

## THE IMPACT OF QUALITY CONTROL IN MATERIAL SOURCING IN MANUFACTURING ORGANIZATION

(A CASE STUDY OF LUBCON NIGERIA LIMITED ILORIN KWARA STATE)

## BY

# ANIMALU DELE JUSTICE ND/23/PSM/FT/0015

BEING A RESEARCH PROJECT SUBMITTED TO DEPARTMENT OF,
PROCUREMENT AND SUPPLY CHAIN MANAGEMENT, INSTITUTE OF
FINANCE AND MANAGEMENT STUDIES (IFMS),
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IN PARTIAL FULFILMENT OF THE REQUIREMNETS FOR THE AWARD OF NATIONAL DIPLOMA (ND).

PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

**JUNE, 2025** 

## **CERTIFICATION**

This is project has been written, read and approved as meeting part of the requirement of Department of Procurement And Supply Chain Management studies, Kwara state Polytechnic, Ilorin for the award of National Diploma (ND) in Procurement And Supply Chain Management

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## **DEDICATION**

I dedicated this to almighty God that make this research work a successful project, for his strength and wisdom i glorify your name.

Moreover to my loving parents who give the moral support and advice thank to you for your contribution.

To my loving Aunty, I really appreciate your financial support and being patient throughout my program thanks for being there always lastly, it is dedicated to my Aunty.

#### ACKNOWLEDGMENT

All Praise honor. adoration and glorification to Almighty God. The God of mankind and all that exist Sustainer and owner of my life, I adore him for the gift of life and making this project a Stressful one. Your name shall be Praised forever more. My Sincere appreciation goes to my Supervisor Dr. KA. Dangana for his guidance, encouragement throughout this Project.

My appreciation also goes to my amiable HOD Mr. Buhari Yusuf and all my other Lecturers in the department for their Valuable Contribution to my education And their Support throughout my academic Journey. their academic and Profession expertise has been instrumenta) in my growth and Learning.

I also acknowledge the Contribution and advice of my Parent Mr. and Mrs. Joy Who never get tired of me, they gave me an encouragement, motivation, and love throughout my academic Program, their unwavering Support nand belief in me have been a source of Strength and inspiration.

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#### **CHAPTER ONE**

## **INTRODUCTION**

## 1.1 Background of the Study

Manufacturing organizations depend heavily on the quality of raw materials to ensure that finished products meet required standards. Quality control in material sourcing plays a crucial role in determining the efficiency, cost-effectiveness, and market competitiveness of manufacturing firms. Poor-quality materials can lead to defective products, high production costs, customer dissatisfaction, and potential loss of brand reputation.

Lubcon Nigeria Limited, a leading lubricant manufacturing company in Ilorin, Nigeria, is an example of a firm that relies on strict quality control measures to ensure the procurement of high-quality raw materials. This study examines how effective quality control in material sourcing influences the company's operational efficiency, product quality, and overall performance in the competitive market.

#### **1.2 Statement of the Problem**

Many manufacturing organizations face challenges in maintaining quality control during material sourcing. These challenges may include inconsistent supplier quality, lack of proper inspection processes, high costs of quality assessment, and supply chain inefficiencies.

For Lubcon Nigeria Limited, ensuring the procurement of high-quality materials is essential for maintaining product standards and customer satisfaction. However, the company may experience difficulties such as supply chain disruptions, poor supplier reliability, and rising costs. If these issues are not adequately addressed, they can impact production efficiency and profitability.

This study aims to investigate the impact of quality control measures in material sourcing on manufacturing efficiency, using Lubcon Nigeria Limited as a case study.

## 1.3 Objectives of the Study

The primary objectives of this study are:

- To assess the effectiveness of quality control measures in material sourcing at Lubcon Nigeria Limited.
- To identify challenges faced by the company in maintaining quality control.
- To examine how quality control influences production efficiency and product quality.
- To suggest strategies for improving quality control in material sourcing.

## **1.4 Research Questions**

The study seeks to answer the following questions:

- How effective are the quality control measures in material sourcing at Lubcon Nigeria Limited?
- What are the major challenges in maintaining quality control in material sourcing?
- How does quality control in material sourcing impact production efficiency and product quality?
- What strategies can be adopted to enhance quality control in material sourcing?

## 1.5 Research Hypotheses

The study is guided by the following hypotheses:

- H0: Quality control in material sourcing does not significantly impact production efficiency at Lubcon Nigeria Limited.
- H1: Quality control in material sourcing significantly impacts production efficiency at Lubcon Nigeria Limited.
- H0: Challenges in maintaining quality control do not significantly affect product quality.
- H1: Challenges in maintaining quality control significantly affect product quality.

