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BUREAUCRACY OF GOVERNMENT ESTABLISHMENTS AND BUSINESS EFFICIENCY IN NIGERIA: AN EVIDENCE OF NIGERIAN NATIONAL PETROLEUM CORPORATION (NNPC) E&P LIMITED

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Abstract

This study explores the impact of bureaucratic structures on the business efficiency of government establishments in Nigeria, with a specific focus on the Nigerian National Petroleum Corporation (NNPC) Exploration & Production (E&P) Limited. Historically, government-owned enterprises in Nigeria, including NNPC, have faced systemic inefficiencies due to entrenched bureaucratic practices such as hierarchical rigidity, outdated procedures, and political interference. These inefficiencies have hindered decision-making, resource allocation, and operational responsiveness, ultimately affecting business productivity. The research examines whether the transition of NNPC to a limited liability company under the Petroleum Industry Act (PIA) 2021 has mitigated these challenges. While the PIA exempts NNPC from certain public sector procurement laws and aims to foster a profit-driven culture, persistent issues like overlapping regulatory mandates and centralized decision-making remain significant obstacles. The study employs Weberian bureaucracy theory to analyze how formal rules and rigid hierarchies influence timeliness of decisions and resource utilization within NNPC E&P Limited. The analysis revealed a strong positive correlation ($R = 0.686$, $p < 0.000$) between hierarchical structures and decision-making timeliness, indicating that as hierarchical complexity increases, decision-making processes are significantly delayed while bureaucracy showed a moderate influence ($R^2 = 0.157$, $F = 18.004$, $\beta = 0.425$, $p < 0.000$) of formal rules and procedures on resource allocation and utilization which offers benefits such as organizational stability and precision, its excessive rigidity and adherence to outdated protocols stifle innovation and adaptability. The research underscores the need for comprehensive reforms to streamline processes and align public sector operations with market dynamics. NNPC E&P Limited should consider flattening its hierarchical structure to expedite decision-making processes. Reducing the number of approval layers can enhance the company's agility and responsiveness, allowing for quicker decisions in critical situations. The company should evaluate its current formal rules and procedures to identify areas where flexibility can be introduced without compromising accountability. This may involve creating adaptive frameworks that allow for deviations under certain circumstances, particularly in resource allocation. By addressing these challenges, NNPC can serve as a model for broader public sector transformation in Nigeria. This study contributes to understanding the balance between bureaucratic control and operational efficiency in government enterprises.

Keywords: *Bureaucratic Structures, Business Efficiency, Decision Making, Rules, Regulations*

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Introduction

The Nigerian National Petroleum Corporation (NNPC) Limited, particularly its Exploration & Production (E&P) subsidiary, operates within a broader context of bureaucratic challenges that have historically plagued government-owned enterprises in Nigeria. While NNPC's recent transition to a limited liability company under the Petroleum Industry Act (PIA) 2021 aims to enhance commercial efficiency (Academia.edu, 2014), its legacy as a state-controlled entity reflects systemic bureaucratic inefficiencies that have long hindered public sector performance.

Nigeria's public bureaucracy has been criticized for structural defects, political interference, corruption, and inefficient recruitment practices (THISDAYLIVE, 2022). These issues manifest as red tape, delays in decision-making, and poor service delivery, undermining the capacity of institutions like NNPC to achieve operational efficiency (THISDAYLIVE, 2022). For instance, political influence in staffing often leads to the appointment of unqualified personnel, while outdated procedures and lack of accountability exacerbate bureaucratic bottlenecks (IIPRDS, 2024).

In the energy sector, such inefficiencies are compounded by outdated regulatory frameworks and dependence on government funding, which historically constrained NNPC's ability to operate as a commercially agile entity (Academia.edu, 2014). Prior to its restructuring, NNPC faced criticism for delays in project execution, opaque procurement processes, and inefficiencies in managing joint ventures with international partners.

As Nigeria's largest state-owned oil company, NNPC E&P Limited is central to the nation's hydrocarbon exploration and production activities. However, its performance has been shaped by legacy bureaucratic practices, including centralized decision-making, rigid hierarchies, and compliance with public sector procurement laws that slowed operational responsiveness Academia.edu (2014). While the PIA 2021 aimed to transform NNPC into a profit-driven entity by exempting it from the Public Procurement Act and Fiscal Responsibility Act, the transition's success hinges on overcoming entrenched bureaucratic norms.

This study examines whether NNPC E&P Limited's efficiency has improved post-restructuring, given its historical entanglement with bureaucratic inefficiencies. The analysis draws on Weberian bureaucracy theory, which emphasizes rationality and specialization, but also critiques rigid hierarchies that stifle innovation. By focusing on NNPC, the research highlights how bureaucratic reforms in Nigeria's energy sector could serve as a model for broader public sector transformation.

Statement of the Problem

The bureaucratic structures in Nigeria's government establishments, particularly exemplified by the Nigerian National Petroleum Company (NNPC) E&P Limited, have created systemic inefficiencies that hinder operational effectiveness and business productivity. Despite NNPC's transition to a commercial entity under the Petroleum Industry Act (PIA) 2021, which aimed to reduce bureaucratic constraints, persistent challenges still persist. Decision-making authority remains concentrated at top tiers, stifling subordinate initiative and delaying task execution through prolonged approval chains. For instance, NNPC E&P Limited still navigates overlapping regulatory mandates from over 20 federal agencies, including the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) and Nigerian Content Development and Monitoring Board (NCDMB), which create administrative bottlenecks.

Bureaucratic processes prioritize adherence to outdated protocols over adaptability, limiting responsiveness to market dynamics and innovation. NNPC's historical entanglement with public sector inefficiencies such as procurement delays and subsidy management has institutionalized slow decision-making cycles, despite recent reforms.The multiplicity of agencies involved in approvals (e.g., NCDMB, NUPRC, and NNPC's internal units) fosters conflicting mandates, rent-seeking behaviors, and duplication of efforts, deterring investment and operational agility.Many agencies operate based on individual discretion rather than institutional frameworks, undermining transparency and accountability.

This study seeks to investigate how these bureaucratic impediments affect NNPC E&P Limited's operational efficiency, particularly in light of recent executive orders aimed at streamlining processes. It questions whether structural reforms have adequately addressed systemic inefficiencies or merely replicated historical challenges under new frameworks.

Objectives of the Study

The aim of this study is to examine the effect of bureaucracy on business efficiency of government establishments in Nigeria. The specific objectives are to:

1. Examine the relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited.
2. Analyze the influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited.

Research Questions

1. What is the relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited?
2. What are the influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited?

Research Hypotheses

H1: There is no significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited.

H2: There is no significant influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited

Scope of the Study

This study has been confined to examining the effect of bureaucracy on business efficiency of government enterprises in Nigeria based on a study of NNPC E&P Limited. This seeks to x-ray components of bureaucracy such as hierarchical structures, rules and regulation, redtapism, excessive paperwork, poor customer service, strict adherence to procedures etc and how it impacts on timeliness of business decisions actions.

The research work covers a limited area which is on the effect of bureaucracy as a management practice or structure on timeliness of business decisions, actions and delivery which translates to efficiency and profitability.

Literature Review

Conceptual Review

Concept of Bureaucracy

The concept of bureaucracy is as old as modern industrial society. Throughout the history of management studies, the term “bureaucracy” has been widely used and taught by many academic scholars, business executives and public practitioners from diverse disciplines. This therefore implies that bureaucracy means different things to different people (Nnamdi, 2011; Sridhar, 2017 in Hussain, Haque, Baloch, 2019).

