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Impact of Inventory Control Management Practices on Organizational Performance in Nigerian Manufacturing Companies

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Abstract: This study uses Askar Paints Nigeria Limited as a case study to investigate how inventory control management practices in Nigeria's manufacturing sector contribute to organizational performance. The specific objectives include assessing the extent of inventory control practices utilized by the company and evaluating their impact on operational performance. A descriptive research design was employed to analyze the relationship between business performance and inventory control management. The study examined risk indicators related to the company's production operations. The findings indicate that effective inventory control management significantly enhances operational performance. It has reduced costs, increasing profitability as the company's customer base grows. However, the business performance reflects insignificant risk, primarily because the production process follows a "make to stock" model rather than a "make to order" approach. While make-to-stock production offers the advantage of shortened lead times, it also poses challenges, such as the risk of goods being damaged during storage when demand forecasts fail. The study recommends that all inventory staff receive regular training, the implementation of an electronic inventory management system, and improvements in inventory planning and management.

Keywords: Inventory control management, organizational performance, manufacturing sector, cost reduction, operational efficiency.

JEL Classification: M4, M41, M48
Paper Type: Research

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1. INTRODUCTION

In an increasingly competitive global market, manufacturing companies are constantly pressured to optimize operations and maximize efficiency while maintaining accessible, high-quality products while managing costs, which is crucial for business success. Effective inventory control management is a pivotal component in achieving this balance, serving as a critical operational tool that enables firms to align production with fluctuating demand, minimize holding costs, and ensure timely distribution of goods to meet customer expectations (Muchaendepi et al., 2019; Yunusa, 2021). Inventory, defined as goods or materials a company holds for sale or production, significantly influences a firm's profitability by managing the balance between stock availability and associated costs (Oluwaseyi et al., 2017; Atnafu & Balda, 2018).

For manufacturing companies, inventory control practices are more than logistical concerns; they represent strategic choices that impact nearly every aspect of operations (Bah et al., 2023; Shukaili et al., 2023). Poorly managed inventory can lead to financial inefficiencies, disrupt production cycles, and compromise customer satisfaction (Oluyemi, 2017). Conversely, efficient inventory management practices support organizational stability, improving decision-making and facilitating better responses to market shifts (Ogbo & Ukpere, 2014). Inventory control also reduces financial liabilities by optimizing stock levels, thus enabling manufacturing firms to improve liquidity and invest resources more effectively (Khalid & Lim, 2018).

Nigeria's manufacturing sector, ranked among the world's fastest-growing industries, is pivotal to the country's economy (Oburota & Okoi, 2017). This sector contributes significantly to Nigeria's GDP and offers employment and market growth opportunities comprising diverse industries like food, textiles, and chemicals (Uma et al., 2019). However, manufacturing firms in Nigeria need help with inventory management, which can hinder their competitiveness. These challenges include fluctuating demand, limited purchasing options, and high inventory storage costs (Mbugi & Lutego, 2022). Consequently, the sector has seen varying levels of success in inventory management, with some firms needing help to adapt efficient practices that align with their production goals and market conditions.

The current study focuses on Askar Paints Nigeria Limited, a manufacturing firm in Oyo State, Nigeria, to examine the relationship between inventory control practices and organizational performance. It aims to identify how effectively the company manages its inventory and to explore the specific impacts of inventory control practices on its operational performance. Through this analysis, the study seeks to provide actionable insights into the benefits of well-implemented inventory management strategies for enhancing productivity and reducing costs in Nigeria's manufacturing industry. This research will contribute to the broader understanding of inventory management's role in organizational efficiency and provide practical recommendations for firms facing similar operational challenges.

2. LITERATURE REVIEW

2.1 Concept of Inventory Control Management

Inventory plays a crucial role in the operational efficiency of manufacturing companies, encompassing a range of materials from raw components to finished goods. Atnafu and

Balda (2018) describe inventory as the stock of items maintained for future use, including raw materials and finished goods. Brutus and Chiyem (2015) further elaborate that inventory represents the total quantity of goods and raw materials held over time, essential for production processes. Naliaka and Namusonge (2015) reinforce this perspective by defining inventory as a catalog of goods available for production and distribution. Balancing inventory costs against the potential benefits is vital for effective management. Manufacturing companies typically manage three categories of inventory: raw materials, production materials, and finished goods, which facilitate efficient production processes (Oluwaseyi et al., 2017).

The primary goal of inventory control management is to maximize the benefits of retaining inventory while minimizing associated costs. Effective inventory management ensures that materials are available in the right quantities, at the correct times, and in appropriate locations, thus supporting smooth operational flow (Brutus & Chiyem, 2015). For manufacturing firms, inventory constitutes a significant expense, often accounting for a substantial portion of capital investment—estimated at up to one-third (Bouadam & Amir, 2022). Consequently, robust inventory management enhances organizational performance and operational productivity.

2.2 Purposes of Inventory Control Management in a Manufacturing Company

The primary objective of inventory control management is cost minimization, which is critical for profitable operations (Muchaendepi et al., 2019). Particularly in manufacturing, where investment costs can be considerable, an effective inventory system is essential to avoid the pitfalls of overstocking and understocking. Insufficient inventory can halt operations, while excessive stock can hinder production efficiency. Adanse et al. (2019) emphasize that the goal is to maintain necessary inventories with minimal expenditure. Ali and Asif (2012) identify enhancing customer service as another core objective, which is achieved by mitigating stock shortages in response to fluctuating market demands. This link between inventory management and production efficiency is further reinforced through effective materials management to optimize operational capabilities (Lewis, 2012).

Essential purposes of inventory control management include ensuring the availability of materials to prevent production delays, enhancing customer service through accurate inventory tracking, minimizing wastage and loss by maintaining effective monitoring systems, and optimizing product sales through accurate demand forecasting. The availability of materials is critical for maintaining continuous production flows. At the same time, a well-managed inventory enhances customer satisfaction and brand loyalty by ensuring that finished goods are readily available to meet market demands.

