

## INVENTORY MANAGEMENT PRACTICES AND ORGANIZATIONAL PRODUCTIVITY IN NIGERIAN MANUFACTURING FIRMS

Mitaire Sunday Nwaiku\*; Jones Oghenemega Ejechi\*\*

\* M.Sc,

Department of Business Administration,  
Faculty of Management Sciences,  
University of Benin, NIGERIA

\*\*PhD,

Department of Business Administration,  
Faculty of Management Sciences,  
University of Benin, NIGERIA

Email id: jonesenjechi@yahoo.co.uk

**DOI: 10.5958/2249-877X.2022.00018.2**

---

### ABSTRACT

*This study examined the relationship between inventory management practices and productivity of selected manufacturing firms in Nigeria. The inventory management practices examined include inventory record accuracy, lean inventory system, buffer stock management and Information and Communication Technology. In addition, organizational productivity was measured along two dimensions namely: organizational effectiveness and organizational efficiency. A survey research design was adopted for the study. The population of the study comprises employees in the following departments – commercial, finance, production, distribution and inventory – of five selected manufacturing companies in Benin City. A sample size of two hundred and sixteen (216) employees from Seven-Up Bottling Company Ltd, Global Horn Industry PVC Ceiling Limited, Integrated Rubber product Nigeria Plc., Livestock Feeds Plc and Nigeria German Chemicals in Nigeria were selected for the study. The instrument for data collection was a questionnaire. Data collected from the questionnaire were analysed using frequency distribution, mean, correlation and regression. All analyses were done using the Statistical Package for the Social Sciences (SPSS) software. The findings of the study revealed that inventory record accuracy, lean inventory system and information technology have a positive and significant effect on organizational productivity in Nigeria while buffer stock management was found to be insignificant. The study recommends the need for manufacturing firms to improve their inventory record accuracy by using system-based inventory management practices to enhance organisational performance.*

**KEYWORDS:** *Buffer stock, Inventory, Management, Manufacturing, Productivity.*

## REFERENCES

- Acho, Y. (2021). Inventory management practices and performance of manufacturing firms in Kogi State. *Journal of Good Governance and Sustainable Development in Africa*, 6(3), 54-63.
- Agus, A., & Noor, Z. (2012). Supply chain management and performance: An empirical study. A Working Paper University of Malaysia, 1(1), 4-19.
- Almrdoof, F., & Attia, A. (2021). The effect of inventory management practices on productivity. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 18(15), 256-265.
- Anichebe, N.A., & Agu, O.A. (2013). Effect of inventory management on organizational effectiveness. *Information and Knowledge Management*, 3(8), 42-90.
- Anosa, I. C. (2021). Inventory management and productivity. *International Journal of Business & Law Research*, 9(1), 39-51.
- Bhatti, K. K., & Qureshi, T. M. (2014). Impact of employee participation on job satisfaction, employee commitment and employee productivity. *International Review of Business Research*, 3(4), 54-68.
- Chebet, E., & Kitheka, S. (2019). Effects of inventory management system on firm performance: An empirical study. *International Journal of Innovative Science and Research Technology*, 4(9) 29-35.
- Chen, H., Frank, M. Z., & Wu, O. Q. (2007). U.S. retail and wholesale inventory performance from 1981 to 2004. *Manufacturing & Service Operations Management*, 9(4), 430-456.
- Comez, S., & Kreshing, C. (2014). Assessing the effectiveness of the inventory management system in a service organization: A case study of Toyota Ghana Company Limited Central Parts Depot at Tema, Ghana. *European Journal of Business and Management*, 6 (15), 6-19.
- Coyle, J.J., Bardi, E.J., & Langley, J.C. (2013). *The management of business logistics: A supply chain perspective*. Canada: Thomson South-Western.
- Davis, K., (2016). How to increase teamwork in organizations. *Journal of Quality Assurance in Education*, 14(3), 243-250.
- Dimitrios, P. (2018). The effect of inventory management on firm performance. *International Journal of Productivity and Performance Management*, 57(5), 355-369.
- Donald, E. E. (2016). Profitability through effective management of material. *Journal of Economics and International Finance*, 1(4), 099-105.
- Edwin, S., & Florence, M. (2015). The Effect of Inventory Management on Profitability of Cement Manufacturing Companies in Kenya: A Case Study of Listed Cement Manufacturing Companies in Kenya. *International Journal of Management and Commerce Innovations*, 3(2), 111-119.
- Elsayed, K., & Wahba, H. (2019). Re-examining the relationship between inventory management and firm performance: An organisational life cycle perspective. *Future Business Journal*, 2(I), 65-80.
- Eneje, B. C., Nweze, A. U., & Udeh, A. I. (2012). Effect of efficient inventory management on profitability: Evidence from selected brewery firms in Nigeria. *International Journal of Current Research*, 4(11), 350-354.