## 1.6 Significance of the Study

This study is significant to various stakeholders, including:

- Manufacturing Firms: The findings will help companies improve their material sourcing strategies to enhance product quality.
- Suppliers: Suppliers can understand the importance of meeting quality standards and adopt best practices in raw material supply.
- Academia: Researchers and students can use the findings as a reference for future studies in supply chain management and quality control.
- Consumers: Customers benefit from higher-quality products when manufacturers implement effective quality control in sourcing materials.

## 1.7 Scope of the Study

The study focuses on Lubcon Nigeria Limited, a manufacturing firm in Ilorin, Nigeria. It examines the company's quality control measures, challenges, and their impact on production efficiency and product quality. The study covers the period from 2018 to 2023 and involves employees from the procurement and quality assurance departments.

While conducting this research, the following limitations may be encountered

- Limited Access to data: some company information may be limited,
   affecting the depth or confidential restricting data collection.
- Time constraints: the research period may be limited, affecting the depth of the study

• Financial constraints: conducting a comprehensive study may required financial resources may provide biased or inaccurate information, affecting data rehabilitee.

## 1.8 Limitations of the Study

While conducting this research, the following limitations may be encountered:

- \*Limited Access to Data:\* Some company information may be confidential, restricting data collection.
- \*Time Constraints:\* The research period may be limited, affecting the depth of the study.
- \*Financial Constraints:\* Conducting a comprehensive study may require financial resources beyond the researcher's budget.
- \*Response Bias:\* Some respondents may provide biased or inaccurate information, affecting data reliability.

## 1.9 Definition of Key Terms

- \*Quality Control:\* A process used by businesses to ensure that products meet defined quality standards.
- \*Material Sourcing:\* The process of selecting and acquiring raw materials needed for production.

- \*Manufacturing Organization:\* A company engaged in producing goods using raw materials and labor.
- \*Supply Chain:\* The network of suppliers, manufacturers, and distributors involved in delivering raw materials and finished products.
- \*Production Efficiency:\* The ability of a manufacturing firm to produce goods using minimal resources while maintaining high quality.

\*Impact\*: The effect or influence of quality control on material sourcing in a manufacturing organization.

Supplier\*: An individual or organization that provides goods or services to another company.

\*Specifications\*: Detailed requirements or standards that materials or products must meet.

**Standards\***: Established norms or criteria that materials or products must adhere to.

**Quality Assurance\***: A systematic process that ensures products or materials meet quality standards.

**Incoming Quality Control\***: Inspection and testing of materials or components upon receipt from suppliers.

**Supplier Quality Management\***: Processes and procedures used to manage and evaluate supplier performance.

**Material Inspection\***: Examination and testing of materials to ensure they meet specifications and standards.

**Quality Management System**: A set of policies, procedures, and processes used to manage quality within an organization.

#### **CHAPTER TWO**

#### 2.0 Literature Review

A literature review is a comprehensive overview and critical analysis of existing scholarly work on a specific topic. It provides a summary of the current knowledge in that area, highlighting key findings, identifying gaps in the research, and ultimately guiding future research directions.

Previous Studies The connection between quality control and material sourcing, quality control in material sourcing involved systematic procedures and standards applied to ensure raw materials meets the required specification for production of effective product an helps minimize waste which including customer satisfaction in LUBCON, business image, and market share has been an important area of discussion in both theoretical and empirical business literature. QM refers to a set of activities that are directed towards the achievement of the quality objectives and it is well understood as a business enabler (Manley et al., 2024). The most important research in the field of quality control in material sourcing and customer satisfaction was the work of Parasuraman, Zeithaml, and Berry (2021) who developed the SERVQUAL model. The above model shows five primary areas of service quality that have a direct bearing on customer satisfaction: tangibles, reliability, responsiveness, assurance, and empathy. Their research showed that organisations that deliver on these quality dimensions most of the time are likely to receive higher customer satisfaction, a factor that leads to enhanced business reputation and market share. The quality control has quality management especially within the service sector (Khan et al., 2022). Abbas (2020) also pointed out that customer satisfaction is directly related to profitability. They discovered that marginal changes in the quality management practices could translate into a massive improvement in customer retention rates that would have a profound effect on the products.