2.3 Inventory Management Practices

Inventory management practices have been developed to achieve the goal of minimizing stock-related costs. Among these practices are ABC analysis, Economic Order Quantity (EOQ), Just-in-Time (JIT), bar-coding, Vendor Managed Inventory (VMI), simulation methods, Material Requirements Planning (MRP), Manufacturing Resource Planning (MRP II), and Enterprise Resource Planning (ERP).

ABC inventory control is founded on the principle that a small number of items often represent a significant portion of the total inventory value. By categorizing inventory, this approach enables organizations to prioritize their management efforts, ensuring that

critical items receive the necessary focus while allowing less essential items to be managed with reduced intensity (Shukaili et al., 2023).

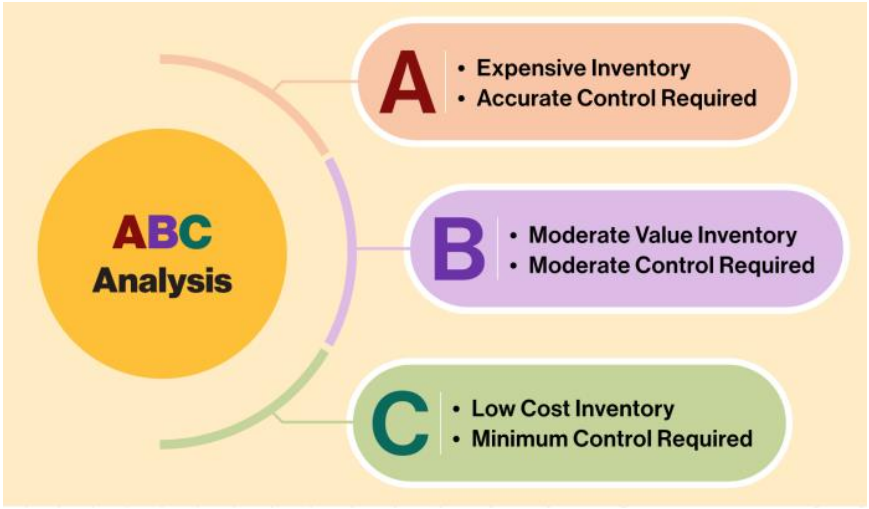

Figure 1: ABC Analysis

The Economic Order Quantity (EOQ) model is another fundamental inventory management strategy that determines the optimal order quantity to minimize total inventory costs, encompassing holding and ordering expenses. According to Aro-Gordon (2015), this model is based on stable demand and lead times, facilitating effective stock management. Developed by Japanese manufacturers, the Just-in-Time (JIT) approach synchronizes inventory levels with production schedules to reduce holding costs. In their study, Balkhi et al. (2022) affirm that its successful implementation relies heavily on maintaining high-quality materials, fostering strong supplier relationships, and ensuring inventory is available precisely when needed.

Bar-coding is a widely adopted method for tracking inventory, helping to prevent shortages and overstocking by accurately identifying stock levels. This system enhances operational efficiency by automating inventory management tasks and streamlining the reorder process (Balkhi et al., 2022). Vendor Managed Inventory (VMI) is a collaborative approach wherein suppliers oversee inventory levels at the distributor's site. Ubabudu et al. (2024) opined that the practice helps prevent stockouts and streamlines replenishment, ultimately enhancing customer service while reducing inventory management costs.

Simulation methods allow organizations to model and analyze complex inventory systems under various conditions, aiding decision-making by providing insights into inventory dynamics and potential challenges (AbuKhousa et al., 2014). Material Requirements Planning (MRP) focuses on assessing the materials necessary for production and ensuring that the proper inventory is available at the right time, which has become integral to improving efficiency and reducing costs in manufacturing operations (Akintokunbo & Obom, 2021).

Manufacturing Resource Planning (MRP II) extends the traditional MRP approach by incorporating additional data, such as labor and budgetary requirements. This enables manufacturers to optimize resource utilization, enhancing production planning and decision-making (Wilson et al., 1994). Lastly, Enterprise Resource Planning (ERP) systems integrate various business functions, including inventory management, finance,

and logistics. By providing real-time insights, ERP enhances operational efficiency and decision-making through centralized information management, allowing organizations to oversee their inventory more effectively (Gupta & Kohli, 2006).

2.4 Inventory Control Management Practices and Operational Performance

Inventory control management practices play a crucial role in enhancing operational performance by aiming to minimize essential costs while ensuring profitable operations. Oluwaseyi et al. (2017) emphasize that the primary goal of inventory management is to reduce the total costs associated with inventory to achieve financial viability. Riwo-Abudho et al. (2012) support this view, noting that successful inventory management decisions often stem from practices designed with a clear focus on the critical aspects of inventory size and timing. These practices balance the costs of acquiring and maintaining inventory, directly impacting an organization's profitability.

Inventory management aims to maintain inventory levels that allow a company to operate profitably while keeping costs low. A vital aspect of this is understanding the Economic Order Quantity (EOQ), which determines the ideal amount of inventory to order at once. According to Atnafu and Balda (2018), the volume of inventory ordered significantly affects ordering and holding costs, ultimately influencing profitability. Placing a few large orders may lead to lower annual ordering costs but higher holding costs due to the larger volumes stored. Conversely, making numerous smaller orders may minimize holding costs but increase ordering expenses.

This complexity requires companies to assess whether increasing order sizes to take advantage of volume discounts will adequately offset the higher holding costs incurred. Onikoyi et al. (2017) conclude that profitability can only be achieved at the optimal level of relevant costs, including holding and ordering costs. Their findings indicate that excessively high inventory levels can harm profitability, highlighting the need for effective inventory control practices that balance these competing costs.

2.5 Difficulties in Implementing Inventory Control Practices

Implementing effective inventory control practices poses significant challenges for companies, particularly in the manufacturing sector, where maintaining an optimal inventory level is crucial for smooth operations. Instead of accumulating excessive stock to meet all potential needs or to reduce costs, companies must focus on achieving an appropriate inventory balance that aligns with competitive priorities. This requires establishing an acceptable threshold and managing reconciliations according to those guidelines.

