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Stock Control Practices and Organizational Effectiveness in Nigerian Beverage Distribution Firms: An Empirical Study

Ebere-Nwosu Chidubem[1*]; Akaun George Junior[2]; Stanley Kalu Awa[3]; Ikeogu Vivian Ngozi[4]; Egwu Lawrence Okpara[5]

[1]International Breweries Plc, Imo State, Nigeria.
[2]Department of Project Management Technology, (FUTO) Owerri, Nigeria.
[3]Department of Finance and Innovation Technology, (FUTO) Owerri, Nigeria.
[4]Department of Logistics and Transport Technology, (FUTO) Owerri, Nigeria.
[5]Department of Entrepreneurship and Innovation Technology, (FUTO) Owerri, Nigeria.

Corresponding Author: Ebere-Nwosu Chidubem*

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Abstract: This study examines the relationship between stock control practices and organizational effectiveness among beverage distributors in Imo State, Nigeria. Specifically, it aims to identify the relationship between stock control and organizational effectiveness among selected beverage distributors in Imo State. Inventory management is widely recognized as a key driver of supply chain efficiency, influencing operational performance, cost control, and customer satisfaction. However, empirical findings in developing economies remain inconsistent, particularly in sectors constrained by infrastructural and technological limitations.

A survey research design was adopted, with data collected from 333 employees across selected beverage distribution firms. Descriptive statistics and Pearson correlation analysis were employed to analyze the data.

The findings reveal that stock control practices have no statistically significant relationship with organizational effectiveness (r = 0.004, p = 0.946). This challenges the conventional assumption that effective inventory management directly improves organizational performance. The results suggest that stock control systems, when implemented without technological integration and managerial efficiency, may have limited impact.

The study concludes that inventory practices must be integrated with broader operational strategies to achieve meaningful performance outcomes. It recommends the adoption of modern inventory technologies, workforce development, and improved logistics coordination.

Keywords: *Stock Control, Inventory Management, Organizational Effectiveness, Supply Chain, Nigeria.*

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I. INTRODUCTION

Inventory management, particularly stock control, is a critical aspect of supply chain operations and organizational performance. In manufacturing and distribution sectors, effective inventory management determines both cost efficiency and responsiveness to customer demands. Stock control ensures that organizations maintain optimal inventory levels, preventing stockouts and overstocking, which can negatively affect operational efficiency and financial performance [1–3].

Historically, inventory was viewed as a sign of organizational strength; however, contemporary management philosophies consider excess inventory a source of inefficiency and higher operational costs [4,5]. Modern strategies such as lean inventory systems, just-in-time (JIT), and digital inventory tracking have proven

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effective in developed economies with robust technological infrastructures [6,7].

In contrast, developing economies like Nigeria present a different reality. Many firms, particularly in the beverage distribution sector, still rely on manual or semi-automated systems prone to inaccuracies, delays, and inefficiencies [8,9]. These limitations are compounded by external challenges such as poor transportation infrastructure, inconsistent supply chains, and limited access to modern logistics technologies [10]. Consequently, the effectiveness of stock control systems in such contexts remains uncertain.

The beverage distribution sector in Imo State represents a key segment of Nigeria's supply chain network, characterized by high product turnover, demand variability, and logistical complexity. In such a setting, efficient stock control is expected to enhance organizational effectiveness through improved service delivery, reduced operational costs, and increased customer satisfaction. However, empirical evidence of these outcomes remains sparse [11].

Prior studies on inventory management and organizational performance are inconsistent. While some report positive relationships between stock control and performance outcomes, others indicate that inventory management alone may not significantly influence effectiveness [12,13]. Factors such as technological capability, workforce competence, and managerial efficiency may mediate this relationship. Preliminary evidence suggests that stock control practices in beverage distribution firms in Imo State do not consistently yield measurable improvements in organizational effectiveness [11].

This study seeks to address this gap through an empirical examination of the relationship between stock control and organizational effectiveness in the beverage distribution sector of Imo State. By focusing on this context, it provides insights into inventory management in emerging economies, where structural and operational constraints may limit expected outcomes. The study contributes theoretically by challenging conventional assumptions about direct links between inventory management and performance, and practically by informing managers and policymakers about the need for integrated supply chain approaches that combine stock control with technology adoption, workforce development, and strategic planning [14,9,21].

II. LITERATURE REVIEW

➢ *Conceptual Review: Stock Control and Organizational Effectiveness*

Stock control, synonymous with inventory management, involves regulating stock levels [1,3,22]. Key activities include stock monitoring, replenishment, record keeping, and demand forecasting. Effective stock control prevents stockouts and overstocking, which could otherwise impair operational performance [2,15].

