

**RELEVANCE OF PURCAHSING PLANNING AND CONTROL
ON ORGANIZATIONAL PRODUCTIVITY
(A CASE STUDY OF NIGERIAN BOTTLING COMPANY PLC, ILORIN)**

BY

**HUSSEN SOFIAT OYINKANSOLA
ND/23/PSM/FT/0100**

**BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT
OF PROCUREMENT AND SUPPLY CHAIN MANAGEMENT, INSTITUTE OF
FINANCE AND MANAGEMENT STUDIES, KWARA STATE
POLYTECHNIC, ILORIN**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF NATIONAL DIPLOMA (ND) IN PROCUREMENT AND
SUPPLY CHAIN MANAGEMENT**

JULY 2025

CERTIFICATION

This is to certify that this research work has been completed, read through and approved as meeting the requirement of the Department of Procurement and Supply Chain Management, Institute of Finance and Management Studies, Kwara State Polytechnic in Partial fulfillment for the Award of (ND) National Diploma in Procurement and Supply Chain Management.

MR. AYANDA J. O.
(Project Supervisor)

DATE

DR. K. A. DANGANA
(Project Coordinator)

DATE

MR. SIDIQ OLAREWAJU
(Head of Department)

DATE

MRS. YUSUF MARIAM OMOWUMI
(External Examiner)

DATE

DEDICATION

This research project is dedicated to the Most High that preserved me throughout the course of my programme at Kwara State Polytechnic, Ilorin, for His infinite mercy that endureth forever in my live.

ACKNOWLEDGEMENTS

All praise belongs only to the Supreme Being the lord of all creation, the nourished and sustainer of mankind, peace and blessing of ALLAH be upon our noble prophet MUHAMMED (S.A.W) and all those who believe in his messengers and the only judgment.

My profound gratitude goes to my expressive parents MR and MRS HUSSEN. For their moral, spiritual and financial support towards my programme in Kwara State Polytechnic, Ilorin. Also their posse's unflinching prayer to forecast this academic career of mine.

I pray that may almighty ALLAH spare your life time, for you to reap the fruit of your labour (Amen)

I also wish to express my appreciation to one of the person that make me smile throughout my (ND) programme, Oloriebi of our family; Oseni Shukurat Omowunmi, may almighty ALLAH protect and guide you for the rest of your life and leave long life happiness and prosperity through your life time (Amen). Also I appreciate the efforts of my Gist partner, troublesome friend, best partner Kabir Sodiq may almighty Allah continue to bless you and enrich your pocket (Amen). And also my beloved sister Alhaja Sarat also known as (Mummy Ahmad) May almighty Allah continue to bless you and enrich your pocket.

I appreciate my friends Arowolo and Big Taofeekat for the support through my ND programme, my unpreserved is due to my supervisor, my guardian, Elder, Mr Ayanda J. O. in the Department of Procurement and Supply Chain Management, Kwara State Polytechnic, Ilorin for taken his time to read and edit errors in the research work, useful advice and leading me through the stage of my work.

Also I appreciate the efforts of my HOD and all my mentor and able lecturers and staff in the department of procurement and supply chain management.

My greeting also goes to my amicable IT man MR. OPOOLA ABDULQODIR for taking his time to design my project work may ALMIGHTY ALLAH continue to guide you and support you (Amen).

ABSTRACT

This research investigates the Relevance of Purchasing Planning and Control on the Productivity of Organizations, with a focus on how structured procurement systems influence operational efficiency and organizational performance. The study employed a combination of questionnaires, interviews, and literature review to gather both empirical and theoretical data. It aimed to evaluate how effective purchasing planning and control mechanisms contribute to timely material acquisition, cost reduction, and overall productivity. The findings reveal that purchasing planning plays a vital role in ensuring the right materials are procured at the right time and cost, thereby minimizing delays, reducing waste, and avoiding excess inventory. Similarly, control mechanisms such as inventory management, vendor evaluation, and performance monitoring help maintain quality standards, reduce operational risks, and align procurement activities with organizational goals. Conversely, poor planning and lack of control were linked to inefficiencies like overstocking, understocking, late deliveries, and increased operational costs. The study concludes that purchasing planning and control are not just administrative functions but strategic tools necessary for achieving competitiveness and productivity. It recommends that organizations adopt modern procurement technologies, provide ongoing staff training, implement strong internal controls, and build effective supplier relationships. These measures will enhance procurement performance, reduce costs, and significantly improve organizational productivity in a dynamic business environment.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of contents	vi

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study	1
1.2 Statement to the Problems	2
1.3 Objectives of the Study	3
1.4 Significance of the Study	3
1.5 Scope of the Study	3
1.6 Research Questions	3
1.7 Formulation of Research Hypothesis	4
1.8 Historical Background of the Nigeria Bottling Company, Plc	4
1.9 Definition of the Terms	4

CHAPTER TWO: LITERATURE REVIEW

2.1 Conceptual Framework	6
2.2 Theoretical Framework	11
2.3 Empirical Review	13
2.4 Gaps in Literature	15

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction	17
3.2 Research Method Used	17
3.3 Sources of Data	18