Coined by M. de Gournay, a Frenchman, bureaucracy was popularized by the German sociologist Max Weber in his seminal work "Economy and Society." Weber referred to his concept as the ‘ideal-type bureaucracy.’ in the sense that it is a pure but not perfect element for the rationalization of the modern world and a scheme composed of theorized features with which reality may be compared (Sapru, 2013; Florian, 2018, Serpa, 2018 & Ang, 2016 in Serpa and Ferreira, 2019).

Weber argued and believed that bureaucracy was the most rational way of organizing the state and its institutions stating that bureaucratic organizations are “dominant institutions of industrial society”. He argued that a bureaucracy is concerned with the issues of administration, coordinating and controlling complex series of tasks (Sager and Rosser, 2009, DuGay, 2000, Evans and Rauch, 1999 in Musonda, 2016).

Weber’s concept of bureaucracy was intended as an "ideal type," meaning a theoretical model that may not fully exist in reality but serves as a reference point for evaluating actual organizations. He saw bureaucracy as the most rational form of organization, particularly suited for complex, modern societies where efficiency and order are necessary (Sapru, 2013; Florian, 2018, Serpa, 2018 & Ang, 2016 in Serpa and Ferreira, 2019).

Business organizations in Nigeria have the balance on efficiency tilted in favour of the private sector, while the public sector or government owned businesses experience some form of laxity, inefficiency and low profitability. As Okwuise (2022) avers, that overtime, public sector organizations have been constantly reprimanded over their mediocre performance, especially when placed side by side with their private sector counterparts. They were seen to be performing below acceptable standards.

This is attributed to, among many things, the addiction to rules and routines, rigidity and redtapes that accompany the bureaucratic form of management structure practiced in government or public sector organizations which spirals to a form of observed laxity of workers towards ensuring efficient performance in the delivery of their duties. It has been highlighted that bureaucracy eliminates favouritism and enhances precision and clarity, while promoting organizational stability. However, it also discourages personal initiative, inspires organizational rigidity and slows down the pace of work because officials tend to concern themselves with routines and regulations at the expense of the goals they should achieve (Oyedijo, 1998).

The workplace is a business environment fashioned for efficiency and effectiveness towards achieving profit expansion. All workers have their duty to execute towards realizing these goals. Yet, often workers are at odds with fellow workers as those at the lower echelon of the organogram feel maltreated by those on top. There is no exception to the rule that things must be done orderly in any organization or establishment for efficiency to be birthed, be it in academic or business (Wahab and Jawando, 2008).

Ugben and Egobueze (2021) quoting Wise (1993) in Okonkwo (2009) emphasize that "the Nigerian public bureaucracies are too complex, characterized by excessive rigidity, and centralization of authority and operation, as such unable to deliver the needs of its citizens. This irresponsible approach by many public institutions has therefore spurred agitations and demands for institutional restructuring and reforms by stakeholders. This further suggests that the time has come for public institutions to carry out responsive approaches to overhaul the service."

The bureaucracy practiced in developed societies like the USA, Britain, Japan, France, and Germany have produced efficient, responsible and responsive administration while its implementation in developing societies like Ghana, Nigeria, etc have only elicited inefficiency, redtapism, unethical practices and above all, public outcry against it due to administrative malady (Ezeali and Edeh, 2007 in Ugben and Egobueze 2021).

Private businesses often have greater proclivity to be efficient due to market rivalry and profit motives which sharpens their sense of adaptability. They can acclimatize rapidly to market vagaries and implement strategies for growth. Government businesses, on the other hand, may battle bureaucratic obstacles such as reliance on rules and regulations and subscribing to procedures, which can retard the speed of or hamper efficiency (Oyedijo, 1995).

However, Weber also warned of potential drawbacks, such as the risk of over-regulation, excessive rigidity, and dehumanization, which can stifle creativity and lead to inefficiencies if the system becomes too rigid or impersonal. This is sometimes referred to as the "iron cage" of bureaucracy (Weber, 1922).

Concept of Business Efficiency

Efficiency has been defined to be the ability to get things done correctly or as Peter Drucker puts it, 'doing things right'. It is the maximization of output to input ratios. It further is classified as the use of resources wisely in a cost-effective way (Mbadiwe, 2010; Griffin, 2019)

Business on the other hand refers to all of the activities of an individual or group of individuals in producing and distributing goods and services to customers or organization that sells goods or services to consumers or other business activities (Brown et al 1997 in Diko, 2009).

Business efficiency is a broad concept which generally refers to the ability of a company to use its resources effectively to achieve desired outcomes. The perspectives of efficiency in business falls under the following metrics:

Operational Efficiency: Operational efficiency is the ability of an organization to deliver products or services to its customers in the most cost-effective manner without compromising quality. This definition highlights the importance of both cost and quality in achieving operational efficiency (Koch, 2011).

Resource Utilization: This is the measure of how well an organization utilizes its resources, such as labor, capital, and materials, to produce goods and services. This perspective directly emphasizes the significance of resource management for optimal output. (Porter, 1985).

Economic Efficiency: Economic efficiency refers to the optimal allocation of resources to achieve the maximum possible output from a given set of inputs. From the above it can be deduced that economic efficiency focuses on the relationship between inputs and outputs (Friedman, 1962).

Technical Efficiency: Technical efficiency is concerned with the production of maximum output from a given set of inputs. Scholars agree that this can stand as a measure of how well resources are used in the production process. Furthermore, technical efficiency underscores the importance of minimizing waste in production (Coelli et al., 2005).

Strategic Efficiency: Strategic efficiency involves aligning resources and activities with the strategic goals of the organization to maximize long-term performance and sustainability. This perspective connects efficiency with the overall corporate strategic objectives (Barney, 1991).

Scholars often use various performance metrics and benchmarks to evaluate these aspects of efficiency, depending on the specific context and focus of the analysis.

Scholars in the field of business posit that businesses seek to know the needs, wants, goals, values etc of customers before they can sell their goods to them. In general, business is a term that describes all the activities of the institutions that produce goods and services in their daily life for a studied audience. It is further seen as an activity undertaken by individuals or a group of people that generates value through the manufacture of goods and to meet the needs of society and gain some benefits or profit through the transaction (Amirullah & Imam Hardjanto, 2005 in Tine, 2018)

Efficiency is further explained to be concerned with the relation between resource inputs (costs, in the form of labour, capital, or equipment) and intermediate outputs, with classification into technical efficiency, productive efficiency and allocative efficiency (Palmer and Torgerson, 1999). It refers to the ability to get things done correctly or the “economic manner” in which goal-oriented operations are carried out which is something of an input-output ratio, it represents the amount of resources used to produce a unit of output (Stoner, 1982, Sandefur, 1983, Ndiomu, 1987 in Okwuise, 2022).

In basic terms, business activities can be grouped into three main classes: production, distribution, and consumption. Production deals with the transformation of raw materials to finished products, distribution is the movement of produced goods and services from one location to the next while consumption refers to the company's ability to create demand of goods & services offered, based on how much sale that acquired by the company (Tine, 2018).

In his work, Barnard (1938) qualified efficiency when he said that it is the cost benefit ratio incurred in the pursuit of organizations goals. From these definitions, we can deduce that for an organization to run efficiently it must consider the cost of resources (human and material) used in the production of a unit of output (Okwuise, 2022).