The Theory of Constraints (TOC) sheds light on these challenges by identifying the most significant limiting factors that hinder a company's progress. TOC is a systematic approach to pinpointing and eliminating constraints, often called bottlenecks, in manufacturing. As Boogaard (2022) notes, this method allows organizations to diagnose barriers to advancement and devise strategies to overcome them. Ibironke and Apanisile (2024) argued that recognizing and leveraging system limitations enables companies to reach their objectives. This theory operates on the premise that every organization faces at least one constraint that affects its performance, necessitating a scientific approach to improvement.

TOC outlines various tools, including the Five Focusing Steps, a cyclical methodology designed to identify and eliminate constraints. The first step involves determining the restriction limiting the goal achievement rate. Following this, companies are encouraged to leverage existing resources to enhance the constraint's throughput. The next step involves examining all other processes to ensure they align with the constraint's needs. If the constraint persists, additional actions should be taken, which may involve capital investment to eliminate the bottleneck. This cycle represents a continuous improvement process, reminding organizations to address constraints as they arise proactively.

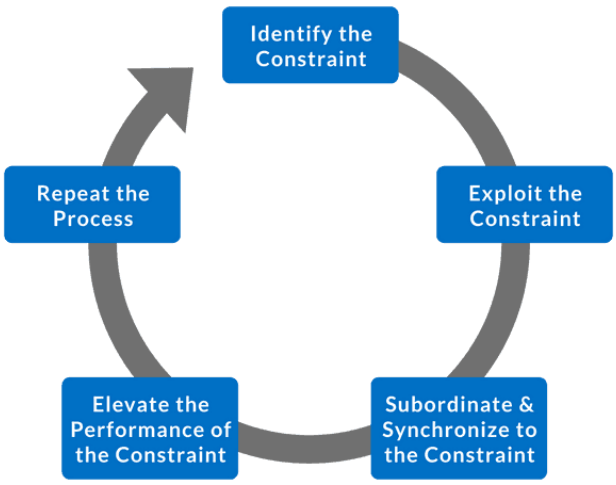

Figure 2: The Five Focusing Steps to identify and eliminate constraints

Additionally, TOC incorporates the Thinking Processes, which provide a structured approach to problem-solving, particularly in complex systems with interdependencies like manufacturing lines. These processes focus on identifying the root causes of adverse outcomes and eliminating undesirable effects without creating new issues. They aim to answer three critical questions: what needs to change, what should be changed, and what practices will facilitate that change.

Throughput Accounting is another concept within TOC that offers an alternative to traditional accounting methods. It seeks to eliminate the negative distortions often associated with conventional accounting practices, which can drive companies to produce unnecessary inventory. By reframing inventory as an asset that can be converted to cash through sales, traditional methods may inadvertently encourage companies to overproduce, undermining their long-term profit objectives.

3. METHOD

In exploring the relationship between inventory control management practices and organizational performance within manufacturing companies in Nigeria, this research employed a systematic approach to data collection and analysis, guided by Creswell and Creswell's (2018) principles of research design. Sixty employees were selected from Askar Paints Nigeria Limited, which has a staff 141. Respondents were chosen from various departments, including Production, Marketing, Sales, Transport, Finance/Audit, and Administration/Human Resources, as shown in Table 1. A pilot study was conducted

to refine the sampling framework and identify willing participants who clearly understood the study's focus.

Table 1. Study population, operation departments, and sample size

S/N	Study Population	Department	Sample Size
1	52	Production (PD)	18
2	24	Marketing (MD)	10
3	18	Sales (SD)	10
4	15	Transport (TD)	8
5	20	Finance/Audit (FAD)	10
6	12	Admin/HR (AHRD)	4
Total	**141**		**60**

Purposive sampling was employed to include informed respondents, allowing the intentional selection of individuals who could provide valuable insights into the study. This approach enhances the quality of information gathered, as Benoot et al. (2016) noted. Data were collected through self-administered structured questionnaires, which were hand-delivered during business hours to address the reluctance of respondents to participate in online surveys. This method encouraged immediate interaction and clarification, facilitating candid responses about inventory control management techniques and their perceived effects on organizational performance, with participants returning their responses within a week.

Credible participant responses were critically analyzed to ensure the research instrument's validity. The structured questionnaire was designed to align with the study's objectives, promoting validity and reliability in measuring the intended constructs. Data analysis followed a quantitative methodology, utilizing Microsoft Excel for editing, coding, and summarizing responses through descriptive statistics like frequencies and percentages. Each response was assigned a numerical code to streamline analysis and enhance clarity, with tables clearly labeled for better comprehension.

Ethical considerations were integral to the research process. Participants were informed of their rights, including withdrawing without repercussions. The study adhered to philanthropic principles, highlighting the societal benefits of the research without offering financial incentives. Efforts were made to use neutral, non-discriminatory language, respecting the dignity of all respondents, and measures were implemented to ensure confidentiality and privacy, safeguarding the integrity of the information provided.

4. RESULT AND DISCUSSIONS

This section presents the findings from the study on the impact of inventory control management practices on the organizational performance of manufacturing companies in Nigeria. Through a comprehensive analysis of data collected from a targeted sample of employees, the study elucidates the relationship between effective inventory management and key performance indicators such as cost efficiency, operational productivity, and overall profitability. The results emphasize the importance of these practices in enhancing operational performance and provide critical insights into the challenges these companies face in optimizing their inventory management strategies.

Table 2. Personal Characteristics of Respondents in the Study on Inventory Control Management Practices and Organizational Performance.

Characteristic	Category	Frequency	Percentage
Age of Respondents	Under 25	12	20%
	25 - 30	21	35%
	31 - 35	10	16.7%
	36 - 40	7	11.7%
	41 - 45	6	10%
	46 & above	4	6.6%
	Total	**60**	**100%**
Gender of Respondents	Female	19	31.7%
	Male	41	68.3%
	Total	**60**	**100%**
Educational Qualification of Respondents	Certificate	12	20%
	Diploma	26	43.3%
	Bachelor	18	30%
	Master	4	6.7%
	Doctorate	-	-
	Total	**60**	**100%**
Duration of Working with Askar Paints Nigeria Limited	0 - 2	19	31.7%
	3 - 5	22	36.7%
	6 - 8	14	23.3%
	9 & above	5	8.3%
	Total	**60**	**100%**

The findings regarding the personal characteristics of respondents in the study on inventory control management practices and organizational performance provide valuable insights into the demographic composition of the sample. The age distribution reveals that the largest group falls within the 25 to 30-year range, comprising 35% of participants. This is followed by those under 25 at 20%, while individuals aged 31 to 35 account for 16.7%. Representation decreases in older brackets, with only 11.7% in the 36 to 40 range, 10% in the 41 to 45 range, and 6.6% aged 46 and above. This suggests a youthful workforce at Askar Paints Nigeria Limited, reflecting trends in the manufacturing sector towards younger employees.

