



EFFECT OF TECHNOLOGICAL ENVIRONMENT ON THE SERVICE DELIVERY OF ANAMBRA STATE HOUSING DEVELOPMENT CORPORATION, AWKA SOUTH-EAST NIGERIA 2012-2021

Chinyeaka Justine Igbokwe-Ibeto and Kehinde O Osakede

Nnamdi Azikiwe University, Awka

West African Seasoning Company Ltd Apapa Lagos

Abstract: Organizations the world over, be it private or public are largely environment-dependent and environment-serving because they do not exist in a vacuum. They depend on their environment for plethora of issues ranging from input resources such as information, ideas, raw materials, finance and labour as well as the consumption of finished goods or services by the environment. Within the framework of systems theory, this study examined the effect of technological environment on service delivery in Anambra State Housing Development Corporation, Awka, South-East Nigeria. This study was guided by two research questions and hypotheses. The study adopted the survey research design. The study relied on primary and secondary data. The data collected were presented in frequency tables and simple percentage. Multiple Regression Analysis statistical tools were used with the aid of Statistical Package for the Social Sciences (SPSS) in testing the research hypotheses. Findings of the study show that technological innovations have significant effect on the profit margin of Anambra State Housing Development Corporation. Also, the automation of services has significant effect on the sales growth of Anambra State Housing Development Corporation. Given the pivotal role that technology plays in the 21st century, Anambra State Housing Development Corporation should strive to be proactive in adapting and implementing innovations and advancement in technology. Government at all levels should address the crisis of epileptic electricity power supply in the country because automation of services cannot succeed without steady power supply.

Keywords: Automation, Public, Enterprises, Invention, Innovation

Introduction

In developing countries like Nigeria, the private sector is largely entrusted with the responsibility of economic development. This strategy, however, has failed to bring about the required innovation in commercial and industrial enterprises, as the private sector is solely guided by selfish motives like commercialism, profit-maximization, exploitation and autocratism (Nwizu, 2013). Besides, it has not been able to match economic development with social justice.

In order to remove the limitations of the private organizations, the public enterprises were established to develop the needed infrastructure of the economy. These enterprises work as economic multipliers to generate employment, help in expansion of ancillary industries, raise the standard of living and increase the Gross National Product (GDP). However, the experience of the last three decades has revealed that the public sector in Nigeria has failed to live up its expectations by the

policy-makers in generating economic development on the principles of social justice. Besides, due to under-utilization of installed capacity, recurring losses, rigid bureaucratic control and unwanted governmental interference etc, it has not been able to achieve the desired results. The entire issue of public sector along with its various managerial dimensions needs to be subjected to an intensive critical examination (Hazary, 2017).

The idea of government's involvement in business through incorporation of its own enterprises is, therefore, aimed at breaking the myth and monopoly of the private sector in economic activities as well as providing the society, particularly the common people, social welfare facilities (Olewe, 2015). Organizations all over the world be it public or private, are largely environment-dependent and environment-serving because they do not exist in a vacuum. They depend on their environment for plethora of issues ranging from input resources such as

Contemporary Journal of Education and Development

An official Publication of Center for International Research Development

Double Blind Peer and Editorial Review International Referred Journal; Globally index

Available <https://cirdjournal.com/index.php/cjed>; E-mail: journals@cird.online



information, ideas, raw materials, finance and labour, among others, to the consumption of finished goods or services by the environment. Besides, their activities are also influence and shaped by such environmental force as social, economic, technological, competitive, and regulatory forces. Therefore, to succeed and achieve organizational objectives, organizations adopt strategies that align them properly with their operating environment, the aim of which is to avoid any mismatch between the organization and its environment, So, for organisations in general and public agencies in particular to succeed in their operating environment they need to formulate and adopt appropriate policies and marketing programmes. In order for a manager to remain useful and relevant, he/she must be able to help shape and implement new strategies and new managerial processes and activities by understanding the political-legal, economic, technological socio-cultural and other forces at work (Aluko, Odugbesan, Gbadamasi & Osuagwu, 2014; Dauda & Mustapha, 2013).