Businesses are characterized by the need for exchange, sale or transfer of goods and services for money, profit making motive, dealing in goods and services, uncertainty and risk bearing, continuity and regularity, while anchoring on significant elements as capital (material and non-material), materials, manpower/human resources, and management skill (Diko, 2009; Tine, 2018).

Concept of Hierarchy

The concept of hierarchy in bureaucracy refers to a structured system of authority and responsibility within an organization. It organizes individuals and departments into a tiered structure where each level has specific roles and authority, which facilitates order, control, and communication. Max Weber's defined hierarchy in bureaucracy as a system where positions are organized in a clear, formalized structure with a chain of command. Each level

of authority is clearly defined and has distinct responsibilities. He emphasized the importance of a hierarchical structure for maintaining order and accountability within organizations (Weber, 1922).

A hierarchical structure in bureaucracy ensures administrative efficiency where each employee knows their role and place within the organization. This helps to streamline administrative processes and improve efficiency (Kuhn, 1974). Merton (1968) further averred that authority and control are a function of hierarchy in a bureaucracy. In his work, he explains that each level of the organization has authority over the levels below it. This hierarchical control helps in maintaining consistency and enforcing rules and regulations (Merton, 1968). Hierarchical organization helps in coordinating activities and facilitating communication within an organization by establishing clear lines of authority and reporting relationships (Robinson, 1982).

Concept of Formal Rules and Procedures

The concept of formal rules and procedures in bureaucracy pertains to the established guidelines and standards that govern organizational behaviour and processes. These rules are designed to ensure consistency, predictability, and fairness within the organization.

In a bureaucratic system, formal rules and regulations provide a structured framework that guides behaviour and decision-making, helping to reduce ambiguity and ensure systematic functionality (March & Simon, 1958). Formal rules and regulations are essential features of bureaucracy in that they are designed to ensure that all employees follow standardized processes which facilitates order and predictability in organizational operations (Weber, 1922).

Furthermore, formal rules in a bureaucracy are intended to promote impartiality and fairness by applying the same standards to all employees, thus minimizing personal biases and favouritism thereby creating a fair and unbiased work environment (Merton, 1968). And as a spiralling effect, rules and procedures engender predictability, reliability and stability of an organization's processes by establishing clear expectations for handling various situations (Robinson, 1982).

Theoretical Review

Max Weber's Theory of Bureaucracy

While the central theme according to The German Sociologist, Max Weber is rationality which seeks to achieve systematization and efficiency, a few scholars see the excessive redtapism and paperwork which often delays smooth operations, higher emphasis of policies and procedures and conformity at the expense of performance as major drawbacks (Nnamdi, 2011; Sridhar, 2017 in Hussain, Haque, Baloch, 2019).

In Weber's words as quoted by Sapru (2013), bureaucracy is "an administrative body of appointed officials", and "is, from a purely technical point of view, capable of attaining the highest degree of efficiency and is, in this sense, formally and the most rational known means of carrying out imperative control over human beings. It is superior to any form in precision, in stability, in the stringency of its discipline, and in its reliability… It is, finally, superior both in intensive efficiency and in the scope of its operations, and is formally capable of application to all kinds of administrative tasks"

Weber considered bureaucracy to be a system of administration where an organization's operations are guided by laid down rules, regulations, procedures and methods for the aim of achieving efficiency. It is a system where emphasis is placed on legal-rational leadership, knowledge, qualification, and experience as the criteria for selection into organizations (Alornyeku, 2011).

According to the German sociologist, there was the need to establish a rational basis for the organization and management of large-scale undertakings. One of the most critical problems was how any large organization might function more systematically and efficiently. He therefore espoused this idea of a machine-like structure where activities are formalized by rules, job descriptions, training and a tight system of formal authority. To Weber, who was basically preoccupied with standardization, bureaucracy was an ideal organization, not the most desirable but in fact, the pure form of organization (Nnamdi, 2011; Egonmwam, 2008)

Weber elucidated three pure types of legitimate authority: rational-legal authority, traditional authority and charismatic authority. Although he argued that traditional and charismatic authorities were irrational and less efficient, when compared to rational-legal authority which provides the basis for basis for a bureaucratic organization (Sapru, 2013).

He itemized the following as the tenets/features of the Weberian bureaucracy:

1. Bound by rules. A pure bureaucracy functions in accordance with abstract rules. There is systematic control over official actions to facilitate standardization and equality.
2. A sphere of competence. Employee selection and promotion on the basis of technical competence: Usually through formal examination or by virtue of training or education. Thus, a systematic division of labour, power and responsibility as defined by administrative regulations.
3. Principle of hierarchy. Well defined hierarchy of authority, offices and positions were organized in a hierarchy of authority resulting in a chain of command or the scalar principle with each lower office under the control and supervision of a higher one.
4. Need for specialized training. The root of the authority of the bureaucrat is his knowledge and skill, therefore, for full rational application of rules which regulate the conduct of an office, specialized training is necessary.
5. Impersonal detachment. Impersonality of interpersonal relations of people working for the organization is paramount, not working for specific individuals. Also the separation of the property of the official from that of the office.
6. Keeping records. The administrative acts, decisions, and rules are formulated and recorded in writing.
7. Career service. Payment of salaries in accordance with responsibilities and social status, promotion and career advancement etc.
8. The non-bureaucratic head. Sets the rules to be followed, and decides which goals are to be served. The non-bureaucratic head usually is elected or inherits his position (Mbadiwe, 2010; Nnamdi, 2011; Sapru, 2013).

Scholars have put out arguments both in favour of and against the bureaucratic approach to organizations.

Jaques (1992) in Nnamdi (2011), submits that managerial hierarchy is the most efficient, hardiest and the most natural structure ever devised for large organizations. Stating further that managerial hierarchy creates a medium for attaining coordination among sub-units and when properly structured, hierarchy can release energy and creativity, rationalize productivity and actually improve morale.

Furthermore, Nnamdi (2011) argued that "the objectivity in employee selection is one of the outstanding advantages of Weber's bureaucracy as it reduces nepotism and other forms of favouritism by decision makers and replacing it with job-competence criteria."

However, Weber's bureaucratic model is argued to only work well only under conditions where machines work well such as when there is a straightforward task to perform, when the environment is stable enough to ensure that the products produced will be appropriate ones, when one wishes to produce exactly the same product time and again, when precision is at a premium and when the human machine parts are complaint and behave as they have been designed to (Nnamdi, 2011).

In fact, scholars argue for flatter structured organization which they referred to as "the organization of the future" given that bureaucratic organizations can have great difficulty in adapting to changing circumstances and keeping up with a rapidly changing environment since the rate of change is getting faster and faster. They further argued that for bureaucratic organizations to function as winning enterprises, they must establish a sense of urgency, generate excellent short-term performance and foster an adaptive corporate culture, develop and communicate a change vision/strategy (Kotter, 1996, Johansen and Swigart, 1996 in Nnamdi, 2011)

Bureaucratic organizations have difficulty adapting to change because they are designed to achieve predetermined goals and function like machines lacking in innovation. Therefore, flexibility and capacities for creative actions become critical than narrow efficiency. Furthermore, the compartmentalization created by bureaucratic divisions between different hierarchic levels, functions, roles and people tend to create barriers and stumbling blocks. Therefore, bureaucratic structure has been described as too mechanical for the needs of modern organizations, has become too obsolete because it is designed for stable environments, whereas the contemporary need is for a structure that is designed to respond effectively to change (Bennis, 1966 in Nnamdi, 2011).