Gender representation shows a predominantly male sample, with 68.3% male respondents compared to 31.7% female. This disparity highlights potential areas for improvement in diversity and gender inclusion within the organization. Educational qualifications indicate a well-educated workforce: 43.3% hold diplomas, and 30% have bachelor's degrees. Additionally, 20% possess certificates, while only 6.7% have master's degrees, with no respondents holding doctorate qualifications. This suggests that many employees possess practical inventory control and management skills.

The duration of employment at Askar Paints Nigeria Limited indicates a relatively experienced workforce, with 36.7% having worked there for 3 to 5 years. Those with 0 to 2 years of experience comprise 31.7%, 23.3% have been with the company for 6 to 8 years, and 8.3% for 9 years or more. This distribution reflects a mix of new and experienced employees, which can facilitate knowledge transfer and mentorship.

Table 3. Strategies for Inventory Management and Organizational Performance at Askar Paints Nigeria Limited

Strategy Statement	Keys	Frequency	Percentage
A competent and skilled supervisor authorizes purchases.	Strongly Agree (5)	16	26.7%
	Agree (4)	22	36.6%
	Neutral (3)	10	16.7%
	Disagree (2)	7	11.7%
	Strongly Disagree (1)	5	8.3%
	Total	**60**	**100%**
For quality assurance purposes, goods are examined at both entry and exit.	Strongly Agree (5)	32	53.4%
	Agree (4)	15	25%
	Neutral (3)	8	13.3%
	Disagree (2)	5	8.3%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Inventory management personnel are highly skilled and undergo regular training.	Strongly Agree (5)	10	16.7%
	Agree (4)	23	38.3%
	Neutral (3)	12	20%
	Disagree (2)	9	15%
	Strongly Disagree (1)	6	10%
	Total	**60**	**100%**
The company regularly experiences understocking issues due to poor inventory management practices.	Strongly Agree (5)	3	5%
	Agree (4)	8	13.3%
	Neutral (3)	9	15%
	Disagree (2)	28	46.7%
	Strongly Disagree (1)	12	20%
	Total	**60**	**100%**
Occasionally, goods are damaged due to poor inventory management practices.	Strongly Agree (5)	11	18.3%
	Agree (4)	20	33.3%
	Neutral (3)	14	23.3%
	Disagree (2)	8	13.3%
	Strongly Disagree (1)	7	11.8%
	Total	**60**	**100%**

As shown in Table 3, the findings indicate strong agreement among respondents regarding the critical role of competent supervisors in authorizing purchases. Expressly, 26.7% strongly agree, and 36.6% agree, emphasizing the importance of supervisory authority in the purchasing process. A small minority, 11.7%, and 8.3% disagree or strongly disagree, reflecting a general recognition of adequate supervision in inventory management.

Quality assurance processes are viewed positively, with 53.4% of respondents strongly agreeing that goods are examined at entry and exit points, while 25% agree. This strong commitment to maintaining product quality is underscored by the low disagreement rate of only 8.3%, highlighting that quality control is a vital aspect of the inventory management process at Askar Paints.

The skill level of inventory management personnel shows mixed perceptions. While 16.7% strongly agree and 38.3% agree that personnel are highly skilled and undergo regular training, 15% disagree, and 10% strongly disagree. This suggests recognition of the training programs in place but indicates potential areas for improvement in the overall competency of the inventory management team.

Conversely, the survey reveals significant concerns regarding understocking issues, with only 5% strongly agreeing and 13.3% agreeing that these problems stem from poor inventory management practices. In contrast, 46.7% disagree, suggesting that many believe ineffective practices do not primarily cause understocking. This disparity points to differing views on the effectiveness of current inventory management systems.

Perceptions of damage to goods due to poor inventory practices also reveal mixed sentiments. While 18.3% of respondents strongly agree and 33.3% agree that occasional damage occurs, 13.3% disagree, with 11.8% strongly disagree. This indicates that while some respondents recognize inventory management issues, many do not perceive them as pervasive, suggesting an area that may require further investigation and improvement.

Table 4. Descriptive statistics on responses to strategies for inventory control at Askar Paints Nigeria Limited.

Mean	12
Standard Error	1.9422
Standard Deviation	4.3428
Kurtosis	0.1409
Skewness	-0.1502
Count	60
Confidence Interval (95.0 %)	5.39

Table 4 presents the descriptive statistical analysis of responses to questions about inventory management strategies at Askar Paints Nigeria Limited. The total number of replies (count) is 60, reflecting the number of participants in the study. The mean value of 12 indicates a generally favorable perception of the strategies, as each question has five possible response options. The standard error and standard deviation values are 1.9422 and 4.3428, respectively.

The skewness value is -0.1502, indicating a slight negative skew, meaning that responses are concentrated toward the higher end of the response scale, with most participants selecting “strongly agree” (5) or “agree” (4). The kurtosis value of 0.1409 suggests a thin-tailed distribution, implying that the strategies for inventory management are adequate and effectively manage fluctuations in production.

The confidence interval (95%) for the responses is 5.39, further supporting the normal distribution of the data. Figure 3 illustrates the average response values to the questions evaluating the inventory management strategies.

The results indicate that participants at Askar Paints Nigeria Limited perceive their inventory management strategies positively. While there is a general agreement, the variability in responses suggests that individual opinions differ. The statistical measures highlight a slight tendency toward higher ratings, suggesting a solid foundation of effective practices and potential areas for improvement within the organization.