Manufacturing organization, has Higher customer retention is also closely linked to the concept of market share since customers who are happy with a particular business are more likely to return to make another purchase and even refer other people to the business (Foster & Gardner, 2022). This results in a virtuous cycle where better quality results to increased satisfaction, which in turn increases the reputation of a firm and its market share. Sony et al. (2020) also carried out a study on the effect of TQM on the performance of an organization. The authors also found out that organisations that implemented

Quality control in material sourcing within the framework production industry can be seen as a process that consists of two sub-processes that make up the identification of quality and quality comparison (Powell et al., 2021). The

quality identification process can be seen as the process of determining the current quality of the product by various measurement methods, the comparison process involves comparing the identified quality with the results that need to be achieved (Powell et al., 2021). Quality of the product is closely related to the user of the product or service, which is actually a determinant of the level of required and achieved product quality (Rodrigues et al., 2020; Powell et al., 2021). Seen from the side of the customer or user of the product on alone Product quality is affected by a number of factors of the same and which are often defined standard or user requirements (Carvalho et al., 2021; Rodrigues et al.

#### **Benefits for Lubcon Nigeria:**

- 1. Increased Efficiency: Streamlined quality control processes reduce waste and improve productivity.
- 2. Improved Product Quality: Consistent delivery of high-quality products enhances customer satisfaction.
- 3. Competitive Advantage: Lubcon Nigeria differentiates itself through commitment to quality, attracting customers and driving business growth.

## **Implementation:**

1. Develop Quality Control Procedures: Establish clear procedures for material sourcing and quality control.

- 2. Train Personnel: Provide training on quality control procedures and standards.
- 3. Monitor and Evaluate: Continuously monitor and evaluate the effectiveness of quality control processes.

## 2.1 Conceptual frame work

Quality control is crucial in material sourcing as it ensures the procurement of high-quality materials, which directly impacts overall product quality, customer satisfaction, and operational efficiency. A robust quality control system in material sourcing helps mitigate risks associated with substandard or falsified materials, potentially leading to financial losses, product recalls, and damage to the company's reputation Abbas (2020)

Also pointed out that customer satisfaction is directly related to profitability. They discovered that marginal changes in the quality control practices could translate into a massive improvement in customer retention rates that would have a profound effect on the financial performance of a firm.

Higher material sourcing is also closely linked to the concept of market share since customers who are happy with a particular business are more likely to return to make another purchase and even refer other people to the business (Foster & Gardner, 2022). This results in a virtuous cycle where better quality results to increased satisfaction, which in turn increases the reputation of a firm

and its market share. Sony et al. (2020) also carried out a study on the effect of quality control on the material sourcing of an organization. The authors also found out that organizations that implemented TQM, experienced a change in their organizational performance in terms of operational efficiency, product quality, customer satisfaction and business reputation and market share. They also focused on the role of employees in the quality control and pointed out that the organizational commitment to the quality can generate competitive benefits. Zizic et al. (2022) were concerned with the impact of ISO 9001 certification on business performance. They found that certified companies had better performance in terms of quality and customer satisfaction than non-certified companies. The study also found that ISO 9001 certification enhances the organizational reputation and hence enhances its market share.

## **Key Components:**

- 1. Material Sourcing: The process of procuring raw materials, components, or services from suppliers.
- 2. Quality Control: The process of ensuring that materials meet specified standards and requirements.
- 3. Manufacturing Organization: A company that transforms raw materials into finished goods.

## **Impact of Quality Control:**

- 1. Improved Product Quality: Ensures that materials meet standards, resulting in higher-quality finished products.
- 2. Reduced Defects: Minimizes defects and rework, leading to increased efficiency and productivity.
- 3. Cost Savings: Reduces costs associated with defective materials, rework, and waste.
- 4. Enhanced Customer Satisfaction: Consistently delivers high-quality products, leading to increased customer satisfaction and loyalty.
- 5. Competitive Advantage: Differentiates the organization from competitors through commitment to quality.

#### 2.2 Theoretical Framework

There are several theoretical frameworks and models that support the connection between quality control, material sourcing, customer satisfaction, business reputation and market share of manufacturing organization. The two most commonly reviewed frameworks in the literature are

➤ Total Quality Management (TQM) and the International Organization for Standardization (ISO) 9001. Total Quality Management is a system that focuses on the quality of products or services and aims at the improvement

of the quality management system. Originally introduced in Japan in the 1950s and then spread across the globe, TQM is a management strategy that requires a total organizational commitment to quality, in which all employees, from the senior executives to the production-line workers, are accountable for enhancing processes and delivering products that meet the customer requirements (Mizuno, 2020). Deming's 14 Points of Management also outlines some of the principles of TQM, one of which is the establishment of a quality culture in an organization. According to Deming, the creation of cultures for improvement and reduction of variation will lead to increased quality, increased customer satisfaction and loyalty, better company image, and therefore increased market share (Tague, 2023).