As Pinchot (1994) submits, bureaucratic organization discourages initiative, encouraging people to obey orders and keep their place rather than to take an interest in, challenge and question what they are doing (Nnamdi, 2011).

Finally, employees lose opportunities for personal growth, often spending many hours a day on work they neither value nor enjoy, while organizations lose the creative and intelligent contributions that most employees are capable of making, given the right opportunities (Nnamdi, 2011).

The Administrative Management Theory

Prominent exponents of this theory include Henri Fayol, Chester Barnard and Colnel Urwick. Henri Fayol a French industrialist is considered as the father of modern management for his contribution in the administrative management field primarily focusing on the operational approach through 14 principles of management (Sridhar, 2017 in Hussain, Haque, and Baloch, 2019).

Here, the focus is on managing the total organization. Fayol divided the total industrial undertaking into six separate activities which are; Technical, Commercial, Financial, Security, Accounting and Administrative. He indicated that the last of these activities is by far the most important and deserves most attention (Sapru, 2013).

Fayol further identified the specific managerial functions under the administrative activity to be; Planning, Organizing, Commanding, Coordinating and Controlling. He believed that these functions accurately reflect the core of the management process (Griffin, 2019).

Key principles of this school of thought include division of work, authority and responsibility, discipline, unity of command, unity of direction, subordination of individual interest to general interest, remuneration, centralization, scalar chain, order, equity stability of tenure of personnel, initiative and esprit de corps (Robbins and Coulter, 2012 in Hussain, Haque, and Baloch, 2019)

1. Division of work. This leads to increased output and specialization. With both the worker and manager dealing with their separate tasks, they both acquire an ability, sureness and accuracy which increases their output.
2. Authority and responsibility. Encourages that special steps be taken to encourage people who wield authority to accept responsibility.
3. Discipline. Good discipline is as a result of effective leadership and clear understanding between management and workers regarding rules and the judicious use of penalties for infractions.
4. Unity of command. An employee should receive orders from one superior only. Should this be violated, authority is undermined, discipline in jeopardy, order disturbed and stability threatened.
5. Unity of direction. One head and one plan for a group of activities having the same objective.
6. Subordination of individual interest to general interest. The interest of the organization should prevail over that of an employee or group of employees.
7. Remuneration. Should be fair and reasonable for the services of the employee, and as cost for services received as an employer.
8. Centralization. Optimum degree of centralization for every decision-making situation.
9. Scalar chain. The dangers of excessive formalism. Fayol states that “it is an error to depart needlessly from the line of authority, but it is an even greater one to keep it when detriment to the business”. He suggested gangplanks (horizontal communication lines) should be used to prevent the scalar chain from slowing down actions.
10. Order. The right man at the right place. Precise knowledge of the human requirements and resources of the organization and their appropriate allocation to create a constant balance.
11. Equity. Workers aspire to equity and equality of treatment, which is the combination of kindliness and justice.
12. Stability of tenure. Ensures the smooth running of an undertaking.
13. Initiative. Thinking out a plan and ensuring its success.
14. Espirit de corps. Harmony among the personnel of an organization.

Henri Fayol’s administrative theory mainly torch-lit the personal duties of management at a much more granular level. He believed that management had five principal roles to uphold in an organization. These roles were to forecast and plan, to organize, to command, to co-ordinate, and to control. Forecasting and planning was the act of anticipating the future and acting accordingly. Organization was the running of the institution’s resources, both material and human. Commanding was keeping the organization’s actions and processes running. Co-ordination was the alignment and harmonization of the group’s efforts. Finally, control meant that the above activities were performed in accordance with appropriate rules and procedures (Olum, 2004).

Empirical Review

A number of studies have been conducted to demonstrate the effect of bureaucracy on institutions, particularly government institutions. According to a greater percentage of these studies, bureaucracy exerts a drawback effect on processes and procedures thereby slowing down efficiency.

Ugben and Egobueze (2021) examined bureaucracy and service delivery in the Nigerian public service. Their research titled "Bureaucracy and Service Delivery in the Nigerian Public Service: A Study of the Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, 2008-2018" discussed the bureaucratic challenges that the University encountered and the extent to which these challenges impacted on service delivery. The study adopted secondary data and content analysis as methods of data collection and analysis, as well as Systems Theory as the theoretical framework. Findings revealed that there is a nexus between bureaucracy and service delivery in the University and that bureaucracy is a necessary tool for the achievement of goals. However, the University bureaucracy does not institute transparency and accountability neither impacted positively on staff motivation but liable for red-tapeism, and delay of service delivery. It therefore submits that bureaucracy does not engender effective service delivery in the University. Also, extant rules and regulation are inflexible, and this causes delay and do not give rooms for initiatives and creativity, amongst others.

Also, Khalid Mohammed AlQahtani (2013) undertook a study titled "Investigating the Impact of Bureaucratic Factors on Government Organisational Performance in The Kingdom of Bahrain: A Multiple Case Study Approach". The main was to explore the bureaucratic factors related to governmental organisations that may influence their performance. Through conceptual and empirical research, several key factors have been identified which link organisational performance to social responsibility, job satisfaction, motivation, and decision quality. The case study design used multiple sources of evidence in a triangulation strategy to contribute to developing a perspective on bureaucracy and its impact to government organisations in the Kingdom of Bahrain. The research adopted a semi-structured interview research design in order to elicit the views of individuals and in-depth qualitative information. The findings in the context of this research confirmed that Bahrainis are highly rule-oriented, risk averse and do not readily accept change. In addition, they have a high preference for avoiding uncertainty thus they maintain rigid codes of belief and behaviour. The results of the empirical investigation have therefore enriched the growing literature of bureaucracy and performance of government organizations not only in the Kingdom of Bahrain but also in the global setting it used the Hofstede's cultural dimensions.

Adewuyi, A. O., & Olowookere, A. S. (2011) conducted a study titled "Bureaucratic Delays and Efficiency in Public Sector Operations: A Case of Nigerian Government Establishments". The study examined the impact of bureaucratic delays on the efficiency of Nigerian government establishments. The authors analyzed data collected from various ministries, departments, and agencies (MDAs), focusing on how bureaucratic bottlenecks affect resource allocation, project timelines, and decision-making. The results indicate that excessive bureaucratic procedures lead to delays in public sector projects and inefficiencies in service delivery. The study recommends streamlining bureaucratic processes to enhance the operational efficiency of government institutions in Nigeria.

Felix Kwame Alornyeku (2011) investigated "The Impact of Bureaucracy on Public Service Delivery: A Study of Kumasi Metropolitan Assembly". He noted that the Kumasi Metropolitan Assembly (KMA) is the local administrative authority mandated to provide services for accelerated development and does this through bureaucratic procedures outlined

by Max Weber. However, its bureaucratic machineries rather than fueling development programmes through public service delivery is said to have hindered the growth expected due to excessive bureaucratization of business processes, coupled with corruption. The study attempted to identify bureaucratic challenges that the Assembly encounters in service delivery and the extent to which these challenges impact on services to the people of the metropolis. It also sought to develop measures to minimise excessive bureaucracy in the working process of officials of the Assembly. It employed structured, unstructured and interviews questionnaires to solicit views from respondents about the impact of bureaucracy on service delivery. The study revealed among others that even though there is a clear practice of division of labour, departments lack technical equipment to effectively coordinate their activities, thereby resulting in delays in meeting the expectation of clients. Also, there was an overwhelming agreement to the fact that the Assembly's low productivity, due to excessive bureaucracy could negatively impact on the performance of the central government. The study concluded by recommending that KMA should be made to go through bureaucratic reforms and offer its staff regular training programmes on customer care and satisfaction. It is also to provide adequate offices to enhance service delivery.