Ozor (2018) also examined the linkage between environment and organizational performance and discovered that environment is the primary determinant of organizational service delivery. Observers of Nigerian business environment stress that in spite of government's effort to promote core strategic industries in the country, the efforts have been confronted with a myriad of environment factors which explains why the public sector service delivery has been below expectation (Kotler & Keller, 2019; Oviemuno, 2012). Organisations are vulnerable to changes in their operating environment in many ways and have great consequences on their operations. As a result of this vulnerability, public agencies are required to be proactive in formulating and adopting appropriate marketing strategies as this will enable them to withstand their vulnerability to environmental risks such as changes in client or consumer needs, technological advancement, economic factors, political factors, socio-cultural factors and competitors' activities. This study therefore, seeks to examine the effect of technological environment on

service delivery with specific reference to Anambra state housing cooperation, Awka 2012-2021.

Research Questions

To interrogate the effect of technological environment on service delivery in Anambra state housing cooperation, Awka 2012-2021, in this study, efforts will be made to beam our search light on the following two research questions which will serve as a guide to the problem being investigated.

1. Does technological innovation have any effect on the profit margin of Anambra state housing development cooperation Awka 2012-2021?

2. Could automation of services have any effect on the sales growth of the Anambra state housing development cooperation Awka 2012-2021?

Research Hypotheses

To determine the effect of technological environment on service delivery in Anambra state housing cooperation, Awka 2012-2021, the following two research hypotheses will be tested for the purpose of this study.

1. Technological innovation has no significant effect on the profit margin of Anambra state housing development cooperation Awka 2012-2021.

2. Automation of services has a significant effect on the sales growth of the Anambra state housing development cooperation Awka 2012-2021.

Conceptual and Theoretical Underpinnings

It is customary especially in social and management sciences research to begin an academic interrogation by combing the conceptual and theoretical contours of the subject matter of investigation as well as the way in which one's research is integrated into the body of existing theories and research (Igbokwe-Ibeto, 2019). It is within this context that this article conceives technological environment as the technology and its associated components that constitute an organization's general environment. It can also be defined as the method of converting resources into finished products and services by using new machines. It includes inventions and improvement of existing methods, machines and materials. To Kotler and Armstrong (2005), it



encapsulates the use of new equipment and implementation of new process. Technological environment consists of technological invention or innovation which is the organization's process with computer and machines, technological changes, diversity of technology, and technological incentives.

Service delivery is the concept of how effective an organization is in achieving the outcomes it intends to achieve (Igbokwe-Ibeto and Osakede, 2022). Organizational effectiveness captures service delivery plus the myriad internal performance outcomes normally associated with more efficient or effective operations and other external measures that relate to considerations that are broader than those simply associated with economic valuation (either by shareholders, managers or customers). Service delivery also refers to the degree of achievement of the mission at the workplace that builds up an employee job. Different researchers have different thoughts about service delivery. For example Igbokwe-Ibeto and Osakede (2022) use the term service delivery to express the range of measurements of transactional efficiency and input and output efficiency.

Those who make use of public goods and services are referred to as customers or clients of public sector services. Nash and Wash in (Igbokwe-Ibeto & Osakede, 2022) claim that customer service delivery is the provision of services to a buyer in such a way that the buyer's expectations can be met or exceeded while at the same time the business remains viable. According to Igbokwe-Ibeto & Osakede (2022), the age of Information and Communication Technology (ICT) has made information dissemination and government-client relationship easy. This innovation is given greater boast by the introduction of electric devices and networking such as e-government, e-administration, e-governance, and lately the Fourth Industrial Revolution (4IR) which has made interaction easier (Igbokwe-Ibeto & Agullah, 2021).

The concept of service delivery cuts across all spheres of operation within and outside the organization. For many organizations, the measurement of service delivery is a constant, on-going activity. The use of business

performance dashboard are increasingly being used as a way for executive to keep track of key performance matrices as sales in relation to target, number of products on back order, or percentage of customer service calls resolved with specified time periods (Hall, 2015). In the view of Hall (2015), dashboards when deployed through an organization for each employee will help to track progress towards goals to spot performance gaps and device innovative strategies to get back on course.