3.4	Data Collection Tools	18
3.5	Research Population and Sampling Size	19
3.6	Sampling Procedure Employed	19
3.7	Statistical Techniques Used in Data Analysis	20

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1	Introduction	21
4.2	Data Presentation	21
4.3	Data Analysis	23
4.4	Discussion of Findings	25

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1	Summary of Findings	26
5.2	Conclusion	26
5.3	Recommendations	27
	References	29

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

In today's competitive business environment, purchasing planning and control play a vital role in enhancing organizational productivity. Purchasing planning involves the forecasting, budgeting, and scheduling of purchasing activities to ensure timely availability of materials needed for production. Control, on the other hand, ensures that purchasing activities are executed according to plan, budget, and standards (Lysons & Farrington, 2016). When effectively implemented, purchasing planning and control reduce material shortages, avoid overstocking, and promote cost-effectiveness, all of which directly contribute to improved productivity.

As businesses expand and markets become more dynamic, the need for strategic purchasing becomes increasingly evident. In manufacturing organizations such as Nigerian Bottling Company Plc (NBC), efficient purchasing planning is critical because raw materials must be procured in the right quantity, quality, and time to sustain production flow. According to Monczka, Handfield, Giunipero, and Patterson (2015), poor purchasing decisions can cause production delays, increase operational costs, and lower customer satisfaction. Conversely, good purchasing planning supports seamless operations and enables organizations to meet customer demand efficiently.

Nigerian Bottling Company Plc, Ilorin plant, as a major player in the Nigerian beverage industry, depends heavily on effective procurement systems to maintain its production schedule and market share. Purchasing planning and control in NBC involve coordination between procurement, production, and logistics teams to ensure uninterrupted production, minimized costs, and maximized output. Therefore, studying how purchasing planning and control influence productivity within NBC Ilorin provides critical insights into how organizations can improve performance through strategic procurement.

Moreover, in a manufacturing setting where timely availability of raw materials is critical, poor purchasing planning can result in production stoppages and unmet customer demands. This directly affects organizational productivity, leading to increased lead times, underutilization of resources, and higher operational costs. According to Baily et al. (2008), effective purchasing planning ensures a smooth flow of materials, aligns procurement with production schedules, and reduces the risk of delays that can negatively impact customer satisfaction and profitability.

In addition, technological advancements and global supply chain dynamics have made purchasing functions more complex and strategic. Companies now rely on integrated purchasing systems that support real-time data analysis, supplier performance monitoring, and automated ordering. When properly controlled, these systems improve accuracy in demand forecasting and inventory management. For Nigerian Bottling Company Plc, adopting a well-structured purchasing plan with tight control mechanisms not only boosts internal efficiency but also supports long-term competitiveness in the fast-moving consumer goods (FMCG) sector.

1.2 STATEMENT OF THE PROBLEM

Despite the importance of purchasing planning and control in ensuring continuous production, many organizations still face inefficiencies such as stockouts, overstocking, poor supplier relationships, and procurement delays. These issues can lead to decreased productivity and profitability. In the case of NBC Ilorin, challenges such as supply disruptions, procurement inconsistencies, and inadequate inventory planning may hinder the company's ability to maintain steady production levels. This study, therefore, seeks to examine how purchasing planning and control practices affect organizational productivity at NBC Ilorin.

1.3 OBJECTIVES OF THE STUDY

The main objective of this study is to examine the relevance of purchasing planning and control on organizational productivity. The specific objectives are:

- i. To assess the current purchasing planning practices at NBC Ilorin.
- ii. To examine the extent to which purchasing control contributes to production efficiency.
- iii. To identify the challenges facing purchasing planning and control at NBC.
- iv. To provide recommendations for improving purchasing strategies to enhance productivity.

1.4 SIGNIFICANCE OF THE STUDY

This study will be significant in several ways. First, it will contribute to academic literature by providing empirical evidence on the link between purchasing planning and organizational productivity. Secondly, the findings will guide procurement professionals and organizational leaders on best practices for efficient purchasing. Thirdly, the study will offer practical insights for NBC and similar manufacturing firms on how to optimize their procurement systems for improved performance. Lastly, it can serve as a reference for future research in procurement and supply chain management.

1.5 SCOPE OF THE STUDY

The study is focused on the purchasing planning and control practices of Nigerian Bottling Company Plc, Ilorin plant. It covers procurement activities, inventory management, supplier relationships, and internal controls related to purchasing. The research is limited to NBC Ilorin's procurement and production departments and does not include the company's branches outside Ilorin.

1.6 RESEARCH QUESTIONS

The study is guided by the following research questions:

- i. What purchasing planning strategies are employed by NBC Ilorin?

- ii. How does purchasing control impact productivity at NBC Ilorin?
- iii. What challenges are associated with purchasing planning and control in NBC?
- iv. What improvements can be made to enhance purchasing effectiveness?

1.7 FORMULATION OF RESEARCH HYPOTHESIS

To analyze the relationship between purchasing planning/control and productivity, the study proposes the following hypotheses:

H₀: Purchasing planning and control have no significant effect on the productivity of Nigerian Bottling Company Plc, Ilorin.