Ajibade, T. A., & Obembe, T. S. (2013) examined "Bureaucracy and Its Impact on Organizational Efficiency: A Case Study of Nigerian Public Institutions". The research studied how bureaucracy affects the operational efficiency of Nigerian public institutions. Focusing on ministries and parastatals, using data from structured interviews and performance reports to assess the relationship between bureaucratic structures and organizational outcomes. Results showed that while formal rules and procedures ensure accountability, they often stifle creativity and delay decision-making, leading to inefficiency. The authors suggest that reforms focused on reducing hierarchical layers and streamlining processes can improve public sector efficiency.

Wahab and Jawando (2008) assessed "The Effects of Bureaucracy and its Implications for Adhocracy in the Workplace: A Study of Lagos State University". They found that bureaucracy is the dominant institution in modern industrial society. Unfortunately, bureaucracy has developed into objects leading to inflexibility and turning of means into ends. While adhocracy is the opposite of bureaucracy meant to reduce red tapism and rigidity in the latter. Data was collected from administrative staff of the Lagos State University in grade levels 7-14. Multi-stage sampling procedure was used to collect data from 180 respondents. In terms of data analysis, frequency distribution and simple percentile were used. The study found that about one-quarter of the respondents mentioned red-tapism as the major negative effect of bureaucracy. The workers complained of lack of discretionary power in decision-making as work was too centralized. In fact, others complained that it could lead to loss of interest in the job. Therefore, the overcentralised nature of decision-making process in the institution would retard the pace of work, thus the need for Adhocracy. The study therefore recommends the use of Adhocracy in order to improve efficiency and effectiveness in the workplace.

Akeju, K. O., & Adebayo, A. O. (2015) researched on "Bureaucratic Corruption and Public Sector Efficiency in Nigeria: An Empirical Investigation". The authors researched the intersection of bureaucracy and corruption in the Nigerian public sector and its effects on business efficiency. Using case studies from several Nigerian government agencies, the study showed that bureaucratic corruption significantly undermines efficiency, resulting in project delays, inflated costs, and the misallocation of resources. The authors argue that excessive bureaucratic regulations create opportunities for corruption, which further hinders public

sector performance. Recommendations are made for improving transparency and reducing bureaucratic inefficiencies to improve business efficiency in government establishments.

Sikawala Musonda (2016) conducted a study on "The study Bureaucracy and the challenges of coordination in service delivery: A comparative study of Kamanga and Kabulonga Primary Schools in Lusaka City 2010-2014". The study sought to draw lessons and understand why schools within the same district and level (primary) were performing differently. The study took a comparative approach to research. Qualitative research was deployed as means of carrying out the study. Both primary and secondary data were used. Primary data was collected from two schools which were sampled purposively. Data was collected using semi structured interview guides while secondary data was obtained from policy, legal, government and internal documents. Among the major findings was that the school's locations or environments have a major impact on how they function Furthermore, the avenues used for communication in the district have got poor information feedback mechanisms. Also, interference of higher offices in routine issues such placement and transfers, overshadows the chance of optimal utilization of human resources. This is because with interference, some schools will have more teachers while others, especially rural ones will have fewer. In addition, delayed communication among components of a system can lead to poor service delivery. This case, delays in communication between offices at district and school levels have affected coordination in an adverse manner.

Nwaogwugwu, I. G., & Ojiako, U. P. (2021) conducted a study titled "Administrative Bureaucracy and Performance in Nigerian Government Institutions: An Empirical Analysis of Service Delivery". Here they sought to analyze the relationship between administrative bureaucracy and service delivery in Nigerian government institutions. Using case studies from government institutions such as the Ministry of Education and the Ministry of Health, the study explored how administrative layers and procedures affect the efficiency of service delivery. The findings indicate that excessive bureaucracy slows down decision-making and hampers the effective implementation of public policies, thereby reducing the overall performance of these institutions. Recommendations for reducing bureaucratic layers and improving operational efficiency were proposed.

Research Gap and Significance

Existing literature critiques Nigeria's public bureaucracy but rarely evaluates post-reform outcomes in strategic sectors like oil and gas. This study bridges this gap by assessing whether NNPC E&P Limited's commercialization has mitigated bureaucratic barriers to efficiency, offering insights into balancing state oversight with operational autonomy in public enterprises.

By interrogating the interplay between bureaucratic structures and business outcomes, the study contributes to debates on institutional reforms in Nigeria's extractive industries, where efficiency directly impacts national revenue and economic stability

Methodology

Research Design

This study employs survey research method. This quantitative method is designed to capture measurable data as it involves the systematic gathering of information from respondents in order to understand and predict the behaviour of the population. This is to quantify the relationship between bureaucratic practices and business efficiency metrics in government

establishments in Nigeria. A research design refers to the arrangement of conditions for collection and analysis of data. It ensures to facilitate the smooth sailing of the various research operations, making the study efficient through the maximal yield of information from minimal expenditure (Kothari & Garg, 2014)

Population

The population of this study is made up of the 1,130 staff of NNPC E&P Limited. (Source: Human Capital Management Department of NNPC E&P Limited). In research, population refers to the entirety of a collection of individuals or items with shared basic and clearly defined characteristics in their numbers. It is further buttressed as the collection of all possible usable information as may be required or as clearly defined (Okpara, 2021).

Sample Size and Sampling Techniques

Sample in statistics refers to the representative of the population, which should reflect all the characteristics of the larger group, while the sample size is the definite number drawn as a sample from the population to be included in the study as participants (Omorogbe (2023).

The sample size for this study is made up of 295 employees drawn from the population. The Taro Yamane statistical formula was used to arrive at the sample size. This formular is particularly useful for studies where the population size is known, and an estimate of a sample size that is statistically significant for your research purposes is being sought after. The formula is generally expressed as:

$$n = \frac{N}{1 + N\ (e\ )2}$$

Where:

- n = Sample size
- N = Population size
- e = Margin of error (expressed as a decimal)

Applying the formula:

$$n = \frac{1130}{1 + 1130(0.05)2}$$

$$n = \frac{1130}{1 + 1130(0.0025)}$$

$$n = \frac{1130}{1 + 2.83} n = \frac{1130}{3.83} n = 295$$

Simple random sampling technique will be used to select the respondents from NNPC E&P HQ in Edo State. This technique ensures that every member of the population has an equal chance of being selected, thereby reducing bias and improving the generalizability of the findings.

As explained, the sampling technique is the approach or method employed in selecting the study elements to be included in a sample for the sole purpose of generating data for the study (Odigbo, 2018).

Sources of Data

Primary data will be obtained for the purpose of this study. The primary data will be gathered through a structured questionnaire focused on bureaucracy and its effect on business efficiency.
Primary data refer to data collected by the researcher him/herself which has not been previously gathered while secondary data are not generated directly by the researcher, but rather obtained from previously documented reports or studies by others (Odigbo, 2018).

Instrument of Data Collection

In this study, the instrument to be used for collecting data is the questionnaire designed by the researcher. It will be structured to reflect the entire variables of interest which are important to knowing if bureaucracy has effect on business efficiency in government establishments, particularly, NNPC E&P Limited.

The instrument will be divided into four sections; Section A, B, C and D. Section A will be designed to get the demographic profile of the respondents, Section B will look at the relationship between Hierarchical Structures and Timeliness of Decision-Making, Section C will focus on the Influence of Formal Rules and Procedures on Resource Allocation and Utilization while Section D will examine the impact of Formal Rationality on Task and Project Completion Timelines.