Organizational effectiveness reflects how well an organization achieves its goals efficiently using available resources [12]. In logistics and distribution, it is measured through operational efficiency, service delivery, cost management, and customer satisfaction. Poor stock control leads to delays, higher costs, and dissatisfied customers [10,9].

The relationship between stock control and organizational effectiveness is often assumed to be direct and positive. However, this may not hold in developing economies with infrastructural and operational constraints [13,11].

➢ *Theoretical Review*

- *Economic Order Quantity (EOQ) Theory*

EOQ determines the optimal order quantity to minimize total inventory costs [2]. It assumes constant demand, fixed ordering costs, and stable lead times. While theoretically robust, EOQ is less practical in developing economies where demand volatility and supply chain unpredictability are common [12,15].

- *Just-in-Time (JIT) Theory*

JIT focuses on receiving goods only as needed, reducing inventory and waste [4]. Its success relies on reliable supply chains and efficient transport systems, which are often lacking in Nigeria [10].

- *Lean Inventory Theory*

Lean inventory extends JIT by eliminating waste and optimizing resources [5]. Full benefits require technological support, skilled workforce, and strong organizational culture, which may be limited in developing contexts, reducing the effectiveness of stock control practices [12].

➢ *Empirical Review*

Studies on stock control and organizational effectiveness show mixed outcomes. Effective inventory management improves operational efficiency, reduces costs, and enhances performance [1,4,16]. Conversely, Onyema (2019) and Nwankwo & Eze (2020) found no significant effects of stock control on performance in Nigerian firms [13,11]. Akanbi et al. (2018) also highlight that inventory management may influence performance indirectly, mediated by management practices and technological adoption [12].

➢ *Critical Review and Research Gap*

Current literature has three main limitations:

- Many studies assume a linear relationship between stock control and effectiveness without considering contextual factors, leading to oversimplified conclusions in developing economies [13,11].
- The role of mediating variables such as technology, workforce competence, and management efficiency is often overlooked [12].

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- Empirical results are inconsistent, with both positive and non-significant effects reported, highlighting the need for context-specific studies.

➢ *Research Gap*

This study addresses these gaps by empirically investigating stock control and organizational effectiveness among beverage distributors in Imo State, contributing to a more nuanced understanding of inventory management in resource-constrained environments.

III. METHODOLOGY

This study adopts a survey research design, which is appropriate for collecting quantitative data from a large population and examining relationships between variables [17]. The design allows for systematic data collection and statistical analysis to test the study objective.

The population of the study consists of approximately 2,000 employees working in major beverage distribution firms in Imo State, including organizations such as Deep Atlantic Energy Limited and Araha Group [8]. These employees are directly involved in warehouse operations, inventory management, and logistics activities, making them suitable respondents for the study.

A sample size of 333 respondents was determined using the Taro Yamane (1967) formula, which ensures representativeness at a 95% confidence level [18]. A purposive sampling technique was employed to select respondents with relevant knowledge and experience in stock control practices.

Data were collected using a structured questionnaire, divided into two sections. The first section captured demographic information such as age, gender, and educational background, while the second section focused on variables related to stock control and organizational effectiveness. Responses were measured using a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

The validity of the instrument was ensured through expert review, where the questionnaire was examined for clarity, relevance, and alignment with the research objectives [17]. Reliability was assessed using the Pearson correlation coefficient, yielding a value of 0.68, which falls within the acceptable range for social science research [19].

Data analysis was conducted using both descriptive and inferential statistics. Descriptive statistics such as frequencies, percentages, and mean scores were used to summarize respondents' characteristics and responses. Inferential statistics, specifically Pearson correlation analysis, were used to test the relationship between stock control and organizational effectiveness.

A decision rule of 2.5 was adopted for mean scores, where values above 2.5 indicate agreement and values below indicate disagreement [11]. The results were presented in tables for clarity and ease of interpretation.

IV. RESULTS AND DISCUSSION

Table 1 Presents the Distribution of Respondents by Organizational Size, Job Position, and Educational Level Position and Their Education Level in a Study of Some Beverage Distributors in Imo State.

Variable	Category	n	%	Cumulative %
Organization Size	< 50 employees	51	17.0	17.0
	51–100 employees	55	18.3	35.3
	101–250 employees	67	19.7	55.0
	251–500 employees	75	21.7	76.7
	> 500 employees	85	23.3	100.0
Position	Senior Management	56	18.7	18.7
	Middle Management	74	24.7	43.3
	Supervisors	50	16.7	60.0
	Operations Staff	58	19.3	79.3
	Others	62	20.7	100.0
Educational Level	SSCE/NECO	69	23.0	23.0
	OND/HND	64	21.3	44.3
	Bachelor's Degree	49	16.3	60.6
	Master's Degree	58	19.3	80.0
	Others	60	20.0	100.0

When it comes to organization size the results show an even spread across different sizes. The most respondents, 85 (23.3%) work for companies with more than 500 employees. Next are 75 respondents (21.7%) who work for companies with 251-500 employees. Then there are 67 respondents (19.7%) from companies with 101-250 employees and 55 (18.3%) from companies with 51-100 employees. The smallest group is from companies with than 50 employees with 51 respondents (17.0%).