H₁: Purchasing planning and control have a significant effect on the productivity of Nigerian Bottling Company Plc, Ilorin.

1.8 HISTORICAL BACKGROUND OF NIGERIAN BOTTLING COMPANY PLC

Nigerian Bottling Company Plc was established in 1951 and is a franchise bottler of Coca-Cola products in Nigeria. It began operations in Lagos but now operates across various locations in the country, including Ilorin. NBC is a subsidiary of Coca-Cola Hellenic Bottling Company (CCHBC), one of the largest bottlers in the world. The Ilorin plant is a key facility in NBC's production and distribution network, supplying soft drinks to markets across Kwara State and neighboring regions. The company's commitment to quality and efficiency underscores the importance of a robust purchasing system to ensure timely procurement of ingredients, packaging materials, and spare parts essential for continuous production.

1.9 DEFINITION OF TERMS

- i. **Purchasing Planning:** The process of forecasting and organizing the procurement of materials based on production needs and market demand.
- ii. **Purchasing Control:** Activities aimed at ensuring that procurement operations align with planned strategies and budget constraints.

- iii. **Productivity:** The efficiency with which inputs are converted into outputs in the production process.
- iv. **Procurement:** The acquisition of goods and services necessary for organizational operations.
- v. **Supply Chain:** The entire network of entities involved in producing and delivering a product to the final consumer.

CHAPTER TWO

LITERATURE REVIEW

2.1 CONCEPTUAL FRAMEWORK

2.1.1 Understanding Purchasing Planning and Control

Purchasing planning and control are vital aspects of an organization's supply chain management, encompassing the process of determining procurement needs, setting purchasing goals, and ensuring the effective and efficient acquisition of goods and services (Monczka et al., 2018). Purchasing planning refers to the proactive approach organizations take to assess their requirements and forecast future needs, while purchasing control involves managing and overseeing the entire procurement process to ensure it aligns with organizational goals (Tate et al., 2021). Proper planning and control help organizations avoid shortages, reduce excess inventory, and ensure that procurement meets production schedules, all of which contribute to enhanced productivity.

Effective purchasing planning allows organizations to align their procurement strategies with broader business objectives, ensuring that the right materials are acquired at the right time and at optimal prices (Gadde & Håkansson, 2019). Control mechanisms, on the other hand, ensure that procurement operations adhere to established standards, budgets, and timelines, minimizing the risk of inefficiency and wastage. Organizations that emphasize purchasing planning and control are more likely to maintain a competitive edge by managing costs and ensuring that production processes are not hindered by supply chain disruptions (Kouvelis et al., 2018). The importance of these processes cannot be overstated, as poor purchasing practices can lead to delays, increased costs, and reduced operational productivity.

In the context of organizational productivity, purchasing planning and control are directly linked to operational efficiency. A company that effectively manages its procurement activities ensures that all departments have the necessary resources when needed,

minimizing downtime and preventing production delays. Moreover, strategic purchasing helps organizations mitigate the risk of fluctuating prices by locking in favorable terms with suppliers, which contributes to cost management and better profit margins (Christopher, 2016). By integrating purchasing planning with organizational goals, companies can improve overall performance and productivity through streamlined processes and reduced operational bottlenecks.

While the strategic importance of purchasing is clear, it requires constant monitoring and adjustment. In rapidly changing markets, purchasing planning must remain flexible and responsive to shifts in demand, supplier performance, and market conditions. Hence, a robust control system is essential for continuously assessing procurement activities to ensure alignment with the organization's evolving needs and objectives (Cox, 2017).

2.1.2 Impact of Purchasing Planning and Control on Cost Management

Purchasing planning and control are crucial for managing organizational costs effectively. A well-planned purchasing strategy helps reduce unnecessary expenditures by ensuring that the company only acquires what is needed, when it is needed, and at the best price possible. In practice, this means companies can avoid over-purchasing or under-purchasing inventory, both of which can lead to financial inefficiencies (Harrison, 2020). By optimizing inventory levels and ensuring timely procurement, purchasing planning can directly impact an organization's bottom line by reducing holding costs, stockouts, and the need for last-minute, expensive procurement decisions.

Furthermore, control mechanisms such as vendor management, cost tracking, and performance evaluations help ensure that the procurement process is transparent and that expenditures remain within budget. These tools allow organizations to identify areas where costs can be further minimized, such as negotiating better terms with suppliers or identifying alternative, less expensive sourcing options (McKeown & Templar, 2019). Research has shown that companies that implement effective purchasing control

mechanisms often experience better financial performance due to their ability to minimize unnecessary spending and optimize procurement costs (Handfield & Nichols, 2020).

Moreover, purchasing planning allows organizations to leverage economies of scale, reducing per-unit costs as purchase volumes increase. Companies that engage in detailed forecasting and planning are more likely to secure bulk discounts and favorable contract terms, which can lead to significant savings over time (Ellram, 2018). Such cost-saving measures play an essential role in boosting productivity, as resources can be redirected toward other areas of the organization that require investment. In this way, purchasing planning and control not only reduce procurement costs but also contribute to the organization's overall efficiency and ability to compete in the market.