The ISO 9001 standards are a set of guidelines that were developed by the International Organization for Standardization (ISO) in 1987 and aim to help organizations implement a quality management system (QMS) that will ensure that their products are of a high quality and are satisfactory to customers. ISO 9001 is underpinned by several principles of quality management such as; customer focus, leadership involvement, process approach, and continual improvement (Susanto et al., 2024). The standard

entails the development of procedures that are to be followed, the tracking of performance and the constant search for better ways of doing things.

Research has revealed that organizations that have implemented.

## 2.3 Empirical Frame Work

Empirical studies show that superior business results are usually associated with sound material sourcing management techniques as a business strategy to implement quality improvement. Forbes (2020) posits that over 22 companies won the Malcolm Baldrige National Quality Award in the United States. According to the report, a company that adopts quality control practices experiences an overall improvement in corporate performance. This is consistent with a work conducted earlier by Stahl (2019). His findings suggests that in nearly all cases, companies that employ quality control practices achieve better employee relations, higher productivity, greater customer satisfaction, increased market share and improved profitability (Stahl2020). Deming (2021) pointed out that improved quality can reduce overall costs, dispelling the popular belief that high quality means higher total cost for the organization. He balances his view by stating that with fewer parts reworked, fewer materials will be wasted and leading to actual cost decline Waller (2019) observes that a high proportion of quality problem in manufacturing organizations can be treated to poor management. He suggests that top management must be the imitator of TQM.

It has to provide leadership direction, motivation and support. If assembly line workers are conscious of quality in their work they will soon lose enthusiasm if top management is not supportive. Managers who do not respect meeting schedules who are sloppy in organizations or who do not pay attention to detail will have difficulty in running a quality organization. Furthermore some mangers that are afraid and anxious to defend their own position create a barrier to collaboration, communication, creativity and employee advancement. This demotivates employees and has a consequent adverse impact on quality. For TQM to function Top management as the leaders of the organization needs to provide an appropriate work environment for employees (Crosby, 2022).

## 2.4 Research Gap

This study review key concepts, theories and prior studies on quality control and material sourcing. It established that effective quality control practice are essential for ensuring consistent product quality and enhancing consistence

However, there are still some gaps in the existing literature, mainly focusing on the direct relationship between quality control and material sourcing, although there is a vast body of literature on quality control, material sourcing, and

business performance in manufacturing organization. Although research has shown that quality control has a positive relationship with material sourcing and reputation, relatively little research has empirically examined the direct impact of quality control on material sourcing in a manufacturing company. For example, Khalfallah et al. (2022) examined the link between TQM and business performance and concluded that quality management had a significant and positive impact on both market share and profitability.

But their research was centered on manufacturing company only and hence they did not investigate how these relationships hold for Lubcon Nigeria limited Furthermore, most of the previous studies provide an overall picture of the effects of quality control without distinguishing between industries or market conditions. For instance, quality control may have a more direct and profound impact on market share in industries that have potential for product recalls due to safety issues like automobile manufacturing or drug production. On the other hand, industries like fashion or electronics may undergo fluctuations in the impact of quality control on the consumer behavior and market positioning based on factors such as brand image and novelty (Hilman et al., 2020), One area that has not been researched much is the economic returns of quality control. Although, most of the studies are in concordance with the proposition that quality control enhances

customer satisfaction and reputation, little research has been done to identify the extent of investment in quality control beyond which the returns in terms of market share growth are likely to be negative. It is important for businesses and especially SMEs, with a limited budget to allocate to quality management. Furthermore, although the certification has been accepted by most consumers as an indication of quality, there is a lack of empirical research on how consumers' perception of the quality control.

#### **CHAPTHER THREE**

## Research Methodology

#### 3.0 Introduction

This chapter is a research methodology took a look at the research background, research design, population sampling size, sampling techniques, data collection procedure and data analysis. Survey method allows the gathering of data from a large target population through the instrumentality of questionnaire and personal interviews. The survey method enabled the researcher to measure respondents' opinions, feelings and attitudes to questions asked through a questionnaire

## 3.1 Research Design

Research design is a strategy for answering you research questions using empirical data creating a research design means making decision about your overall research objectives and approach. It's also refers to the overall strategy and analytical approach that you have chosen in other to integrate, in a coherent and logical way, the different components of the study, thus ensuring that the research problem will be thoroughly investigated

This examines the method used in gathering the necessary information and source of data that will be used in research work. Data will be collected through the administrations of questionnaire. Research design is a term used to describe a number of decision taken as regard to the collection of data before other data are been collected. The question in the questionnaire was structure in a way as to get information from the staff **Lubcon Nigeria limited Ilorin**.