Each sections will contain five questions on bureaucracy and its effect on business efficiency of government establishments, particularly NNPC E&P Limited. Responses will be rated on a 5-points Likert scale model. Where 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Undecided (UD) 2 = Disagree (D) 1 = Strongly Disagree (SD).

Validity of the Instrument

The instrument will be face-validated by my supervisor as well as other experts in measurement and evaluation. The instrument will bescrutinized in terms of language structure, ambiguity and how suitable the rating scale is. These experts including my supervisor will be given the initial draft of the questionnaire instrument to make relevant input. The corrections will bereflected on the final draft of the questionnaire instrument.

Reliability of the Instrument

The reliability of the questionnaire will be tested using a pilot study. A small group of respondents from NNPC E&P Limited will complete the questionnaire, and the results will be analyzed using Cronbach's alpha to determine the internal consistency of the instrument. A Cronbach's alpha value of 0.7 or higher will be considered acceptable for the reliability of the instrument.

Method of Data Collection

The researcher will personally distribute the copies of questionnaire both electronically and in paper format to the respondents with the help of one research assistant. Permission will be secured from the authorities of NNPC E&P Limited to be used for the study. A total of 294 copies of the questionnaire will be distributed by the researcher and research assistant to the staff of the company for a period of two weeks.

Method of Data Analysis

The data collected through the survey questionnaire will be analyzed using descriptive statistics as well as inferential statistics with the aid of correlation analysis using the SPSS software to determine the mean, standard deviation, and correlation coefficient between the independent variable (bureaucracy) and dependent variable (business efficiency).

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This section presents, analyses and interprets the data collected from the sampled respondents on the effect of bureaucracy on business efficiency of government establishments in Nigeria: a study of NNPC E&P Limited. 295 copies of questionnaires were administered to the respondents but 188 returned. All the retrieved copies were properly filled and used for the analysis of the study. Descriptive and inferential statistics were used to present the collected and analyzed the data respectively. The descriptive summary of the demographic characteristics of the respondents were presented using cross-tables, frequency counts, percentages, charts, mean, standard deviations. The stated hypotheses were analysed with regression analysis with the aid of Statistical Package for Social Scientists (SPSS v 20).

Analysis of Characteristics of the Respondents

Table 1: **Staff Position**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior level	40	13.8	13.8	13.8
	Middle Level	176	59.6	59.6	73.4
	Junior Level	79	26.6	26.6	100.0
	Total	295	100.0	100.0	

Source: Field Survey Data (2025)

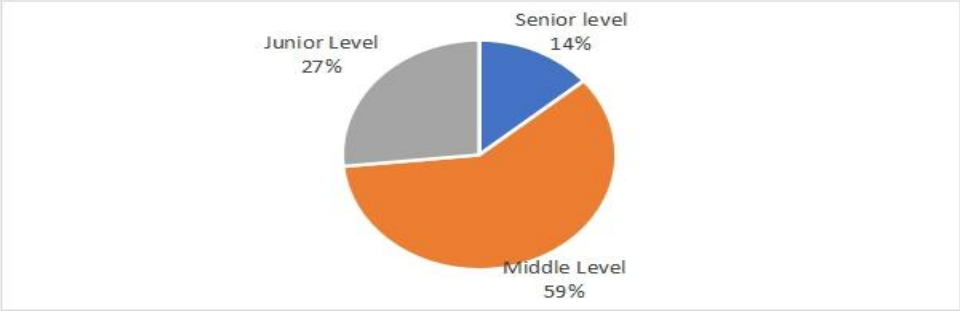


Fig. 1: Employment status of the respondents

Table 1 and figure 1 show the employment status of the respondents. 13.8 percent of the respondents are senior level employees, 59.6 percent of the respondents are middle level employees, while 26.6 percent are junior level employees.

Table 2 **Gender of the respondents**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	122	41.5	41.5	41.5
	Female	173	58.5	58.5	100.0
	Total	295	100.0	100.0	

Source: Field Survey Data (2025)

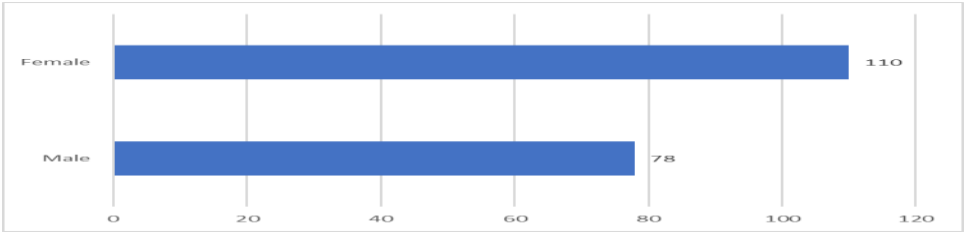


Figure 4.2: Gender of the respondents

Table 2 and figure 2 show the gender of the respondents. 41.5 percent of the respondents are male while 58.5 percent are female. A critical examination of the gender differences among the respondents shows that there are less males than females in the organization.

Table 3 **Years of Service in NNPC E&P Limited**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - 5 years	6	2.1	2.1	2.1
	11 - 15 years	129	43.6	43.6	45.7
	16 - 20 years	160	54.3	54.3	100.0
	Total	295	100.0	100.0	

Source: Field Survey Data (2025)

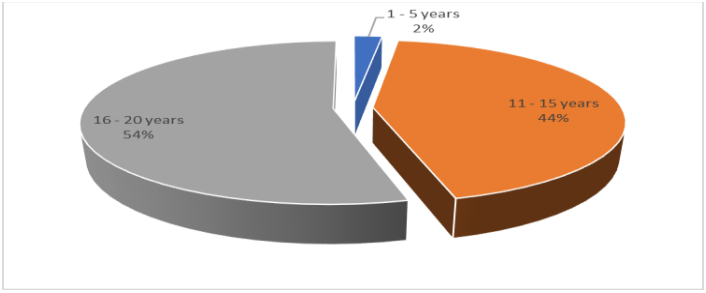


Figure 4.3: Years of Service in NNPC E&P Limited

Table 3 and figure 3 show that 2.1 percent of the respondents have spent 1-5 years in the organization, 43.6 percent spent 11-15 years while 54.3 percent have spent 16-20 years.

Table 4: Age of Group Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 28 years	100	34.0	34.0	34.0
	29 - 39 years	154	52.1	52.1	86.2
	40-50 years	41	13.8	13.8	100.0
	Total	295	100.0	100.0	

Source: Field Survey Data (2025)

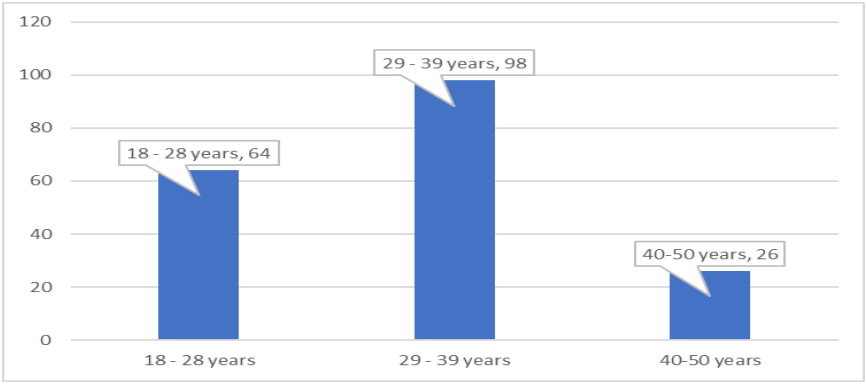


Fig. 4: Age of Group Respondent

The age group distribution shows that 34 percent are under 30 years old; 52.1 percent are between 29-39 years old; while 13.8 percent are above 40 years old. This implies that the copies of the questionnaire were evenly administered to respondents from various age grades.