In social and management sciences research, no one theoretical approach can adequately explain a social phenomenon. Nonetheless, this study needs a platform on which to anchor its subject of investigation (Igbokwe-Ibeto, Agbodike & Osakede, 2018). Of all available theories that could be used to unravel our subject matter of investigation such as cybernetics theory, efficiency and effectiveness theories, the systems theory is perhaps the most potent. The origin of the systems theory dates back to the classical era and was then known as the "closed-system theory" and was later expanded during the neoclassical era and was later renamed the "open-system theory".

System theory refers to that model that looks at or approaches a system as a whole that is made up of parts that have mutual and cross-cutting interdependence. System can also be seen as a family of relationships among the members acting as a whole or as elements in a sanding relationship. Systems theory starts from the premise that everything depends on everything. The term "system" which is the central pillar of this theory is being used more and more to refer to methods of scientific analysis that are particularly adapted to unraveling of complexity. Open-systems theory in general and the systems theory in particular originated in the natural sciences in the efforts to understand sets of objects, the relationships between those objects, and the relationships between sets of objects and their environment. In this study, Anambra State Housing Development Corporation is seen as an object (organization) constantly interacting with, influencing or being influenced by its external environment (technological environment).



The Nexus between Technological Environment and Service Delivery

This study examined the influence of technological factors on the service delivery. Technological environment is perhaps the most dramatic factor now shaping our destiny. Technology is the process of transforming scientific discoveries into realities. According to Kotler and Armstrong (2005) every new technology replaces an older technology and that technological environment is highly dynamic as new technologies render old ones obsolete, while it also creates new markets and opportunities. Also, Thompson and Martin (2015) argued that technology in one respect is part of the organisation and it is used for the creation of competitive advantage. Technological breakthroughs can create new industries which might prove a threat to existing organisations whose products or services might be rendered redundant, and those organisations which might be affected in this way should be alerted to the possibility. Equally, new technology could provide a useful input, perhaps in both manufacturing and service industries, but in turn its purchase will require funding and possibly employee training before it can be used (Thompson & Martin, 2015).

In the views of Babatunde and Adebisi (2012), technological factors include technological aspects such as research and development activity, automation, technology incentives and the rate of technological change. They can determine barriers to entry, minimum efficient production level and can influence outsourcing decisions. In addition, technological shifts can affect costs, quality, and can lead to innovation. A technological innovation can have a sudden and dramatic effect on the environment of an organisation. For instance, technological developments can significantly alter the demand for an organisation's products or services (Barnat, 2015; Business Teacher, 2012). According to Barnat (2015), technological change can decimate existing business and even entire industries, since it shifts demand from one product to another. Moreover, changes in technology can affect organisations' operations as well as its services. Barnat (2015) further

argued that these changes might affect processing methods, raw materials and service delivery. Therefore, managers should keep track of the advancement and invention in technology, nature of changes in technological environment as well as the diversity in technology in their operating environment. It is this aspect of operational environment, that is, external or uncontrollable environment which is of interest to this study.

Flowing from the above, Osuagwu (2015) argued that organisations that stand their vulnerability to these environmental factors must possess many uncommon characteristics including all adaptive and flexible managerial style, a balanced portfolio of products, and a well-developed intelligence and information system designed to monitor and anticipate environmental changes. Indeed, Ansoff (2016) admonished that the more turbulent the environment is, the more aggressive the firm must be in terms of competitive strategies and entrepreneurialism or change orientation if it is to succeed.

The Challenges Confronting Public Enterprises in Nigeria

In countries like India, Mexico and Nicaragua, public enterprises accounted for 80 percent or more of the value-added in manufacturing (World Development Report, 2020). Nigeria was not exception in terms of the belief that the state and public enterprises have a role to play in the country's development efforts. The oil boom of the 1970s enabled the government to venture into "ownership" and control of economic activities. The Nigerian Enterprises Promotion Decree of 1972 set the basis for the government's extensive participation in the ownership and management of banking, insurance and industry, (Onwioduokit, 2019). The seriousness of expansion of public enterprises and virtually the policy shift which allowed the public sector to take the commanding height in Nigeria cannot be overemphasized.