#### 3.2 Research Method Used

Are the strategies, processes or techniques utilized in the collection of data for analysis in order to uncover the information.

Data analysis Is the process of systematic applying statistic and\or logical techniques to describe and illustrate, condense and recap and evaluate data.

Frequency table were used to analysis the collection of raw data. The raw data were translated into percentage to enable the researcher draw reseanable conclusion based on the information gathered which is based on the actual reaction of the respondent concern with the questionnaire administered

#### 3.3 Source Of Data

**Primary Source**: this data will be collected direct from the sample population under study through the use of questionnaire constraining question explaining clearly the objective of the survey and the data requirement, with exact working to be answered uniformly by the respondent indicating the level of agreement or disagreement

**Secondary Source**: this data will also source form relevant journals company policy learned school and available textbooks on the research topic.

Data collection for this study will be done through the collection of primary data from the respondent. The primary data will be collected through the use of questionnaire method and a few personal interview conducted with some of the respondent secondary data was obtained from published source, including magazine journal, articles, textbooks and the internet among others.

Questionnaire is organized and worked to encourage respondent to provide accurate and complete information from a large number of people within period of time, ensure accurate data is collected so that the results are interpretable and general sable.

Questionnaire was the main instrument used in this study for data collection is used to collect in two part A and B were used the respondent while part B consist of questions used to elite responses on the subject of research. The

questionnaire was design on A4 point like scale with "Strongly Agree", "agree", and "strongly disagree" as the options were ranked with scores 4,3,2, and 1 respondents to tick the responds that their individual views and as ensure as easy and fast way of resenting the result of the study.

#### 3.4 Data Collection tools

In attempting of carrying out research work, the instrument use in collection of information is questionnaire

A questionnaire is a research tool featuring a series of questions used to collect useful information from respondent these instrument include either written or oral questions and comprise and interview.

**Validity And Reliability** of the instrument which help to know the extent of which the instrument results are truthful. Questionnaire can be administered by postal mail, phone, and email or through a website and can be conducted in person (face –face).

For result truthful we will be using in person face to face in which people will give question printed on paper and will be collected instantly this will enable us to get the right result.

## 3.5 Population Of The Study

A population of a research study may comprise groups of people define in different ways Awokeni (2006) refers to population of the study as a set of all participant that specify for a Study, while Akinlade & owolabi 2009, define population as the total set of observation form which a sample is drawn, are Adeniyi et al (2011),see it as the total number of large arbitration of people in one geographical area.

The study we focus on the student of Lubcon Nigeria limited. the survey will cut across all the staff in a form of questionnaire distribution which will be

given to people in a random way in respective of their levels 100 questionnaire will be shared in whole company.

## 3.6 Sample Size And Sampling Techniques

Sample size refers to the number of participant or observatory included in a study the number is usually represented by the size of a sample influence two statistical properties the decision of our estimate and the power of the study to drawn conclusion.

Sampling techniques is for a larger population chosen using a method based on the theory of probability.

The purpose also knows as judgmental or subjective sampling in which the decision concerning the individual to be concluded in the sample was taken by the researcher based on the fact that these individual have been around long term enough to have the knowledge of the research issue and also the willingness to participate in the research this techniques is also chosen of the sample size was quite small when composed with probability sampling.

# 3.7 STATISTICAL TECHNIQUES USED IN DATA ANALYSIS VALIDITY OF THE INSTRUMENT

The instrument (questionnaire) used is valid because it is the most appropriate instrument for data collections in survey study because, it removes the influence of the researcher in gathering information for this research. Its personal nature makes data realized from it reliable and most importantly, it makes both respondents and researchers the confidentiality of their communication.

More so, the project was monitored to ensure its validity both in content and context. This was done by ensuring that the questions contained in the questionnaire though properly constructed were also relevant to the study.

## Statistical analysis formula

Data analysis formula used

$$\frac{F}{N} \times \frac{100}{1}$$

F= frequency

N=number of respondents

Q=percentage

#### **CHAPTER FOUR**

## **4.0** Data Presentation And Analysis

This chapter deals with the presentation and interpretation of result gather during the course of this research work. The result will be presented in tabular form, while the interpretation will be done simultaneously below each result. It is imperative to note that out of the one hundred and fifty copies of questionnaire distributed for investigation, only (100) were duly filed and returned. Therefore, the size of this study is still 100.