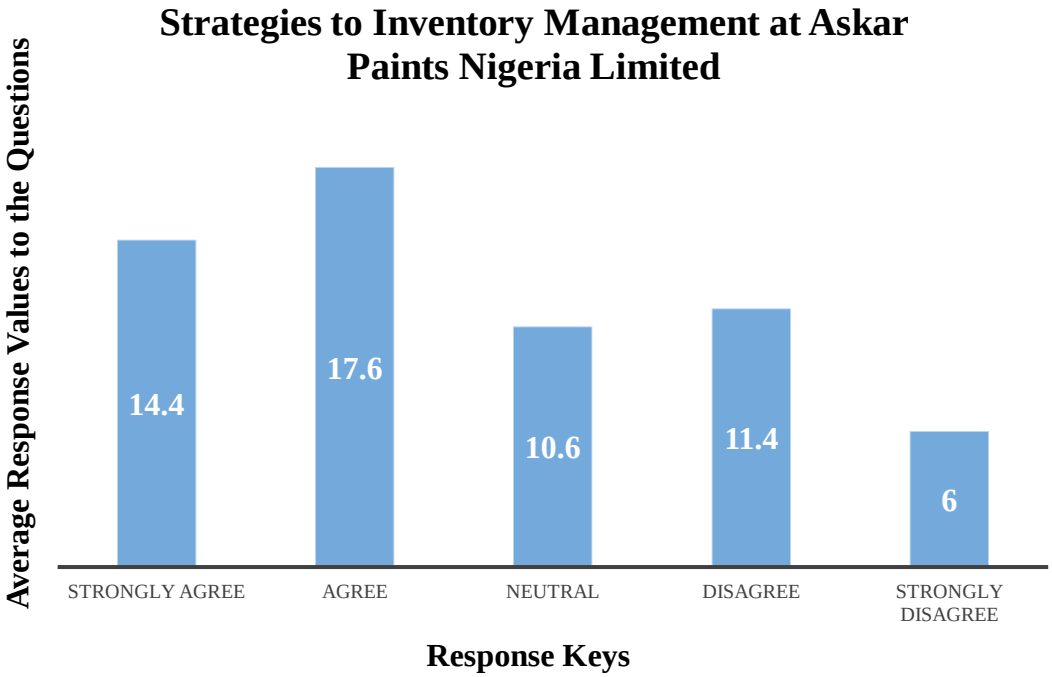

Figure 3: Average response values to questions aim to evaluate the strategies for inventory management at Askar Paints Nigeria Limited.

Table 5. Impact of inventory control management on Askar Paints Nigeria Limited's business performance.

Aspect	Keys	Frequency	Percentage
Cost Reduction due to Inventory Control	Strongly Agree (5)	31	51.7%
	Agree (4)	18	30%
	Neutral (3)	6	10%
	Disagree (2)	4	6.7%
	Strongly Disagree (1)	1	1.6%
	Total	**60**	**100%**
Staff Satisfaction with Business Performance	Strongly Agree (5)	27	45%
	Agree (4)	16	26.8%
	Neutral (3)	9	15%
	Disagree (2)	4	6.6%
	Strongly Disagree (1)	4	6.6%
	Total	**60**	**100%**
Annual Increase in Consumer Base	Strongly Agree (5)	41	68.3%
	Agree (4)	10	16.7%
	Neutral (3)	8	13.3%
	Disagree (2)	1	1.7%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Customer Satisfaction	Strongly Agree (5)	25	41.7%
	Agree (4)	17	28.3%
	Neutral (3)	16	26.7%
	Disagree (2)	2	3.3%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**

Aspect	Keys	Frequency	Percentage
Sales Increase and Market Penetration	Strongly Agree (5)	26	43.3%
	Agree (4)	12	20%
	Neutral (3)	12	20%
	Disagree (2)	7	11.7%
	Strongly Disagree (1)	3	5%
	Total	**60**	**100%**
Profitability Improvement	Strongly Agree (5)	33	55%
	Agree (4)	16	26.7%
	Neutral (3)	10	16.7%
	Disagree (2)	1	1.6%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**

The analysis of inventory control management practices at Askar Paints Nigeria Limited provides valuable insights into the impact of these strategies on the company's overall business performance. Table 5 illustrates that most respondents believe effective inventory management contributes to cost reduction within the organization. Expressly, 51.7% of participants strongly agree that these practices lead to lower costs, while 30% agree, reflecting a solid perception of their financial benefits. The minimal disagreement (6.7% expressing disagreement) further highlights the positive acknowledgment of inventory management's role in enhancing cost efficiency.

The satisfaction levels among inventory unit staff also support these findings. Approximately 45% of respondents strongly agree that they are satisfied with the company's performance, with 26.8% agreeing. This suggests that employees value inventory control practices to foster a positive work environment and enhance operational effectiveness. The results indicate a positive trend in customer engagement. Notably, 68.3% of participants strongly agree that Askar Paints Nigeria Limited has experienced an annual increase in its consumer base, with only 1.7% expressing disagreement. This substantial affirmation underscores the effectiveness of inventory management in driving business growth and attracting new customers.

Customer satisfaction is another critical aspect of performance, with 41.7% of respondents strongly agreeing that customers are satisfied with the services received, while 28.3% agree. These results reinforce that effective inventory management streamlines operations and enhances customer experience.

Furthermore, the company's ability to increase sales and penetrate new market opportunities is evident, with 43.3% of participants strongly agreeing that these inventory strategies have facilitated growth in this area. Although 11.7% disagree, the overall sentiment remains positive, indicating that inventory management practices are crucial for market expansion.

Lastly, the analysis reveals a marked improvement in profitability over the past five years, with 55% of respondents strongly agreeing that Askar Paints Nigeria Limited's financial performance has improved. This high percentage of agreement underscores the importance of robust inventory control in enhancing profitability and achieving organizational goals.

Table 6. Descriptive statistics on responses on the impact of inventory control management on Askar Paints Nigeria Limited's business performance.