Most respondents, 55.0% work for companies with 250 employees or fewer.

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Also 76.7% of respondents work for companies with up to 500 employees.

This shows that although respondents come from sized companies there are more from larger companies.

In terms of job position the data show a mix of people from different levels.

The largest group, 74 respondents (24.7%) are in management.

Then there are 62 respondents (20.7%) in categories and 58 (19.3%) are operations staff.

Senior management has 56 respondents (18.7%) while supervisors have the group with 50 respondents (16.7%).

Here 43.3% of respondents are in senior management and 79.3% are supervisors or below.

This distribution shows a spread of respondents across different levels with a focus on middle management.

Looking at education level the findings show a range of qualifications.

The most respondents, 69 (23.0%) have SSCE/NECO qualifications.

Next are 64 respondents (21.3%) with OND/HND qualifications.

Then there are 60 respondents (20.0%) with qualifications and 58 (19.3%) with Masters degrees.

The smallest group has 49 respondents (16.3%) with Bachelor's degrees.

Here 44.3% of respondents have qualifications up to OND/HND level. 80.0% Have qualifications up to a Master's degree.

Overall, the results show that respondents come from organizations of varying sizes, the results show a workforce with educational backgrounds, including many, with advanced qualifications

In summary the table shows that respondents come from organizations of sizes have different roles and have a range of educational qualifications.

This variety makes the study findings representative and reliable.

To achieve the study objective, the following hypothesis was tested:

$H0_1$: There is no significant relationship between stock control and organizational effectiveness of selected brewery distributors in Owerri, Imo state.

Table 2 Correlations Analysis Results of the Significant Relationship between Stock Control and Organizational Effectiveness.

		Inventory management	Organizational effectiveness
Inventory management	Pearson Correlation	1	.004
	Sig. (2-tailed)		.946
	N	333	333
Organizational effectiveness	Pearson Correlation	.004	1
	Sig. (2-tailed)	.946	
	N	333	333

Table 2 shows the Pearson correlation results for stock control (inventory management) and organizational effectiveness. The correlation coefficient ($r = 0.004$) indicates a very weak positive relationship, which is not statistically significant ($p = 0.946 > 0.05$). Hence, the null hypothesis (H01) cannot be rejected, implying that stock control practices do not have a significant impact on organizational effectiveness among the studied brewery distributors.

Table 3 Mean Ranking of Stock Control Challenges

Factor	Mean Score	Rank
Poor Inventory tracking systems	3.42	1st
Inadequate staff training	3.31	2nd
Lack of technology integration	3.25	3rd
Poor demand forecasting	3.10	4th
Inefficient record keeping	2.98	5th

Table 4.3 presents the mean ranking of challenges affecting stock control practices. The results indicate that poor inventory tracking systems (Mean = 3.42) ranked first, followed by inadequate staff training (Mean = 3.31) and lack of technology integration (Mean = 3.25). Other challenges identified include poor demand forecasting (Mean = 3.10) and inefficient record-keeping (Mean = 2.98).

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These findings suggest that operational and technological deficiencies are the major barriers to effective stock control among the studied firms. Specifically, operational issues such as poor tracking and record keeping, combined with technological gaps like the absence of integration, significantly hinder efficiency in inventory management.

At first glance, the finding of a non-significant relationship between stock control and organizational effectiveness appears to contradict conventional inventory management theories such as Economic Order Quantity (EOQ), Just-in-Time (JIT), and Lean Inventory systems, which generally posit that efficient inventory control enhances organizational performance [2,4]. However, a deeper analysis reveals that this result is both contextually valid and theoretically meaningful, particularly within developing economy settings.

One key explanation for this outcome lies in the limitations of applying classical inventory models in unstable operational environments. The EOQ model, for instance, assumes stable demand patterns and predictable lead times conditions that are rarely present in the Nigerian distribution sector [12]. Similarly, JIT systems depend on reliable transportation infrastructure and seamless supplier coordination, which are often constrained by logistical inefficiencies, poor road networks, and inconsistent supply chains [20]. As a result, even when stock control practices are implemented, their effectiveness may be significantly diminished.