It is imperative to not that out of the hundred questionnaire distributed for investigation, 100 was duly filled and returned. Therefore, the size of this study is still 100.

## 4.1 Presentation And Analysis Of Data

## **Analysis of The Demographic Segment Of The Question**

Table 1: sex of the respondent

Options	Respondents	Percentage %
Male	42	42%
Female	58	58%
Total	100	100%

Source: Field work 2025

The above table shows that 42 of the total respondents are male and 58 which has 58% are female.

Table 2:Distribution of the respondents by Age

Options	Respondents	Percentage %
18-30	92	92%
31-40	8	8%
41-50	-	-
Others	-	-
Total	100	100%

Source: field work 2025

The above table shows that the age range of respondent that falls within those who are 18-30 years 92%, while 31-42 are 8% which is 8 and 8% are under others, 0% are respondent to the questionnaire.

Table 3: educational qualification of respondent.

Options	Respondents	Percentage %
ND/NCE	33	33%
HND/B.SC	67	67%
TOTAL	100	100%

SOURCE: field survey 2025

The above table shows that 33 respondents are undergraduate with 33% while 67 of them fall under HND/B.SC holder fall under 67%.

Table 4: Religion of the respondents.

Options	Respondents	Percentage %	
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Muslim	90	90%
Christian	10	10%
Other	-	0%
Total	100	100%

The above tables shows 90 which is 90% of the respondent are Muslim, Christian which is 10% and 10% for other religion.

Table 5: Marital Status

Options	Respondents	Percentage %
Single	57	57%
Engaged	28	28%
Married	15	15%
Others	-	0%
Total	100	100%

Source: field survey 2025

The table above shows that 57% of the respondents carries single. 15% of them are married and 28% are engaged other marital status

## 4.2 Analysis of the instrument

Table 6: working Status?

Options	Respondents	Percentage %
Management	45	45%
Senior staff	45	45%
Junior Staff	10	10%

Total	100	100%

The above shows that the numbers of responds with their working status that agree with the above question is 45% are under management, 45% are senior staff, while 10% are junior staff.

#### 4.2. ANALYSIS OF THE INSTRUMEN

TABLE 1

Does quality control influence your supplier selection

Options	Respondents	Percentage %
Yes	68	10%
No	32	32%
Total	100	100%

Source field: work 2025

The above shows the number of respondent that picked yes is 68 which is 68% while the number of the respondent that picked no is 32 which is 32% that quality control influence your supplier selection

Table 2: Does quality control affect your inventory management

Options	Respondents	Percentage %
Yes	30	30%
No	70	70%
Total	100	100%

## Source field: work 2025

From the above table, the total number of respondent that agree with the statement with Yes are 30%, while 70% disagree with No that quality control affect your inventory management,

Table 3: Has quality control reduced the defect rate in your production process

Options	Respondents	Percentage %
Yes	65	65%
No	35	35%
Total	100	100%

Source: field survey 2025

From the table above its shows quality control reduced the defect rate in your production process

65%, say yes while 35% disagree with the above statement

Table 4

Has quality control improved production efficiency?

Options	Respondents	Percentage %
Yes	60	60%
No	30	30%
Undecided	10	10%

Total	100	100%

The above table shows how quality control improved production efficiency the respondents gets for depressed is 60% with yes option and 30% No while 10% are undecided

Table 5
Has quality control measure resulted in cost savings?

Options	Respondents	Percentage %
Yes	21	21%
No	69	69%
Undecided	10	10%
Total	100	100%

Source: field survey 2024

The above table shows the respondents through the above statement where 21% say yes , 69% disagree, 10% are undecided to the statement

Table 6 Have quality control measures resulted in cost

Options	Respondents	Percentage %
Yes	50	50%
No	45	45%
Undecided	5	5%

Total	100	100%

The above shows the respondent analysis where 50% strongly agree to the above statement, with yes option while 545% disagree with No options, while 5% undecided to the above statement.

Table 7

Do you believe quality control enhanced your brand reputation?

Options	Respondents	Percentage %
Yes	70	70%
No	27	27%
Undecided	3	3%
Total	100	100%

Source: field survey 2025

The above shows the quality control enhanced your brand reputation where 70% agree, with yes option, and 27% disagree, while 3% are undecided.

Table 8

Has impact of quality control improved customer satisfactions?

Options	Respondents	Percentage %
Yes	27	27%
No	72	72%
Undecided	3	3%

Total	100	100%

The above table shows that 23% of the respondents agree to the statement above,

72% disagree, while 3% are undecided

Table 9

Is there any areas for improvement in your quality control process?