In spite of the huge investments in public enterprises in Nigeria, their services fall short of expectations by the masses. The 1984 Report of the Onosode Presidential



Commission on public enterprises revealed that most of the public enterprises were infested with some problems which related to: defective capital structures resulting in heavy dependency burden on national treasury; mismanagement of funds and operations; misuse of monopoly power culminating in corruption; and bureaucratic bottlenecks within the public enterprises/supervisory ministerial linkage.

These problems according to the Onosode Commission, resulted in ill-conceived investments, political interference in public enterprises' decision-making processes, costly and inefficient use of scarce resources, growing budgetary burden and the diversion of credit and other resources meant for other sectors of the public enterprises (Ayodele, 2014). The service delivery of most public enterprises in the country has been a serious source of worry to both the government that established them and to the general public the enterprises are supposed to serve. Ushiagaiale (2000) argues that although government established public enterprises to create jobs, spread development and provide social services. However, experience over the years has shown that these lofty deals could not be achieved as a result of nepotism, corruption, mismanagement, faulty staff recruitment processes, excessive government interference, dependence on treasury funding, poor services, arrogance, ethnicity religious bigotry, god fatherism, and inequities.

Hall (2015) corroborates the above view and contends that poor administration and lack of skill in the application of resources management have been the worst problems bedeviling the Nigerian public sector. In the words of Ikemefuna and Abe (2015) the problems of public enterprises such as ill-conceived investments, political interference in decision making, costly and inefficient use of public resources are the factors responsible for the decadence of public companies. According to Ukwu (2015), public enterprises flounder under the weight of political boards, poor management and demoralised workforce.

Methodology

This study adopted survey research design in which pre-tested and well validated questionnaire were used to collect data from respondents who were staff of the Anambra State Housing Development Corporation, Awka. The population of the corporation was 375 and from this population, a sample of 268 was drawn using Cochran's finite population correction factor technique. This special formula is given by:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

Where,

n = adjusted sample size

$n_0 = \text{correction factor } n_0 = \left[\frac{Z^2 pq}{e^2} \right]$

N = Population size for the study

To determine the sample size for this study, we assume the following:

z = 1.96 (i.e 95% confidence level)

p = Estimated proportion of an attribute that is present in the population (estimated at 50% or 0.5)

q = 1-p (the proportion of an attribute that is not present in the population (100% - 50% or 0.5)

e = desired level of precision (estimated at 5% or 0.05).

To obtain n_0 (finite population correction factor), we

substitute in $\frac{Z^2 pq}{e^2}$ as follows:

$$n_0 = \frac{1.96 \times 1.96 \times 0.5 \times 0.5}{0.05 \times 0.05}$$

$$= \frac{0.9604}{0.0025}$$

$$= 384.16 = 384$$

Therefore, n_0 (finite population correction factor) is 384.

N is already given as 4,252 above.

$$\text{Substituting in the formula } n_0 = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

above, we obtain:

$$= \frac{384}{1 + \frac{384 - 1}{4252}} = \frac{384}{1.43771}$$

$$= 267.09141 = 268 \text{ (rounded up).}$$

Therefore, the sample size for the study was 268.

The questionnaire comprised 15 closed-ended items set on the 5-point Likert-type scale. Results of the reliability



test of the questionnaire showed it has a Cronbach Alpha index of 0.84. The respondents were selected using purposive sampling method, which allowed selection of only the senior staff of the agency, who had good knowledge of the issues concerning technological environment of their organisation. Descriptive statistics that consists of frequency, counts, tables and percentages was used to analyze the data collected. Inferential statistics known as multiple regression analysis was used in testing the hypotheses with the aid of Statistical Package for the Social Sciences (SPSS) software.