Furthermore, the finding suggests that stock control, in isolation, is insufficient to drive organizational effectiveness. Organizational performance is a multidimensional construct influenced by a combination of factors including technology integration, workforce competence, managerial efficiency, and process optimization. The descriptive results presented earlier (mean ranking of challenges) indicate that issues such as poor inventory tracking systems, inadequate staff training, and lack of technological support are prevalent. These factors likely weaken the impact of stock control practices, leading to the observed non-significant relationship.

This finding aligns with Onyema (2019) and Nwankwo and Eze (2020), who reported that inventory management practices do not always translate into improved organizational performance in developing economies [13,11]. It also supports the argument by Akanbi et al. (2018) that the relationship between inventory management and performance is often indirect and mediated by organizational capabilities [12]. In other words, stock control contributes to effectiveness only when supported by enabling structures such as digital inventory systems, skilled personnel, and efficient management processes.

Another important implication of this result is the concept of operational decoupling, where inventory systems exist but are not effectively integrated into broader organizational processes. In such situations, firms may maintain stock records and control mechanisms, but these systems do not meaningfully influence decision-making or operational efficiency. This disconnect reduces the potential impact of stock control on overall performance.

Additionally, the very low correlation coefficient ($r = 0.004$) suggests that variations in organizational effectiveness are almost entirely explained by factors other than stock control. This reinforces the need for a more holistic approach to performance improvement, where inventory management is combined with other strategic and operational initiatives.

From a practical perspective, the result highlights the need for organizations to move beyond basic stock control practices and invest in integrated logistics systems, staff development, and process improvements. Without these complementary factors, stock control alone is unlikely to yield significant performance gains.

In summary, while traditional theories emphasize the importance of inventory management, the findings of this study challenge the assumption of a direct relationship between stock control and organizational effectiveness. Instead, the study demonstrates that context matters, and that the effectiveness of stock control practices depends heavily on the broader organizational and environmental conditions in which they are implemented.

V. CONCLUSION AND RECOMMENDATION

This study examined the effect of stock control practices on organizational effectiveness among beverage distributors in Imo State, Nigeria. The findings revealed that although stock control practices are moderately implemented within the studied firms, they do not have a statistically significant influence on organizational effectiveness ($r = 0.004$, $p = 0.946$). This indicates that variations in stock control practices do not translate into measurable improvements in organizational performance.

The result challenges the conventional assumption in inventory management literature that effective stock control directly enhances organizational outcomes. While theoretical models such as Economic Order Quantity (EOQ), Just-in-Time (JIT), and Lean Inventory systems emphasize efficiency gains from inventory optimization, the findings of this study suggest that such benefits may not be realized in contexts characterized by operational inefficiencies, infrastructural limitations, and weak system integration.

Furthermore, the study identified key challenges affecting stock control practices, including poor inventory tracking systems, inadequate staff training, and lack of technology integration. These constraints highlight the presence of structural and operational gaps that limit the effectiveness of stock control systems. As such, stock control appears to function in isolation rather than as part of

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an integrated operational framework that supports organizational performance.

Overall, the study concludes that stock control, while necessary, is not sufficient on its own to drive organizational effectiveness in the studied context. Its impact is largely dependent on complementary factors such as technological capability, human resource competence, and efficient management systems. Therefore, organizations seeking to improve performance must adopt a more holistic approach that integrates stock control with broader operational and strategic initiatives.

- *Based on the Findings of this Study, the Following Recommendations are Proposed:*

- *Integration of Technology in Inventory Systems*

Organizations should invest in modern inventory management technologies such as automated tracking systems, barcode systems, and enterprise resource planning (ERP) tools. This will enhance accuracy, reduce errors, and improve real-time decision-making in stock control processes.

- *Capacity Building and Staff Training*

Regular training programs should be organized for staff involved in inventory and warehouse management. Improving employees' technical and analytical skills will ensure more effective implementation of stock control practices.

- *Adoption of Integrated Logistics Systems*

Firms should move beyond isolated stock control practices and adopt integrated logistics and supply chain management systems. This will ensure that inventory decisions are aligned with procurement, distribution, and overall organizational strategy.

- *Improvement in Demand Forecasting Techniques*

Organizations should utilize data-driven forecasting methods to improve demand prediction. Accurate forecasting will reduce the risks of overstocking and stockouts, thereby improving operational efficiency.

- *Strengthening Management and Supervisory Controls*

Effective supervision and monitoring mechanisms should be established to ensure compliance with inventory policies and procedures. Strong management oversight will enhance accountability and efficiency in stock control operations.

- *Policy and Infrastructure Support*

Government and industry stakeholders should provide enabling infrastructure, particularly in transportation and logistics, to support efficient inventory management. Improved infrastructure will enhance the effectiveness of supply chain operations.

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