Statistics Management and Finance*. 7(1).
- Okonkwo, C. O. (2022). Capacity building and employee performance in plastic manufacturing companies in Anambra State. *International Journal of Business & Law Research* 10(3). 44-60,
- Oluochi, F., & Mengich, E. (2023). Effects of technological infrastructure on employee performance among Kisumu County Government Employees. *International Journal of Innovative Science and Research Technology*. 8(11)
- Mauerhoefer, T., Strese, S., & Brettel, M. (2017). The impact of information technology on new product development performance. *Journal of Product Innovation Management*, 34(6), 719–738. <https://doi.org/10.1111/jpim.12408>
- Nwapi, R. O. (2023). Effect of capacity building on workers' productivity in public sector organization. A case study of Enugu State. *International Journal of Public Administration (IJOPAD)*. p-ISSN: 2617-129X;
- Smith, E. F., Gilmer, D. O. & Stockdale, M. S. (2019). The importance of culture and support for workplace flexibility: An ecological framework for understanding flexibility support structures. *Business Horizons*, 62(5), 557–566. doi:10.1016/j.bushor.2019.04.002.
- Sunday C. E., Adenike O. B. & Anthony T. Adekola (2017). The effects of organizational structure on the performance of organizations. *European Journal of Business and Innovation Research*. 5(6) 46-62,

- Thorpe, M., & Gordon, J. (2015). Online learning in the workplace: A hybrid model of participation in networked, professional learning. *Australasian Journal of Educational Technology*, 28(8), 1267–1282. DOI: 10.14742/ajet.763
- Williams, F.O. (2017): “Capacity building and Utilisation in the Private Sector In Nigeria: Status, Problems and Prospects PACT Workshop, Nigeria.
- Zziwa G. (2014). Does the organizational structure affect the management universities in Uganda? An empirical Analysis. *International Journal of Educational Administration and Policy Studies*. Vol. 6(8) 159-169. DOI: 10.5897/IJAPS2014.0344. ISSN 2141-6656