Preliminary Analysis of Results

The researchers distributed a total of two hundred and sixty-eight (268) questionnaires of twelve (12) items each to members of staff of the Anambra State Housing Development Cooperation, Awka. As a result of frequent persuasion on the importance of responding fully and honestly to the questionnaire, the researchers was able to achieve questionnaire return of two hundred and fifty-three (253) or 94.4percent responses while fifteen (15) or

5.1percent were not returned out of the total distributed two hundred and sixty-eight (268). Out of these numbers, eleven (11) or 1.5percent copies of the questionnaire were not properly filled, leaving a total of two hundred and fifty-three (253) usable questionnaires yielding a response rate of 94.4percent. The researcher proceeded with the analysis of the data as 94.4percent response rate is regarded as very satisfactory for this study. According to Babbie and Mouton in Igbokwe-Ibeto (2019), some rules of thumb about the return/response rate is that a response rate of 50percent is adequate for analysis and reporting, 60percent is good while 70percent is very good.

As earlier stated, the hypotheses of the study are tested using Multiple Regression Analysis. The test was carried out using the primary data generated from the field survey. As part of the test procedure, the said data were fed into the SPSS software according to each of the four hypotheses. The results of the test are displayed in tables 1 and 2 below.

Table 1: Model Summary

Model 1	R	R Square	Adjusted R Squared	Std Error of Estimate	Durbin Watsun stat.
1	0.547	0.229	0.698	0.91487	2.614732

- a. **Dependent variable:** Profit margin, and sales growth
- b. **Predictors (constants):** Technology innovation, automation, technological changes.

Source: Field Survey, 2022

Table 2: ANOVA Model

Source of difference	Sum of squares	Df	Mean square	f _o	Sig
Between Groups	8.111	3	2.7923	10	.000
Within Groups	37.306	347	0.270		
Total	45.415	350			

- a. **Dependent variable:** Profit margin, sales growth.
- b. **Predictors (constants):** Technology innovation, automation, technological changes.

Source: Field Survey, 2022

Table 3: Co-Efficient

Contemporary Journal of Education and Development
An official Publication of Center for International Research Development
Double Blind Peer and Editorial Review International Referred Journal; Globally index
Available <https://cirdjournal.com/index.php/cjed>; E-mail: journals@cird.online



	Unstandardized Coefficients		Standardized coefficients	T	Sig
	B	STD Error	Beta		
Constant	1.659	0.242		6.85	0
Technological innovation	0.83	0.07	0.097	1.189	0.002
Automation	0.22	0.065	0.279	3.41	0.001
Technological change	-0128	0.05	0.203	-2.532	0.012

a. **Dependent variable:** Profit margin, sales growth.

b. **Predictors (constants):** Technology innovation, automation, technological changes.

Source: Field Survey, 2022

The results of the Multiple Regression Analysis as displayed in tables 1 and 2 are interpreted below. Table 1 shows that the Adjusted R Squared has the value of $r^2 = 0.698$ which indicates that when all the variables are combined, the multiple linear regression model could explain for approximately 70percent of the variation in service delivery of the Anambra State Housing Cooperation, Awka.

In Table 2, it is shown that the calculated F-values is 10.0, which shows that the recession model is very significant and well specified at the probability of 0.000. Table 3 shows that the four independent (predictors) variables have the following beta and probability values: mentoring (B = 0.097; P = 0.002) (B = 0.279; P=0.001) technological innovation, automation.

From table 3, we can easily construct the prediction equation of the relationship or model as follows: Service delivery of Anambra State Housing Cooperation = 1.659 + 0.097 (technological innovation) +0.279 (automation) +0.203 (technological changes).

When interpreted, the equation tells us that when technological innovation or invention goes up by 0.097 or 10%, the service delivery of Anambra State Housing Cooperation. When automation increases by 1, the dependent variable (the service delivery of Anambra State Housing Cooperation goes up by 0.279 or 28percent. When technological changes increases by 1,

the dependent variable (the service delivery of Anambra State Housing Cooperation, Awka goes up by 0.203 or 20percent.

Test of Hypotheses

The three hypotheses are tested by using the primary data generated from the field survey. The test of the hypotheses is based on the results of the Multiple Regression Analysis as contained in Table 3 above.

Hypotheses One:

H₀: Technological innovation has no significant effect on the profit margin of the Anambra state housing development cooperation, Awka 2012-2021.

H₁: Technological innovation has significant effect on the profit margin of the Anambra state housing development cooperation, Awka 2012-2021.

Table 3 shows that the beta value is 0.097, while the probability is 0.002, which is less than the critical probability of 0.05. This means that there is very low probability that the statement overall model was insignificant was true.