Mean	12
Standard Error	5.2221
Standard Deviation	11.6772
Kurtosis	1.1601
Skewness	1.1632
Count	60
Confidence Interval (95.0 %)	14.50

Table 6 shows the descriptive statistical relationship of the responses to the questions on the impact of inventory control management on Askar Paints Nigeria Limited's business performance. For each question, the total number of replies (count) is 60, reflecting the number of participants for the study. The standard error and standard deviation values are 5.2221 and 11.6772, respectively.

The skewness value is positive (1.1632), which implies that the values of the responses to the questions are highly skewed. The kurtosis value of 1.1601 was reported for this study, meaning that it is thin-tailed. The confidence interval (95%) for responses to questions about the impact of inventory control management on Askar Paints Nigeria Limited's business performance is 14.50.

Table 7. Determining the relationship between Askar Paints Nigeria Limited's business performance and inventory control management.

Aspect	**Keys**	**Frequency**	**Percentage**
Significantly impact on business performance	Strongly Agree (5)	33	55%
	Agree (4)	17	28.4%
	Neutral (3)	8	13.3%
	Disagree (2)	2	3.3%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Meeting Manufacturing and Production Goals	Strongly Agree (5)	29	48.3%
	Agree (4)	22	36.7%
	Neutral (3)	9	15%
	Disagree (2)	0	0
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Timely Deliveries to Customers	Strongly Agree (5)	34	56.7%
	Agree (4)	20	33.3%
	Neutral (3)	6	10%
	Disagree (2)	0	0
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Minimizing Inventory Costs to Increase Profitability	Strongly Agree (5)	47	78.3%
	Agree (4)	9	15%
	Neutral (3)	4	6.7%
	Disagree (2)	0	0
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
Improving Customer Satisfaction and Responsiveness	Strongly Agree (5)	31	51.7%
	Agree (4)	20	33.3%

Aspect	Keys	Frequency	Percentage
	Neutral (3)	8	13.3%
	Disagree (2)	1	1.7%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**

Investigating the relationship between inventory control management practices and organizational performance at Askar Paints Nigeria Limited reveals substantial evidence of their positive impact on business outcomes. As summarized in Table 7, a significant majority of respondents—55%—strongly agree that effective inventory management enhances overall performance, with an additional 28.4% in agreement. This consensus underscores the vital role of inventory management in driving key performance metrics within the organization.

The data further indicates that the company frequently meets its manufacturing and production goals through these inventory techniques, with 48.3% of participants strongly agreeing and 36.7% agreeing. This finding highlights the effectiveness of inventory management in aligning operational activities with strategic objectives.

Timeliness in product delivery is another area positively influenced by inventory management, as 56.7% of respondents strongly agree that these practices ensure on-time deliveries. This capability boosts customer satisfaction and strengthens the company's competitive reputation.

Additionally, maintaining minimal inventory costs is essential for increasing profitability, with 78.3% of participants agreeing that effective inventory management contributes to cost efficiency. This emphasizes the financial benefits linked to sound inventory practices. Customer satisfaction and responsiveness—crucial elements for any manufacturing business—are also significantly enhanced through effective inventory management. The survey results reveal that 51.7% of respondents strongly agree that these practices improve customer satisfaction, supported by an additional 33.3% who agree. This indicates a strong alignment between inventory control and customer-centric outcomes.

The findings demonstrate a robust relationship between inventory control management practices and the overall performance of Askar Paints Nigeria Limited. The broad support for the effectiveness of these practices in achieving manufacturing goals, ensuring timely deliveries, minimizing costs, and enhancing customer satisfaction underscores their critical importance in driving organizational success within the Nigerian manufacturing sector.

Table 8. Descriptive statistics on responses on the relationship between Askar Paints Nigeria Limited's business performance and inventory control management.

Mean	12
Standard Error	6.5198
Standard Deviation	14.5788
Kurtosis	0.5634
Skewness	1.1690
Count	60
Confidence Interval (95.0 %)	18.10

Table 8 shows the descriptive statistical relationship of the responses to the questions on the relationship between Askar Paints Nigeria Limited's business performance and inventory control management. For each question, the total number of responses (count) is 60, reflecting the number of participants for the study. The standard error and standard deviation values are 6.5198 and 14.5788, respectively.

The skewness value is positive (1.1632), which implies that the values of the responses to the questions are highly skewed. The kurtosis value of 0.5634 was reported for this study, meaning that it is thin-tailed. The confidence interval (95%) for responses to questions under this section is 18.10. Figure 4 shows the average response values to questions evaluating the relationship between Askar Paints Nigeria Limited's business performance and inventory control management practices.

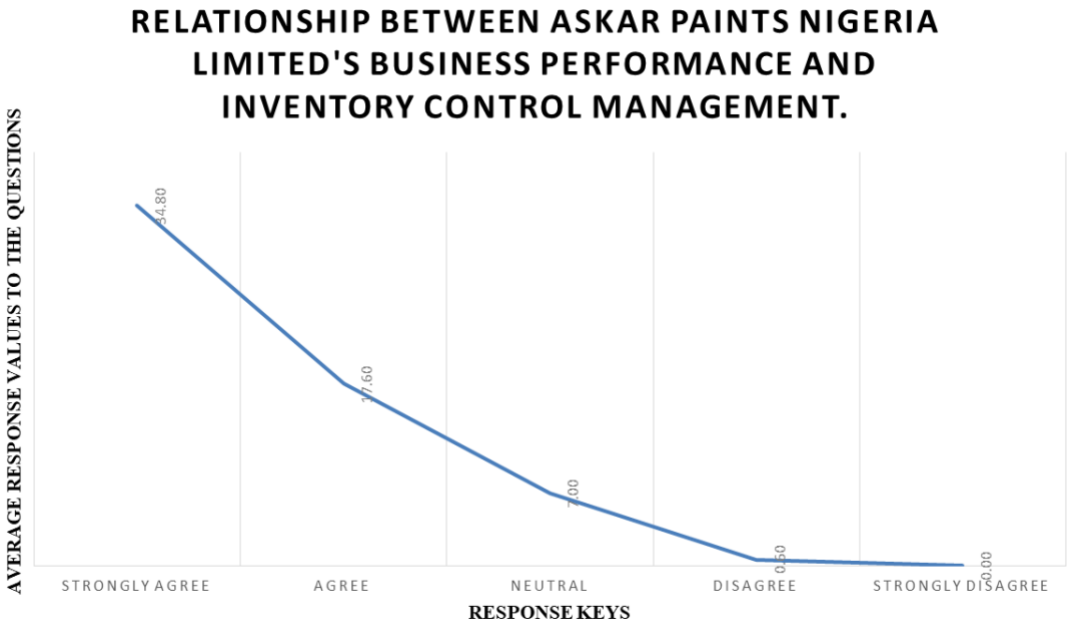

Figure 4. Relationship between Askar Paints Nigeria Limited's business performance and the inventory control management practices of the company.