4.3 DESCRIPTIVE ANALYSIS, INTERPRETATION AND DISCUSSION RESPONDENTS' RESPONSES

The responses are based on a five-point Likert scale coded with numerical values for ease of analysis. The values assigned are 5 for strongly agreed (SA), 4 for agreed (A), 3 for disagreed (D), 2 strongly disagreed (SD) and 1 Neutral. Results are interpreted using descriptive statistics such as percentages, means and standard deviations.

Analysis According to Research Questions

Table 5: Descriptive Analysis of the Respondents' Responses on the Relationship between Hierarchical Structures and Timeliness of Decision-Making

Items	Strongly Disagree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard deviation
The hierarchical structure in NNPC E&P leads to delays in decision-making.	25.5%	30.9%	18.1%	24.5%	1.1%	3.45	1.373
Multiple layers of authority slow down the decision-making process in NNPC E&P Limited.	24.5%	50.0%	10.6%	10.6%	4.3%	3.73	1.193
There is clear communication between different levels of the hierarchy in NNPC E&P Limited.	29.8%	43.6%	17.0%	8.5%	1.1%	3.68	1.370
The hierarchical structure of NNPC E&P Limited allows for efficient decision-making processes.	52.1%	46.8%	0.0%	0.0%	1.1%	4.50	.563
Grand Mean						**3.84**	**1.12**

Source: Field Survey Data (2025)

Table 5 shows that 56% of the respondents agreed that The hierarchical structure in NNPC E&P leads to delays in decision-making, while 25.5% disagreed with the statement (Mean = 3.45, Std. = 1.37);

73.4% of the respondents agreed Multiple layers of authority slow down the decision-making process in NNPC E&P Limited while 14.9% disagreed with the statement (Mean = 3.73, Std. = 1.19); 98.9% of the respondents agreed that There is clear communication between different levels of the hierarchy in NNPC E&P Limited while 9.6% disagreed with the statement (Mean = 3.68, Std. = 1.37); 56% of the respondents agreed that The hierarchical structure of NNPC E&P Limited allows for efficient decision-making processes while 1.1% disagreed with the statement (Mean = 4.5, Std. = 0.56).

Table 6: Descriptive Analysis of the Respondents' Responses on the Influence of Formal Rules and Procedures on Resource Allocation and Utilization

Items	Strongly Disagree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard deviation
The application of formal rationality in NNPC E&P Limited leads to faster project completion.	38.3%	46.8%	7.4%	5.3%	2.1%	4.06	1.096
Strict adherence to formal rationality causes delays in task completion within NNPC E&P Limited.	27.7%	38.3%	22.3%	10.6%	1.1%	3.48	1.479
Over-reliance on formal rationality slows down project execution in NNPC E&P Limited.	27.2%	43.5%	15.2%	13.0%	1.1%	3.66	1.312
The use of formal rationality in decision-making helps NNPC E&P meet project deadlines.	20.2%	39.4%	17.0%	12.8%	10.6%	3.35	1.373
Grand Mean						3.64	1.31

Source: Field Survey Data (2025)

85.1% of the respondents agreed that The application of formal rationality in NNPC E&P Limited leads to faster project completion, while 7.4% disagreed with the statement (Mean = 4.06, Std. = 1.10); 66% of the respondents agreed that Strict adherence to formal rationality causes delays in task completion within NNPC E&P Limited while 11.7% disagreed with the statement (Mean = 3.48, Std. = 1.5); 70.7% of the respondents agreed that Over-reliance on formal rationality slows down project execution in NNPC E&P Limited while 14.1% disagreed with the statement (Mean = 3.66, Std. = 1.31); 59.6% of the respondents agreed that The use of formal rationality in decision-making helps NNPC E&P meet project deadlines while 23.4% disagreed with the statement (Mean = 3.35, Std. = 1.37).

Table 7: Descriptive Analysis of the Respondents' Responses on the Impact of Formal Rationality on Task and Project Completion Timelines

Items	Strongly Disagree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard deviation
The application of formal rationality in NNPC E&P Limited leads to faster project completion.	12.8%	33.0%	20.2%	31.9%	2.1%	3.16	1.289
Strict adherence to formal rationality causes delays in task completion within NNPC E&P Limited.	12.0%	52.2%	17.4%	18.5%	0.0%	3.41	1.242
Over-reliance on formal rationality slows down project execution in NNPC E&P Limited.	20.4%	57.0%	12.9%	8.6%	1.1%	3.71	1.194
The use of formal rationality in decision-making helps NNPC E&P meet project deadlines.	20.2%	39.4%	17.0%	12.8%	10.6%	3.95	0.999
Grand Mean						**3.43**	**1.24**

Source: Field Survey Data (2025)

Table 7 shows that 45.7% of the respondents agreed that The application of formal rationality in NNPC E&P Limited leads to faster project completionwhile 34% disagreed with the statement (Mean = 3.16, Std. = 1.29); 64.1% of the respondents agreed that Strict adherence to formal rationality causes delays in task completion within NNPC E&P Limitedwhile 18.5% disagreed with the statement (Mean = 3.41, Std. = 1.24); 77.4% of the respondents agreed that over-reliance on formal rationality slows down project execution in NNPC E&P Limitedwhile 9.7% disagreed with the statement (Mean = 3.71, Std. = 1.19); 59.6% of the respondents agreed that he use of formal rationality in decision-making helps NNPC E&P meet project deadlines, while 23.4% disagreed with the statement (Mean = 3.95, Std. = 0.999).

Hypotheses Testing.

Regression and correlation analyses were used to test the stated hypotheses at 0.05 level of significance (95% confidence level).

Hypothesis One:

H_o: There is no significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited.

H_1: There is a significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited.

Independent variable (X) = Hierarchical structures

Dependent variable (Y) = Timeliness of decision-making in NNPC E&P Limited.

Correlations

		Hierarchical structures	Timeliness of decision-making
Hierarchical structures	Pearson Correlation	1	.686
	Sig. (2-tailed)		.000
	N	188	188
Timeliness of decision-making	Pearson Correlation	.686	1
	Sig. (2-tailed)	.000	
	N	188	188

. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis examines the relationship between hierarchical structures (independent variable) and timeliness of decision-making (dependent variable) in NNPC E&P Limited. The results reveal a Pearson correlation coefficient of 0.686, indicating a strong positive relationship between hierarchical structures and timeliness of decision-making. This means that as hierarchical structures within the organization become more defined or complex, the timeliness of decision-making improves significantly.

The significance level (Sig. 2-tailed) is 0.000, which is well below the 0.01 threshold, indicating that the observed correlation is statistically significant. This implies that the relationship between hierarchical structures and timeliness of decision-making is not due to chance.

Decision

Given the strength of the correlation and its statistical significance, the null hypothesis (H0), which states that there is no significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited, can be rejected. Instead, the alternative hypothesis (H1) is accepted, confirming that there is a significant positive relationship between hierarchical structures and the timeliness of decision-making within the organization.