Decision Rule

The probability of the model (0.002) is less than the critical probability of 0.05 and the model found to be significant with a calculated F-value of 10.0. On basis of this, we can therefore, reject the null hypothesis and accept the alternative hypothesis and conclude that technological innovation has significant effect on the



profit margin of Anambra State Housing Development Cooperation, Awka. This finding supports Adeoye and Eleguade (2016) findings that, technological innovation had significant effect on the performance of the manufacturing companies in Malaysia.

Implication: The implication of the result of hypothesis one which states that Technological innovation has a significant effect on the profit margin of the Anambra state housing development cooperation, Awka is that, an enabling environment which could enhance public service delivery and national development will for long remain a mirage without proper integration of technological innovations and changes into employees and organizational objectives in the Nigerian public sector organizations. This study provides evidence that technological innovations and changes enhance better results. Thus, the need for public sector agencies to identify and develop a framework for effective integration of technological innovations in the public service that could enhance service delivery cannot be overemphasised.

Hypothesis Two

H₀: Automation of services has no significant effect on the sales growth of the Anambra state housing development cooperation, Awka 2012-2021.

H₁: Automation of services has significant effect on the sales growth of the Anambra state housing development cooperation, Awka 2012-2021.

Table 3 also shows that the beta value of the model is 0.279 as it pertains to automation at a probability of 0.001, which is less than the critical probability of 0.05.

Decision

Since the probability of the regression model as it pertains to automation is 0.001, which is less the 0.05 critical probability thresholds and the model significant at a calculated F-Value of 10.0. On basis of this, we can therefore, reject the null hypothesis and accept the alternative hypothesis and conclude that automation of services has significant effect on the sales growth of Anambra State Housing Development Cooperation, Awka. This result is agreement with findings of Mustapha and Ekpunobi (2011) that lack of automation

featured as the most technological factors that had significant effect on the performance of the depressed textile companies studied in Kaduna State, Nigeria

Implication: The implication of the result of hypothesis two which states that automation of services has a significant effect on the sales growth of the Anambra state housing development cooperation, Awka is that, lack of automation of services by public sector organizations' create room for lack of fit between public sector organisations in Nigeria and global best practices thereby making the sector unproductive and at the same time inhibiting service quality and national development. Empirical evidence appears to support the view that automation of services can influence the service quality and organizational growth. Organizations interested in the growth and service quality should integrate and adapt to automation of their services. This will led to customer/client satisfaction

Conclusion

The concept of technological environment and service delivery as captured by scholars and social commentators has been espoused with an attempt at clarifying the intellectual-cobweb surrounding the issue of technological environment and service delivery in Anambra state housing development cooperation. To scientifically undertake the subject of analysis, this paper traversed theoretical framework, conceptual epistemology and discussed dominant issues in technological environment in relations with service delivery. To this end, the theory on transformational leadership has been examined as postulated by scholars. An attempt has also been made to establish the nexus technological environment and service delivery.

The findings of this study suggest that technological environment of any organization being it public or private has significant effect on the service delivery of such organization. Indeed, technological innovation, automation of processes, changes in technology, availability of state-of-the-art technology, and diversity in technology have had significant effect on the service delivery public sector agencies in in Anambra state in particular and Nigeria in general.



Recommendations

Public sector managers should appreciate the fact that the technological environment has significant influence on their organisations. Thus, public sector managers should strive to be proactive in adapting and implementing innovations and advancement in technology as well as diversity and nature of changes in the technological environment

Anambra state government in particular and Nigerian government in general should as part of its statutory responsibility provide the enable environment for smooth operation of the private sector organisations. Government at all levels, should address the problem of inadequate and epileptic supply of electricity in the country because automation of services cannot succeed without steady power supply.