Table 9. Establishing the influence of inventory control management practices on the business performance of Askar Paints Nigeria Limited.

Duration (in years)	Keys	Frequency	Percentage
Effective inventory control management decreases the cost of production and boosts profitability.	Strongly Agree (5)	36	60%
	Agree (4)	18	30%
	Neutral (3)	5	8.3%
	Disagree (2)	1	1.7%
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
The sales volume rises due to effective inventory control practices, which boost sales and profitability.	Strongly Agree (5)	28	46.7%
	Agree (4)	24	40%
	Neutral (3)	8	13.3%
	Disagree (2)	0	0
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**
	Strongly Agree (5)	38	63.4%

Duration (in years)	Keys	Frequency	Percentage
Effective inventory control management decreases production costs, lowers product prices, and improves sales and profitability.	Agree (4)	20	33.3%
	Neutral (3)	2	3.3%
	Disagree (2)	0	0
	Strongly Disagree (1)	0	0
	Total	**60**	**100%**

The study investigated the influence of inventory control management practices on the performance of manufacturing companies in Nigeria, focusing specifically on Askar Paints Nigeria Limited. The results, derived from survey data, provide compelling evidence that effective inventory control significantly enhances business performance.

Table 9 illustrates employee perceptions regarding the impact of inventory control management on production costs and profitability. A substantial majority of respondents—60%—strongly agreed that effective inventory control practices decrease production costs, while 30% agreed, resulting in a total of 90% affirming the positive impact of these practices. Only 1.7% disagreed, and none strongly disagreed, indicating a robust consensus.

The findings also highlight the relationship between effective inventory control and sales performance. The data reveal that 46.7% of respondents strongly agreed that these practices contribute to increased sales, with 40% agreeing, totaling 86.7% who recognize this positive influence. Notably, no respondents disagreed, underscoring the perceived benefits of effective inventory management in driving sales and profitability.

Furthermore, effective inventory control reduces production costs and leads to lower product prices, enhancing sales and overall profitability. As indicated by the responses, 63.4% strongly agreed that effective inventory control results in decreased production costs, while 33.3% agreed, representing a combined 96.7% who see a direct correlation between cost efficiency and pricing strategies. Again, there was no disagreement among respondents, reinforcing the importance of inventory management in shaping competitive pricing.

The findings from Askar Paints Nigeria Limited indicate a strong consensus among employees that effective inventory control management practices significantly influence production costs, sales volumes, and profitability. These results suggest that manufacturing companies in Nigeria can enhance operational performance by adopting robust inventory management strategies. This study offers valuable insights for managers aiming to optimize inventory practices to improve organizational performance.

Table 10. Descriptive statistics on responses to questions on establishing the influence of inventory control management practices on the business performance of Askar Paints Nigeria Limited.

Mean	12
Standard Error	6.6647
Standard Deviation	14.9027
Kurtosis	-0.8637
Skewness	0.9617
Count	60
Confidence Interval (95.0 %)	18.50

Table 10 shows the descriptive statistical relationship of the responses to the questions establishing the relationship between Askar Paints Nigeria Limited's business performance and inventory control management. For each question, the total number of responses (count) is 60, reflecting the number of participants for the study. The standard error and standard deviation values are 6.6647 and 14.9027, respectively.

The skewness value is positive (0.9617), which implies that the values of the responses to the questions are highly skewed. The kurtosis value of -0.8637 was reported for this study, meaning it is lighter-tailed. The confidence interval (95%) for responses to questions under this section is 18.50. Figure 5 shows the graph of the average response values to questions aimed at establishing the influence of inventory control management practices on the business performance of Askar Paints Nigeria Limited.

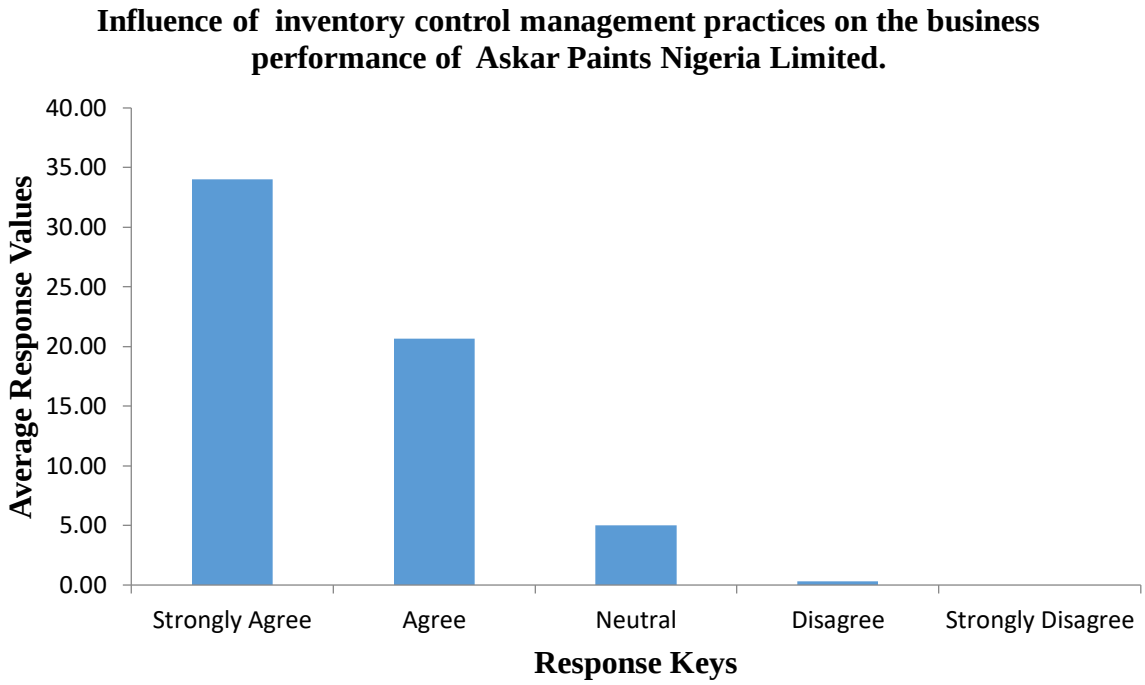

Figure 5: The relationship between Askar Paints Nigeria Limited's business performance and inventory control management.