While purchasing planning and control are essential for cost management, they also help organizations manage risks associated with procurement. For instance, by maintaining strategic relationships with multiple suppliers, companies can reduce the risk of price volatility and ensure continuity in supply, even during market disruptions (KPMG, 2020). Thus, an organization's ability to manage costs through purchasing is not limited to price negotiation but extends to risk management, which in turn supports long-term productivity goals.

2.1.3 Purchasing Planning and Control in Enhancing Supply Chain Efficiency

Purchasing planning and control are foundational to the efficiency of an organization's supply chain. Effective procurement ensures that raw materials, components, and services are delivered on time, which prevents production delays and keeps operations running smoothly (Christopher, 2019). Strategic planning helps forecast future needs and streamline supply chain activities, while control mechanisms ensure that these activities are executed without delays or inefficiencies. By accurately forecasting demand and aligning procurement with production schedules, purchasing planning helps avoid

stockouts or overstocking, both of which can hinder supply chain efficiency (Monczka et al., 2022).

A key aspect of purchasing control is the management of supplier relationships. Organizations that engage in regular performance evaluations of their suppliers are better positioned to ensure quality and timely deliveries (Lamming et al., 2018). By fostering strong relationships with suppliers and monitoring their performance closely, companies can reduce disruptions caused by late deliveries or subpar products. This level of control enhances the supply chain's overall performance, which, in turn, boosts organizational productivity by ensuring that production processes are uninterrupted and resources are available when needed.

Additionally, purchasing planning plays a critical role in maintaining an optimal balance between inventory and supply chain costs. Companies that adopt just-in-time (JIT) procurement strategies, for example, are able to minimize inventory holding costs while ensuring that production materials arrive exactly when needed (Harrison, 2020). Such strategies require precise forecasting, planning, and coordination between purchasing and other departments, all of which are facilitated by effective purchasing control. This integration of purchasing planning and control with supply chain management results in a more streamlined and efficient supply chain, enhancing productivity by reducing waste, lowering costs, and increasing output.

Finally, purchasing planning and control are integral in identifying and eliminating inefficiencies within the supply chain. By continuously monitoring and assessing procurement activities, organizations can pinpoint areas where improvements can be made, such as reducing lead times, improving supplier reliability, or automating procurement processes (Handfield & Nichols, 2018). These efforts help create a more agile and responsive supply chain, allowing organizations to adapt quickly to changing market conditions and maintain high productivity levels.

2.1.4 Strategic Role of Purchasing Planning and Control in Organizational Productivity

Purchasing planning and control are not only about managing costs and supply chains; they are strategic tools that directly influence organizational productivity and competitive advantage. A well-managed procurement system enables organizations to maintain consistent production schedules, minimize downtime, and allocate resources efficiently across departments (Cox, 2019). Strategic purchasing decisions, including supplier selection and contract management, can contribute to the overall success of the organization by ensuring the timely availability of high-quality materials at competitive prices.

In organizations where purchasing planning and control are integral to decision-making, there is a marked improvement in operational efficiency. Purchasing decisions are aligned with the company's broader strategic goals, ensuring that procurement activities support overall business objectives, such as market expansion, product innovation, or cost leadership (Tate et al., 2021). For example, in industries where technological advancements are critical, procurement planning can prioritize the acquisition of the latest materials and components, ensuring that the organization remains competitive and productive.

Additionally, strategic purchasing planning allows companies to optimize their use of resources, reducing waste and improving productivity (Gadde & Håkansson, 2019). By ensuring that purchasing decisions are informed by data and aligned with organizational goals, companies can maximize their output without increasing costs. This approach to procurement supports the efficient use of resources, reduces unnecessary overheads, and enhances the organization's ability to scale its operations while maintaining productivity. The strategic nature of purchasing planning and control also plays a key role in fostering innovation within organizations. By establishing strong relationships with suppliers and

staying abreast of market trends, organizations can gain access to new technologies, materials, and innovations that enhance their productivity and operational capabilities (McKeown & Templar, 2019). Therefore, the strategic alignment of purchasing planning and control with organizational goals is crucial for ensuring that procurement activities contribute to long-term productivity and success.

2.2 THEORETICAL FRAMEWORK

This study has adopted two theories theory which are Resource Based viewpoint theory and Transaction Cost Economics theory. The resource-based viewpoint theory is important as procurement relay on required resources which needed by organization to ensure better functions toward improved performance. The modern theory is referred to the extent to which organizations follow the modern technology and science to reach its performance. Thus, modernization is a common characteristic of 21st century, which is adopted by all types of organizations in the world.

2.2.1 Resource Based Viewpoint Theory

According to Resource Based Viewpoint Theory (RBV), an organization's success is largely dependent on the resources at its disposal. When the firm puts its strengths to use, it may gain a competitive edge that might last for years. The purpose of RBV in procurement planning is to justify the priority that the organization places on the procurement process and the essential functions of the period in question so that it can fulfill its obligations and accomplish its objectives. The foundation of outsourcing is a company's need to compensate for a deficiency in-house by contracting with an external supplier of valuable, rare, unique, and well-organized resources and competencies. In outsourcing context, the success of a firm or its failure in the economy is influenced by various elements.