References

- Adeoye, A. O. & Elegunde, A. F. (2016), Impacts of external business environment on organisational performance in the food and beverage industry in Nigeria, *British Journal of Arts and Social Sciences*, 6(2):119-233.
- Aluko, M., Odugbesan, O., Gbadamasi, G. & Osuagwu, L. (2014), *Business policy and strategy*, Lagos: Purnark Nigeria Limited.
- Ansoff H. (2016), *Strategic change and the strategic marketing Irocess*, Oxford: Black well.
- Ayodele, A. S. (2014), Issues in privatization of public enterprises in Nigeria, *Bullion*, CBN Publication (Privatization Strategies), 23, No.3.
- Babatunde, B.O. & Adebisi, A.O. (2012), Strategic environmental scanning and organisational performance in a competitive business environment, *Economic Insight -Trend and Challenges*, LXIV(1).
- Barnat, R. (2015), *Strategic management*, New Jersey: Prentice Hall.
- Dauda, A. & Mustapha, Y. I. (2013), Influence of technological environmental factors on the strategic choice of quoted manufacturing firms in Nigeria's food and beverage industry, *International Journal of Business and Technology*, 3(8):159-169.

Hall, E. H. (2015), Corporate diversification and performance: An investigation of causality, *Australian Journal of Management*, 20(10):25-42.

Hazary, N. M. (2017), Public enterprises in India: Problems and prospects, *Journal of Institute of Public Administration*, 3(5):1-4.

Igbokwe-Ibeto, C.J & Osakede, K.O (2022), Managerial leadership and public service delivery in Africa: The Nigerian experience, *Management and Human Resource Journal*, 11(6):1-13

Igbokwe-Ibeto, C.J, & Agullah, A.O. (2021), Fourth industrial revolution and service delivery innovation: Bridging the digital gap for inclusive growth and development in Africa, *Unizik International Journal of Entrepreneurship and Multidisciplinary Studies*, 1(1):44-59

Igbokwe-Ibeto, C.J (2019). The effect of job analysis on service delivery in federal airports authority of Nigeria (FAAN) 2005-2014, *International Journal of Human Resources Studies*, 9(2):195-211

Igbokwe-Ibeto, C.J, Agbodike, F.C & Osakede, K.O. (2018), Entrepreneurial curriculum in African universities: A panacea to graduates' unemployment if...? *Africa's Public Service Delivery and Performance Review*, 6(1):342-359

Ikemefuna, I. & Abe, A. (2015), Technological environment and some selected manufacturing industries in Enugu State, Nigeria, *Journal of Global Economics*, 3(2):149-158.

Kotler, P. & Armstrong, G. (2005), *Principle of marketing*, New Jersey: Prentice Hall.

Kotler, P. & Keller, K. L.(2019). *Marketing Management*. (13th ed.). New Jersey, Prentice Hall

Mustapha, Y. I. & Ekpunobi, G.N. (2011), Assessing the effect of environmental factors on the performance of depressed textile manufacturing firms in Kaduna state, *Advances in Management*, 9(1):21-44.

Nwizu, G. (2013), *Management of public enterprises and co-operatives: An interdisciplinary approach*, Enugu: John Jacob's Publishing Co. Ltd.

Olewe, B.N. (2015), *Development administration*, Aba: Grace Books.



Onosode, G. (1984), The report of the Onosode presidential commission on public enterprises, Lagos: Government Press.

Onwioduokit, E.A. (2019), Privatization in Nigeria: Options for the next millennium, *Bullion* (C.B.N Publication), Privatization Strategies. 23.

Osuagwu, L. (2015), Environmental perception in bank marketing strategies, *Journal of Marketing Research*, 8(3):99-141.

Oviemuno, A.O. (2012), Impact of energy on manufacturing sector in Nigeria, *Journal of Marketing Research*, 8(3):161-184.

Ozor, E. (2014), *Public enterprises in Nigeria: A study in public policy making in a changing political economy*, Ibadan: University Press Plc.

Porter, M. E. (2018). *Competitive strategy*. New York: Free Press.

Thompson. J. & Martin. F. (2015), *Strategic management: Awareness and change*, New York: Thomson Press.

Ukwu, I. U. (2015), *Managing National Development: Essays on Public Management in Nigeria*, Enugu: Institute for Development Studies Publications, University of Niger-a, Enugu Campus.

Ushiagiale, J. (2000), Economy: FG loses N265 billion annually from public enterprises, *This Day Newspapers*, 6(18):50, May 16th.