Risk Management Analysis

Table 11. Risk Impact Criteria

Score	Level	Description (response based)
5	Extreme	- challenges to the production process (> 15 responses) - poor business performance (> 20 responses) - customers' complaints (> 15 responses)
4	Major	- challenges to the production process (11 - 13 responses) - poor business performance (13 - 20 responses) - Customer complaints (11 - 15 responses)
3	Moderate	- challenges to the production process (6 - 10 responses) - poor business performance (9 - 12 responses) - customers complaint (7 - 10 responses)
2	Minor	- challenges to the production process (4 - 5 responses) - poor business performance (6 - 8 responses)

Score	Level	Description (response based)
		- Customer complaints (4 - 6 responses)
1	Incidental	- challenges to the production process (≤3 responses) - poor business performance (≤5 responses) - Customer complaints (≤3 responses)

		Possibility				
		Very Rare (1)	Less Possible (2)	Maybe (3)	Very Likely (4)	Almost (5)
IMPACT	Extreme (5)	MODERATE	HIGH	HIGH	EXTREME	EXTREME
	Major (4)	LOW	MODERATE	HIGH	HIGH	EXTREME
	Moderate (3)	LOW	LOW	MODERATE	MODERATE	EXTREME
	Minor (2)	LOW	LOW	LOW	MODERATE	MODERATE
	Incidental (1)	LOW	LOW	LOW	LOW	MODERATE

Figure 6. Risk Matrix

The response analysis from the questionnaires was the basis for the risk matrix. The inventory risk analysis was done to determine the risk involved with the company's ability to sell its products or the possibility that its inventory stock may lose value. This assessment focused on three distinct risk impact criteria: obstacles to the production process, poor business performance, and customer complaints or satisfaction. The risk impact criteria and risk matrix are shown in Table 11 and Figure 6, respectively. In the category of production process risks, supplier delays frequently impede inventory management, which might lead to other risk factors.

The business performance shows insignificant risk because the production process is "made to stock" instead of "made to order." A significant advantage of make-to-stock production is shortened lead times, as shown in the responses from the respondents. Askar Paints Nigeria Limited uses repetitive manufacturing techniques in its production operations to generate batches of a similar product in good succession. Their products are then available to ship to customers as soon as the orders arrive, leading to customer satisfaction because goods are available once requested. Their products are often already in stock in local distribution centers for even faster delivery. Askar Paints' production method is often significantly more straightforward and streamlined because its products have fewer features. According to the respondents, the company depends on the accuracy of the forecast, which is a significant drawback of this manufacturing technique.

Thus, there are inclinations for some goods to get destroyed in storage during particular seasons when the forecast fails and demand declines. There is always a chance that more products will be produced than there are buyers, and those products could get spoiled or damaged. There is also a chance that this excess stock will never be sold, which could result in the manufacturer being obliged to pay a disposal fee.

According to the findings, Askar Paints Nigeria Limited experiences more excellent business performance and a more decisive comparative advantage with higher levels of inventory management technique. The results show that inventory control management positively affects the organization's financial health and supply chain. Respondents said that the company's sales and client base had increased annually. Inventory management has improved the company's customer satisfaction behavior. Due to efficient inventory management procedures, the business can promptly determine availability when clients

inquire about specific items. As a result, clients have a better view of the company and are less inclined to buy products from Askar Paints Nigeria Limited's competitors. This ensures quick response times to inquiries. Askar Paints Nigeria Limited may run successfully and survive due to proper inventory management. This is clear from the responses since the majority said that the manufacturing firm does not have stockouts and that productivity, profitability, and customer satisfaction have increased.

5. CONCLUSION

The study provides compelling evidence of the significant role of inventory control management practices in enhancing the organizational performance of manufacturing companies in Nigeria, specifically through the case of Askar Paints Nigeria Limited. By evaluating the extent of inventory control practices, their impacts on business performance, and the relationships that underpin these dynamics, the research demonstrates how effective inventory management can lead to substantial improvements in operational efficiency and profitability.

The findings indicate that a skilled workforce and robust inventory management techniques are vital for minimizing production costs and optimizing resource allocation. The high percentage of employees who recognized the effectiveness of inventory practices in reducing costs and increasing customer satisfaction underscores the importance of these practices in fostering a competitive edge within the manufacturing sector. Notably, the study highlights the direct correlation between effective inventory control and enhanced sales performance, as evidenced by the growing customer base and rising profitability reported by respondents.

Moreover, the results reflect a consensus among employees on the necessity of continuous training and skill development in inventory management. This commitment to enhancing employee capabilities is crucial for maintaining high inventory control standards, which, in turn, supports the organization's overall success. Askar Paints Nigeria Limited's approach to inventory management not only facilitates operational efficiency but also positions the company favorably within the marketplace by ensuring timely delivery of products and improved customer service.

In conclusion, the research affirms that effective inventory control management is integral to the performance of manufacturing companies in Nigeria. By adopting comprehensive inventory management strategies, Askar Paints Nigeria Limited can continue to drive business growth and profitability while navigating the challenges of a competitive manufacturing environment. The insights gained from this study are invaluable for industry practitioners aiming to refine their inventory management practices, enhance operational performance, and achieve sustained competitive advantage in the ever-evolving market landscape.

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