Hypothesis Two:

H_0: There is no significant influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited

H_1: There is significant influence of formal rules and procedures on resource allocation and utilization within NNPT E&P Limited

Independent variable (X) = Formal rules and procedures

Dependent variable (Y) = Resource allocation and utilization within NNPT E&P Limited

Table 4.9: Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.396[a]	.157	.148	.74179

a. Predictors: (Constant), formal rules and procedures

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.907	1	9.907	18.004	.000[b]
	Residual	53.375	186	.550		
	Total	63.282	187			

a. Dependent Variable: resource allocation and utilization within NNPT E&P Limited

b. Predictors: (Constant), formal rules and procedures

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.777	.430		4.136	.000
	formal rules and procedures	.425	.100	.396	4.243	.000

a. Dependent Variable: resource allocation and utilization within NNPT E&P Limited

The regression analysis conducted examines the influence of formal rules and procedures (independent variable) on resource allocation and utilization within NNPC E&P Limited (dependent variable). The model summary indicates that the correlation coefficient (R) is 0.396, suggesting a moderate positive relationship between formal rules and procedures and resource allocation and utilization. The R-squared value is 0.157, meaning that approximately 15.7% of the variance in resource allocation and utilization can be explained by formal rules and procedures. This indicates that while formal rules and procedures do have an impact, there are likely other factors influencing resource allocation and utilization within NNPC E&P Limited.

The ANOVA table shows that the regression model is statistically significant, with an F-value of 18.004 and a p-value of 0.000. This implies that the model is a good fit for the data and that formal rules and procedures significantly influence resource allocation and utilization within the company.

The coefficients table reveals that the unstandardized coefficient (B) for formal rules and procedures is 0.425, with a standard error of 0.100. This coefficient suggests that for every unit increase in formal rules and procedures, resource allocation and utilization within NNPC E&P Limited increases by 0.425 units. The t-statistic for this coefficient is 4.243, with a highly significant p-value of 0.000, further confirming the strong influence of formal rules and procedures on resource allocation and utilization.

In summary, the analysis provides evidence to reject the null hypothesis (H0) and accept the alternative hypothesis (H1), concluding that formal rules and procedures do have a significant positive impact on resource allocation and utilization within NNPC E&P Limited.

Decision

Null hypothesis is rejected while the alternative hypothesis is accepted. This implies that there is influence of formal rules and procedures on resource allocation and utilization within NNPT E&P Limited.

Table 12: Summary of Results

HYPOTHESES	RESULTS	DECISIONS
There is no significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limited.	R= 0.686, < 0.000 Null hypothesis is not accepted	There is a significant relationship between hierarchical structures and timeliness of decision-making in NNPC E&P Limite
There are no influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited	R^2 = 0.157, F= 18.004, β= 0.425 and p < 0.000 Null hypothesis is not accepted	There are an influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited

Source: Researcher's Result (2025)

Summaryof Findings

This study explores the intricate relationships between organizational structures and operational efficiency within NNPC E&P Limited. Specifically, it investigates the impacts of hierarchical structures, formal rules and procedures, and formal rationality on critical aspects such as decision-making timeliness, resource allocation and utilization, and project completion timelines. By analyzing these relationships through empirical data, the study aims to uncover significant correlations and provide actionable insights that can enhance organizational performance. The findings indicate that hierarchical structures, formal rules, and rational procedures play crucial roles in shaping organizational outcomes, challenging some of the preconceived notions about the effectiveness of bureaucratic systems in modern corporate settings.

Empirical Findings

1. Hierarchical Structures and Timeliness of Decision-Making

- Hypothesis: There is no significant relationship between hierarchical structures and the timeliness of decision-making in NNPC E&P Limited.

Results: The analysis revealed a strong positive correlation ($R = 0.686$, $p < 0.000$) between hierarchical structures and decision-making timeliness, indicating that as hierarchical complexity increases, decision-making processes are significantly delayed.

Decision: The null hypothesis is rejected, confirming that hierarchical structures indeed have a significant impact on the timeliness of decisions within NNPC E&P Limited.

Interpretation: This finding suggests that the multi-layered organizational hierarchy may be contributing to bureaucratic delays, which in turn, slow down decision-making processes. This can hinder the company's agility and responsiveness to dynamic market conditions, potentially affecting its competitive edge.

2. Formal Rules and Procedures on Resource Allocation and Utilization

Hypothesis: There is no influence of formal rules and procedures on resource allocation and utilization within NNPC E&P Limited.

Results: The regression analysis showed a moderate influence ($R^2 = 0.157$, $F = 18.004$, $\beta = 0.425$, $p < 0.000$) of formal rules and procedures on resource allocation and utilization.

Decision: The null hypothesis is rejected, establishing that formal rules and procedures significantly influence how resources are allocated and utilized within the organization.

Interpretation: Formal rules and procedures are essential for ensuring transparency and fairness in resource allocation. However, overly rigid rules can also lead to inefficiencies, as they may not allow for the flexibility needed in resource utilization, particularly in response to unforeseen challenges.

Conclusion

The study underscores the importance of understanding the complexities within organizational structures and their direct implications on operational efficiency. Hierarchical structures, while necessary for maintaining order and clear lines of authority, can inadvertently slow down decision-making processes if not properly managed. Similarly, while formal rules and procedures ensure consistency and accountability, they must be designed to allow enough flexibility to optimize resource allocation and utilization.

Recommendations

1. Streamline Hierarchical Structures: NNPC E&P Limited should consider flattening its hierarchical structure to expedite decision-making processes. Reducing the number of approval layers can enhance the company's agility and responsiveness, allowing for quicker decisions in critical situations.

2. Revise Formal Rules and Procedures: The company should evaluate its current formal rules and procedures to identify areas where flexibility can be introduced without compromising accountability. This may involve creating adaptive frameworks that allow for deviations under certain circumstances, particularly in resource allocation.

3. Implement Continuous Feedback Mechanisms: Establishing a system for continuous feedback from employees at all levels can help identify bottlenecks within the organizational structure and procedural inefficiencies. This will enable the company to make informed adjustments in real-time.

Contribution to Knowledge

This study contributes to the existing body of knowledge by empirically demonstrating the significant roles that hierarchical structures, formal rules, and formal rationality play in organizational efficiency. It challenges the conventional wisdom that bureaucratic structures are inherently inefficient, showing instead that with proper management, these structures can support operational goals. The findings also provide a nuanced understanding of how formal procedures and rational decision-making processes can be leveraged to improve project outcomes and resource management within complex organizational settings.

Suggestions for Further Studies

1. Comparative Analysis Across Sectors: Future studies could compare the impact of organizational structures on efficiency across different sectors, such as oil and gas, telecommunications, and manufacturing, to identify sector-specific dynamics.

2. Longitudinal Studies on Organizational Changes: Research that tracks the effects of organizational restructuring over time would provide valuable insights into the long-term impacts of changes in hierarchy, rules, and rational processes.

3. Exploring Cultural Influences: Investigating the role of organizational culture in shaping the effectiveness of hierarchical structures and formal procedures could offer deeper understanding into the interplay between culture and efficiency.

4. Impact of Technological Integration: Given the increasing role of technology in modern organizations, future studies should explore how digital tools and platforms influence the relationship between organizational structures and operational efficiency, particularly in decision-making and project management.

5. Employee Perspectives on Organizational Structures: Conducting qualitative studies that focus on employee perspectives regarding hierarchical structures and formal procedures could reveal additional insights into the human factors that influence organizational efficiency.

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