In the words of Brammer (2022) the ability of a firm to adopt strategies such as innovation, consistent improvement in addition to preserving its connection with external

elements is paramount in maintaining its competitive edge. Presently, this study emphasizes on elucidating corporate strategy through the lens of resource-based view (RBV) theory. French (2019) highlighted that a company's strategy describes the correlation between its external environment with its internal capacities and resources. In this regard, a firm is obligated to undergo restructuring, embrace modern technology and invest in resourceful human capital to align with this new economic setting. As such RBV technique is concerned with a company's internal settings for instance assets and strengths as a way of enhancing its competitiveness.

The RBV method explains how businesses gain and maintain a competitive edge by accumulating and using resources effectively (Ahmed, 2019). A company is a collection of growth-inducing resources and practices. An organization's competitive edge originates in its better resources, according to the resource-based view. Planning for acquisitions is the sole place where a company's strategy may be articulated in relation to its available resources (Kipkorir, 2018). Only 'valued, uncommon, imperfectly imitable, and non-substitutable' resources, as defined by the RBV, may provide a company with a lasting competitive advantage. A company's ability to accumulate greater profits via product differentiation rests on the premise that it has distinctive sets of resources and related competencies that are difficult for rivals to replicate. Specialized assets guarantee financial success, broaden commercial prospects, and boost company efficiency. Plant and equipment are examples of physical resources; administrative and technical personnel are examples of human resources; and knowledge and experience are examples of organizational resources.

2.2.2 Transaction Cost Economics theory

Transaction Cost Economics (TCE) is a theory developed by Ronald H. Coase, an economist and Nobel laureate, in his seminal paper titled "The Nature of the Firm," published in 1937. Coase's work on TCE fundamentally changed the way economists and

scholars in related fields thought about the organization of economic activities within firms and markets (Miguel, 2021). Transaction cost economics is understood as alternative modes of organizing transactions (governance structures such as markets, hybrids, firms, and bureaus) that minimize transaction costs. Transaction cost theory posits that the optimum organizational structure is one that achieves economic efficiency by minimizing the costs of exchange. The theory suggests that each type of transaction produces coordination costs of monitoring, controlling, and managing transactions (Gianfaldoni, 2021). In the context of procurement planning and organizational performance in the public sector, TCE provided understandings into the make-or-buy decision and the choice of governance mechanisms.

2.3 EMPIRICAL REVIEW

According to a study by Kiplel and Keitany (2018), the effectiveness of the company's suppliers is now crucial to its survival. Many companies and academics have looked into the question of what factors impact supplier performance, both favorably and adversely. However, the procurement processes in underdeveloped nations like Kenya have been the subject of relatively little research. Weak legislative framework and lack of expertise among public procurement practitioners have been hallmarks of Kenya's public procurement system. The research strategy used in this study was explanatory. A total of 119 suitable vendors were selected as the sample size. Self-administered questionnaires and interview schedule instructions were utilized to compile the data for this study's census of the suppliers. Descriptive statistics were used for data analysis. According to the data collected, planning has several benefits, including improved efficiency, lower costs, higher quality, more efficient use of resources, faster decision making, and more creative solutions to problems. Suppliers' effectiveness in providing services is improved when procurement planning is used.

Ahmed (2019) research was to find out how strategic procurement planning affected the procurement results of state-owned companies in Mombasa County, Kenya. The research set out to examine the relationships between the processes of determining what help is needed, how that help is prioritized, how much help is needed, and how it is procured. The study utilized a descriptive design, and the sample was drawn using a stratified random sampling process to ensure it was really representative of the community at large. Specifically, 204 individuals were picked out of 34 state enterprises in Mombasa County, including both middle and senior level staff. At the 95% confidence level, the sample size of 135 indicated statistical significance. Primary data was collected by questionnaires sent to the various divisions, such as procurement, finance, human resources and administration, operations, engineering, and legal. The relationship between the dependent and independent variables was determined by descriptive analysis using SPSS version 24. To assess the strength of the link between independent and dependent variable, both multivariate regression analysis and Pearson correlation coefficient (r) were adopted. Frequency tables, Percentages and a central tendency table were utilized to present quantitative analysis of the study outcomes. In the County of Mombasa, Kenya, government companies were observed to benefit significantly as a result of pointing out their requirements during procurement.

Higiyo (2021) carried out research in Kicukiro District, Rwanda to assess how Strategic Procurement Planning boosted state agencies effectiveness. As such, procurement strategy needs to be established by a state body before bids are awarded in Rwanda. Errors and inconsistencies during procurement certainly brings a ripple effect regarding success, blocking maximum benefit from being achieved. In this regard, current research purpose was to assess procurement planning and its impact on the performance of the public sector in Kicukiro District region in Rwanda. The study used an explanatory research approach, and the sample size was 258 full-time workers. One of the most

important indicators of improving public institution performance was found to be the timely and accurate assessment of requirements. The results strongly support the researcher's conclusion that the efficiency of public entities may be improved via the use of recognizing needs and tendering procedures. The research suggests that in order to boost Kicukiro District's performance, tendering techniques should be prepared by identifying demands, constructing a tendering procedure, estimating the budget, and including the user unit.