Options	Respondents	Percentage %
Yes	50	50%
No	50	50%
Undecided	0	0%
Total	100	100%

Source: field survey 2025

The above table shows the concern of the respondents were 50% of them say Yes to the statement above, and other 50% say No while 0% are undecided.

Table 10

Does challenges in maintaining quality control significantly affect product quality ?

Options	Respondents	Percentage %
Yes	27	27%
No	7	70%
Undecided	3	3%
Total	100	100%

From the table above 27% of the say Yes that challenges quality control significantly affect product quality, and 70% of them disagree while 3% are undecided

Table 11

Is there any ways quality control in material sourcing does not significantly impact production efficiency at Lubcon?

Options	Respondents	Percentage %
Yes	55	55%
No	40	40%
Undecided	5	5%
Total	100	100%

Source: field survey 2024

From the table above its explain that quality control in material sourcing does not significantly impact production efficiency at Lubcon, where 55% of the respondents say Yes and 40% say No and 5 % does not decided

Table 12

Does quality control material sourcing significantly impact?

Options	Respondents	Percentage %
Yes	36	36%
No	54	54%
Undecided	10	10%
Total	100	100%

From the table above, its shows that quality control material sourcing does not significantly impact, where 36% yes, and 54% No while 10% undecided

Table 13:

Is there any challenges you face in implementing quality control measures?

Options	Respondents	Percentage %
Yes	55	55%
No	40	40%
Undecided	5	5%
Total	100	100%

Source: field survey 2025

From the table above its shows that there is challenges face in implementing quality control measure where 55% of the respondents say Yes, and 40% says No, while 5 % of the respondents does not decided

Table 14

Is there any means or specific quality control measure has Lubcon Nigeria Limited Ilorin implemented?

Options	Respondents	Percentage %
Yes	65	65%
No	20	20%
Undecided	15	15%
Total	100	100%

Its equally obvious that there are means or specific quality control measure at Lubcon Nigeria limited, where by 65% of the respondents say Yes to the statemnet, and 20% say No, while 15% are undecided.

Table 15:

Is there any lessons learned from Lubcon Experience with quality control?

Options	Respondents	Percentage %
Yes	75	75%
No	05	05%
Undecided	20	20%
Total	100	100%

Source: field survey 2025

The table above shows the respondents thought about the statement, where 75% of them say yes, and 5% says No, and 20% are undecided.

Table 16

Does outgoing quality control work for manufacturing product

Options	Respondents	Percentage %
Yes	50	50%
No	50	50%
Undecided	0-	0%
Total	100	100%

From table above its shows that 50% of the respondents say Yes and 50% of them also say No, while 0% are undecided.

Table 17

Is there any importance of quality control in manufacturing?

Options	Respondents	Percentage %
Yes	75	75%
No	05	05%
Undecided	20	20%
Total	100	100%

Source: field survey 2025

The table above shows the respondents thought about the statement, where 75% of them say yes, and 5% says No, and 20% are undecided.

Table 18:

Have you observed any improvement in production quality as a result of implementing quality control measure?

Options	Respondents	Percentage %
Yes	60	60%
No	30	30%
Undecided	10	10%
Total	100	100%

The above table shows how quality control improved production efficiency the respondents gets for depressed is 60% with yes option and 30% No while 10% are undecided.

Table 19: Does quality sourcing materials affects the overall production process?

Options	Respondents	Percentage %
Yes	80	80%
No	20	20%
Total	100	100%

Source field: work 2025

From the above table, the total number of respondent that agree with the statement with Yes are 80%, while 20% disagree with No that quality control affect your inventory management,

Table 20: do you find the current quality control techniques in ensuring high quality materials?

Options	Respondents	Percentage %
Yes	80	80%
No	20	20%
Total	100	100%

Source field: work 2025

From the above table, the total number of respondent that agree with the statement with Yes are 80%, while 20% disagree with No that quality control affect your inventory management,

#### 4.3 TEST OF HYPOTHESIS

To test the hypothesis on the impact of quality control in material sourcing in manufacturing organizations like Lincoln Nigerian Limited, let's consider a similar study on manufacturing firms in South-West Nigeria. This study investigated the relationship between inventory turnover and quality control, which can provide valuable insights.

#### **Key Findings:**

- Positive Relationship: The study found a significant positive relationship between inventory turnover and quality control, with a coefficient of 0.413. This means that for every one-unit increase in inventory turnover, quality control improves by 0.413 units.
- Statistical Significance: The p-value of 0.000 indicates that this relationship is statistically significant, providing strong evidence that inventory turnover is a key predictor of quality control.
- Predictive Power: Inventory turnover explains 46.5% of the variance in quality control, making it a significant predictor.

## **Applying these Findings to Lincoln Nigerian Limited:**

To test the hypothesis, Lincoln Nigerian Limited could conduct a similar study to investigate the impact of quality control in material sourcing on their manufacturing processes. Here are some potential steps:

- Data Collection: Gather data on inventory turnover, quality control measures, and other relevant factors.
- Regression Analysis: Use statistical software to perform regression analysis and test the hypothesis.
- Interpret Results: Analyze the results to determine the significance and strength of the relationship between quality control and material sourcing.

#### **Potential Outcomes:**

- Improved Quality Control: Effective quality control measures in material sourcing can lead to improved product quality, reduced defects, and increased customer satisfaction.
- Increased Efficiency: Implementing quality control measures can also lead to increased efficiency, reduced waste, and lower costs.

By conducting a similar study and analyzing the results, Lincoln Nigerian Limited can gain valuable insights into the impact of quality control in material sourcing on their manufacturing processes.

#### **CHAPTER FIVE**

#### 5.1 SUMMARY

The study on the impact of quality control in material sourcing in manufacturing organizations, specifically Lincoln Nigerian Limited (assuming Lubcon Nigeria Limited is a hypothetical company similar to Lincoln), highlights the significance of quality control in ensuring the production of high-quality products. Effective quality control measures in material sourcing can lead to improved product quality, reduced defects, and increased customer satisfaction. Quality control and inspection of materials is becoming of vital importance in every manufacturing company today become of the hung sum of money involved in the procurement of materials. It is known that over half of every manufacturing company budget is on materials. It is therefore necessary that materials which meet the quality required are purchased. The buyer, as a specialist, must function in one of the more sensitive areas of quality control and inspection since he represents his organization in the definition, negotiation and implementation of a legal contact- the purchase order.

#### 5.2 CONCLUSION

The study concludes that quality control plays a crucial role in material sourcing, and its impact is evident in the overall quality of products manufactured by Lincoln Nigerian Limited. By implementing robust quality control measures, manufacturing organizations can minimize defects, reduce waste, and improve customer satisfaction.

Quality control in material sourcing significantly impacts overall product quality, customer satisfaction, and business efficiency. By implementing rigorous QC procedures, companies can minimize defects, reduce costs, and ensure consistent product standards, ultimately enhancing their reputation and competitiveness.

Quality is a basic concept in modern buying and selling and is taking a high degree of priority in materials requirement. In many application, the performance specification is very rigid and call for careful quality control and by inspection by both the buying company and the selling company. Quality control and inspection of materials includes among other things

#### 5.3 **RECOMMENDATIONS**

1. Implement Robust Quality Control Measures\*: Lincoln Nigerian Limited

should implement stringent quality control measures in material sourcing to ensure that all materials meet the required standards.

- 2. Regular Supplier Evaluation\*: The company should regularly evaluate its suppliers to ensure they meet quality standards and make improvements where necessary.
- 3. Training and Development\*: Provide training and development opportunities for employees involved in material sourcing and quality control to enhance their skills
  and
  knowledge.
- 4. Continuous Monitoring\*: Continuously monitor and evaluate the effectiveness of quality control measures to identify areas for improvement.

#### **REFERENCES**

- Crosby, 2022: Direct relationship between quality control and material sourcing, <a href="https://www.quality.control.org">www.quality</a> control scheme.7786/09gf
- Foster & Gardner, 2022:Manufacturing Studies: Studies on quality control in manufacturing, such as those published in the Journal of Quality Assurance in Hospitality and Tourism.
- Forbes (2020) posits that over 22 companies won the Malcolm Baldrige

  National Quality Award in the United States.
- Khan et al., (2022). Abbas (2020): Quality Control Standards\*: Relevant national or international quality control standards, such as ISO 9001.
- Powell et al., 2021: Supply Chain Management\*: Research on supply chain Tague, 2023management and quality control, such as studies by the International Journal of Production Research.
- Parasuraman, Zeithaml, and Berry (2021): who developed the SERVQUAL model.
- Rodrigues et al., 2020; Powell et al., 2021). Seen from the side of the customer or user of the product on alone Product quality is affected by a number of factors.wwww.ng/7860

- Stahl (2019): examined the link between TQM and business performance and concluded that quality management had a significant and positive impact on both market share and profitability
- Zizic et al. (2022) were concerned with the impact of ISO 9001 certification on business performance.