Uyarra and Flanagan (2020) assessed public procurement, innovation and industrial policy: Rationales, roles, capabilities and implementation. The study takes a single case study approach, our case being the progressive institutionalization of PPI as an element of regional innovation policy in Galicia over time. In its 2009 strategic plan, the Health Service of Galicia (SERGAS), serving 95% of the Galician population and representing more than 40% of the regional government budget, indicated that the financial crisis would have direct consequences on its performance, and that innovation in new healthcare processes and new partnerships would be needed if the region was to respond to the needs. There is an argument that innovation policy should steer economic transformation in socially desirable directions.

2.4 GAP IN LITERATURE

This study has taken 106 populations who have direct works related to procurement planning functions from Ruhengeri referral hospital and reporting health centers (42 working at Ruhengeri referral hospital main location and 64 from 12 health centers under management of Ruhengeri referral hospital). The researcher has determined that due to the small population size, a census inquiry method employed instead of sampling. This study used both primary and secondary data, and each has its specific instruments for collection including questionnaire, documentary and interview. Here the researcher tends to interpret frequency, percentages, mean, and standard deviation, as results of Statistical

Package for Social Scientists (SPSS) version 20 while content analysis used to analyze qualitative data.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research methodology used in the study, focusing on the approach and techniques employed to collect and analyze data for the study of "Relevance of Purchasing Planning and Control on Organizational Productivity." The aim of this research is to evaluate how purchasing planning and control impact the productivity of organizations, with a specific focus on a selected organization in the context of Kwara State Polytechnic. This chapter discusses the research method, data sources, data collection tools, population sample size, sample procedure, and statistical techniques used for analysis.

The research methodology plays a crucial role in ensuring that the findings of the study are reliable, valid, and representative of the target population. The methodological approach chosen for this study is designed to align with the research objectives and provide insights into how purchasing planning and control processes influence organizational productivity.

3.2 RESEARCH METHOD USED

This research adopts a quantitative research method, as it is well-suited for studying the impact of purchasing planning and control on organizational productivity in a measurable and systematic way. The quantitative approach allows for the collection of numerical data that can be analyzed using statistical methods to test hypotheses and draw conclusions (Creswell, 2019).

The study employs a descriptive correlational research design to explore the relationship between purchasing planning and control and organizational productivity. This design is appropriate because it allows for the examination of how different variables, such as procurement practices and supply chain management, correlate with productivity

outcomes in an organization. The use of correlational analysis helps to identify patterns and relationships between the independent variable (purchasing planning and control) and the dependent variable (organizational productivity).

3.3 SOURCE OF DATA

The data for this study is sourced from two primary sources:

- i. **Primary Data:** Primary data is collected directly from respondents through surveys and questionnaires administered to employees involved in purchasing, procurement, and supply chain management at Kwara State Polytechnic. This data includes information about the purchasing processes, planning techniques, and control mechanisms, as well as their perceived impact on productivity within the organization.
- ii. **Secondary Data:** Secondary data is gathered from relevant organizational documents, reports, and academic literature on purchasing planning, control practices, and organizational productivity. The secondary data helps to contextualize the findings from primary data and provides additional insights into best practices and theoretical frameworks relevant to the study.

3.4 DATA COLLECTION TOOLS

The primary data collection tool used in this study is a structured questionnaire designed to capture respondents' views on the impact of purchasing planning and control on organizational productivity. The questionnaire contains both closed and open-ended questions, allowing respondents to provide quantitative responses while also offering the opportunity for qualitative insights. The questions are tailored to address key themes such as:

- i. The purchasing planning process within the organization
- ii. Control mechanisms in procurement activities
- iii. Perceived impact of purchasing practices on organizational productivity

iv. Challenges faced in implementing effective purchasing planning and control

To complement the questionnaire, interviews are conducted with key stakeholders in the procurement and supply chain departments to gather in-depth insights and further clarify the quantitative findings.

3.5 RESEARCH POPULATION SAMPLE SIZE

The population for this study consists of employees involved in purchasing, procurement, and supply chain management at Kwara State Polytechnic. This includes managers, procurement officers, supply chain coordinators, and other relevant personnel. According to the organization's staffing records, there are approximately 150 employees involved in procurement and related functions at the institution.

From this population, a sample size of 50 respondents is selected to ensure that the data collected is representative and sufficient for analysis. This sample size is considered adequate given the nature of the research and the population size, ensuring that the results can be generalized to the larger population within the organization (Yamane, 1967).

3.6 SAMPLE PROCEDURE EMPLOYED

The stratified random sampling technique is employed to select the respondents for this study. This technique involves dividing the population into distinct subgroups, or strata, based on their roles within the procurement and supply chain departments. These strata may include procurement officers, supply chain managers, and support staff. Once the strata are identified, a random sample is selected from each subgroup, ensuring that all relevant perspectives are represented.

Stratified random sampling ensures that the sample accurately reflects the distribution of employees in various roles, thus minimizing bias and increasing the reliability of the findings. The goal is to capture a wide range of opinions and experiences regarding purchasing planning and control across different levels of the organization.

3.7 STATISTICAL TECHNIQUES USED IN DATA ANALYSIS

The data collected from the questionnaires and interviews will be analyzed using several statistical techniques to test the hypotheses and draw meaningful conclusions about the impact of purchasing planning and control on organizational productivity:

- i. **Descriptive Statistics:** Descriptive statistics, such as mean, median, mode, and standard deviation, will be used to summarize and describe the central tendencies and variability of the data. These statistics provide an overview of respondents' perceptions and experiences regarding purchasing planning and control.
- ii. **Correlation Analysis:** Pearson's correlation coefficient will be used to determine the strength and direction of the relationship between purchasing planning and control and organizational productivity. This technique will help identify whether there is a significant correlation between the procurement practices and productivity levels within the organization.
- iii. **Regression Analysis:** To further explore the relationship between the independent variable (purchasing planning and control) and the dependent variable (organizational productivity), multiple regression analysis will be applied. This technique allows for the assessment of the impact of multiple factors (e.g., purchasing strategies, control mechanisms) on organizational productivity, accounting for the influence of other variables.
- iv. **Chi-Square Test:** A chi-square test of independence may also be used to examine categorical data and determine whether there is an association between different demographic characteristics (e.g., role within the organization) and responses to the survey questions.

These statistical techniques will be conducted using statistical software such as SPSS or Excel, ensuring that the analysis is rigorous and accurate.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

This chapter presents the analysis and interpretation of data collected to evaluate the relevance of purchasing planning and control on organizational productivity at Nigerian Bottling Company (NBC) Plc, Ilorin. The data is organized into demographic profiles of respondents, analysis of research questions, hypothesis testing, and a discussion of key findings. A sample size of 35 employees was used for this study.

4.2 DATA PRESENTATION

4.2.1 Demographic Data Analysis

Table 4.1: Gender Distribution of Respondents

Variable	Frequency	Percentage
Male	22	62.9%
Female	13	37.1%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, Males constituted 62.9% of respondents, reflecting a gender imbalance in the departments surveyed.

Table 4.2: Age Distribution

Table 4.1: Gender Distribution of Respondents

Variable	Frequency	Percentage
18–30 years	12	34.3%
31–40 years	15	42.9%
41+ years	8	22.8%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, Most respondents (42.9%) were aged 31–40, indicating a middle-aged workforce.

Table 4.3: Educational Qualification

Variable	Frequency	Percentage
SSCE	5	14.3%
Bachelor's Degree	25	71.4%
Master's Degree	5	14.3%
Total	35	100%

Source: Research Field Survey, 2025

According to 71.4% held bachelor's degrees, suggesting a educated workforce.

Table 4.4: Years of Experience

Variable	Frequency	Percentage
<2 years	7	20.0%
2–5 years	18	51.4%
>5 years	10	28.6%
Total	35	100%

Source: Research Field Survey, 2025

Over half (51.4%) had 2–5 years' experience, indicating moderate experience.

Table 4.5: Department of Respondents

Variable	Frequency	Percentage
Procurement	10	28.6%
Production	15	42.9%
Quality Control	8	22.8%
Finance	2	5.7%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, Production department dominated responses (42.9%).

4.3 DATA ANALYSIS

Q1: To assess current purchasing planning practices

Table 4.6: Existence of Structured Purchasing Plan

Variable	Frequency	Percentage
Strongly Agree	16	45.7%
Agree	12	34.3
Neutral	4	11.4%
Disagree	3	8.6%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, 80% agree NBC has a structured purchasing plan.

Table 4.7: Frequency of Plan Updates

Variable	Frequency	Percentage
Quarterly	20	57.1%
Biannually	10	28.6%
Annually	5	14.3%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, Plans are updated quarterly (57.1%), ensuring flexibility.

Q2: To examine purchasing control's contribution to production efficiency

Table 4.8: Inventory Management Efficiency

Variable	Frequency	Percentage
Very Efficient	20	57.1%
Efficient	10	28.6%
Inefficient	5	14.3%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, 80% perceive inventory management as efficient.

Table 4.9: Supplier Quality Monitoring

Variable	Frequency	Percentage
Strongly Agree	14	40.0%
Agree	15	42.9%
Neutral	6	17.1%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, 82.9% agree supplier quality is monitored effectively.

Q3: Challenges in purchasing planning and control

Table 4.10: Budget Constraints

Variable	Frequency	Percentage
Major Challenge	20	57.1%
Minor Challenge	10	28.6%
Not a Challenge	5	14.3%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, Budget constraints hinder purchasing (57.1%).

Table 4.11: Supplier Reliability

Variable	Frequency	Percentage
Unreliable	18	51.4%
Occasionally Reliable	12	34.3%
Reliable	5	14.3%
Total	35	100%

Source: Research Field Survey, 2025

According to the table above, 51.4% report supplier unreliability.

Q4: Recommendations for improvement

Table 4.12: Need for Digital Tools

Variable	Frequency	Percentage
Strongly Agree	25	71.4%
Agree	8	22.9%
Neutral	2	5.7%
Total	35	100%

Source: Research Field Survey, 2025

From the table above, 94.3% support adopting digital procurement tools.

4.4 DISCUSSION OF FINDINGS

1. Purchasing Planning: NBC has structured plans, but infrequent updates reduce adaptability.

2. Production Efficiency: Effective inventory management and supplier monitoring drive efficiency.

3. Challenges: Budget constraints and supplier reliability hinder optimal performance.

4. Recommendations: Invest in digital procurement tools and diversify supplier networks.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

This study examined the relevance of purchasing planning and control on the productivity of organizations, using empirical data and theoretical analysis. The research aimed to determine how structured purchasing processes, effective planning, and control mechanisms contribute to the smooth functioning and profitability of an organization. Through the use of questionnaires, interviews, and relevant literature, several important findings were drawn.

The study revealed that purchasing planning is a critical factor in ensuring the timely availability of materials, reducing waste, minimizing costs, and avoiding production delays. Organizations that properly forecast their material requirements and plan their procurement processes experience fewer disruptions in their operations. It was also found that control mechanisms such as vendor evaluation, inventory control, and performance monitoring significantly enhance efficiency and ensure that quality standards are met.

Furthermore, the study showed that poor planning and lack of control in purchasing activities lead to overstocking, understocking, late deliveries, and increased operational costs—all of which negatively affect organizational productivity. Respondents affirmed that purchasing planning and control provide a strategic advantage in competitive markets by aligning procurement activities with organizational goals, improving cost-effectiveness, and enhancing overall performance.

5.2 CONCLUSION

Based on the findings, it can be concluded that purchasing planning and control are indispensable tools for achieving organizational productivity. Effective planning ensures that the right quantity and quality of materials are acquired at the right time and cost, while control measures guarantee that procurement activities are conducted efficiently

and within budget. When properly implemented, these processes contribute to reduced operational costs, improved product quality, timely service delivery, and increased customer satisfaction.

The study also emphasizes that purchasing should not be treated as a routine administrative function but rather as a strategic element that directly affects organizational success. Therefore, for an organization to thrive in a competitive business environment, it must invest in skilled procurement personnel, embrace modern purchasing technologies, and adopt a well-structured planning and control system.

5.3 RECOMMENDATIONS

In light of the study's findings, the following recommendations are made to enhance purchasing planning and control for improved organizational productivity:

Adopt Strategic Purchasing Practices: Organizations should treat purchasing as a strategic function by integrating it into overall business planning and involving procurement experts in key decision-making processes.

Training and Development: Continuous training should be provided for purchasing staff to enhance their skills in planning, negotiation, inventory management, and supplier evaluation.

Use of Technology: Organizations should adopt procurement software and digital tools to improve accuracy in planning, monitor supplier performance, and enhance transparency and accountability in purchasing operations.

Establish Clear Control Systems: Strong internal control systems should be developed to monitor purchasing activities, track expenditures, and ensure compliance with organizational policies and standards.

Vendor Relationship Management: Building long-term relationships with reliable suppliers can help ensure consistency in supply, better pricing, and improved quality, which positively impacts productivity.

Regular Performance Reviews: Management should periodically assess the performance of the purchasing department in relation to productivity goals and make necessary adjustments for continuous improvement.

REFERENCES

- Ammer, D. S. (2019). *Materials Management and Purchasing*. New York: McGraw-Hill.
- Baily, P., Farmer, D., Crocker, B., Jessop, D., & Jones, D. (2020). *Procurement Principles and Management* (11th ed.). Pearson Education.
- Burt, D. N., Petcavage, S., & Pinkerton, R. (2021). *Supply Chain Management: A Strategic Perspective*. Pearson.
- Chase, R. B., Jacobs, F. R., & Aquilano, N. J. (2022). *Operations Management for Competitive Advantage*. McGraw-Hill.
- Dobler, D. W. & Burt, D. N. (2019). *Purchasing and Supply Management: Text and Cases*. McGraw-Hill.
- Handfield, R. B., Monczka, R. M., Giunipero, L. C., & Patterson, J. L. (2021). *Sourcing and Supply Chain Management*. Cengage Learning.
- Lysons, K., & Farrington, B. (2020). *Purchasing and Supply Chain Management* (9th ed.). Pearson Education Limited.
- Ogunnaike, O. (2020). Strategic Procurement and Organizational Performance in Nigeria. *Journal of Business and Management Studies*, 8(2), 44–56.
- Omoniyi, M. B. (2021). The Effect of Purchasing Planning on Production Efficiency in Manufacturing Firms. *Nigerian Journal of Procurement Studies*, 5(1), 65–78.
- Osuala, E. C. (2021). *Principles of Purchasing and Supply Management*. Enugu: Cheston Agency Ltd.
- Porter, M. E. (2019). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Yusuf, A. B. (2022). Purchasing Control and Performance in Nigerian Manufacturing Firms. *African Journal of Industrial Economics*, 4(3), 21–33.