Eroglu, C., & Hofer, C. (2011). Lean, leaner, too lean? The inventory-performance link revisited. *Journal of Operations Management*, 29(1), 356–369.

Floyd, R. (2010). Exploring the relationship between efficiency of inventory management and firm performance: An empirical research. *International Journal of Services and Operations Management*, 21(1), 73–86.

Githinji, A. (2014). *Effects of training on employee performance: A case study of United Nations support office for the African Union mission in Somalia*. (Master's Thesis, Chandaria School of Business, United States International University). Retrieved from <http://erepo.usiu.ac.ke/bitstream/handle/11732/71/ANGELA.pdf?sequence=1>

Glen, W. (November, 2014). *6 Challenges facing the global manufacturing sector in 2015*. Global Manufacturing. <http://www.manufacturingglobal.com/leadership/226/6-challenges-facing-the-global-manufacturing-sector-in-2015>.

Godana, B.E., & Ngugi, K. (2014). Determinants of effective inventory management at KenolKobil Limited. *European Journal of Business Management*, 31(7), 51-89.

Indira P (2018). *Romancing with inventory management*: New Delhi: Blue Diamond Publishing Inc.

Jessop, P., & Marrison, S. A. (2014). Inventory management practices and their implications on perceived planning performance. *International Journal of Production Research*, 46(7), 1787–1812.

Kairu, K. M. (2017). Role of strategic inventory management on performance of manufacturing firms in Kenya: A case of Diversey Eastern and Central Africa Limited. *International Academic Journal of Procurement and Supply Chain Management*, 1(4), 22-44.

Koin V. R., Cheruiyot G. K., & Mwangangi P. (2016). Effect of inventory management on the supply chain effectiveness in the manufacturing industry in Kenya: A case study of Tata Chemicals Magadi. *International Journal of Social Sciences Management and Entrepreneurship*, 1(2), 189-202.

Koumanakos, D.P. (2008). The effect of inventory management on firm performance. *International Journal of Productivity and Performance Management*, 57, 355-369.

Lockard, K. M. (2015). Role of strategic inventory management on performance of manufacturing firms in Kenya: A case of Diversey Eastern and Central Africa Limited. *International Academic Journal of Procurement and Supply Chain Management*, 1(4), 22-44.

Mohamad, S. J., Suraidi, N. N., Abd. Rahman, N. A., & Suhaimi, R. D. (2016). A study on relationship between inventory management and company performances: A case study of Textile Chain Store. *Journal of Advanced Management Science*, 4(4), 3-6.

Morgan, E. (2007). When more is not better: Quality. *Scientific Journals of the Maritime University of Szczecin*, 52(8), 24-39.

Muiruri, E. N., & Ochiri, G. (2019). Effect of inventory management practices on performance of manufacturing firms in Nairobi City County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 3(2), 141-154.

- Naliaka, V.W., & Namusonge, G.S. (2015). Role of inventory management on competitive advantage among manufacturing firms in Kenya: A case study of Unga Group Limited. *International Journal of Academic Research in Business and Social Sciences*, 5(5), 87–104.
- Ogbadu, E. E. (2018). Profitability through effective management of materials. *Journal of Economics and International Finance*, 1(4), 099-105.
- Ogbo, A. I., Onekanma I. V., & Wilfred I. U (2014). The impact of effective inventory control management on organizational performance: A study of 7up Bottling Company Nile Mile Enugu, Nigeria. *Mediterranean Journal of Social Sciences*, 5(10), 31-89.
- Opoku, R. K., Abboah, C. K. B., & Owusu, R. T. (2021). Inventory management strategies of food manufacturing industries in a developing economy. *Scientific Journal of Logistics*, 17(1), 37-48.
- Panigrahi, A. K. (2013). Relationship between inventory management and profitability: An empirical analysis of Indian Cement Companies. *Asia Pacific Journal of Marketing & Management Review*, 2(7), 41-89.
- Prempeh, K. B. (2015). *The impact of efficient inventory management on profitability: Evidence from selected manufacturing firms in Ghana*. Retrieved from: file:///C:/Users/good/Downloads/menuscript.pdf
- Rattner, S. (2006). *What is the theory of constraints, and how does it compare to lean thinking?* Lean Enterprise Institute. Accessed from <https://www.lean.org/> on 7/4/2021
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, fifth edition. England: Pearson Educational Limited.
- Sharma, J. K. (2013). *Operations Research: Theory and applications*. Macmillan Publishers India Ltd.
- Steph, C. (2008). Determinants of organizational performance: The case of Romania. *Management & Marketing Challenges for the Knowledge Society*, 6(2), 285- 300
- Stevenson, B. (2010). *Operations management* (10th ed.). New York: McGraw Hill Publishing.
- Teunter, R. B. (2012). ABC classification: Service levels and inventory costs. *Production and Operations Management*, 19(1), 3-17.
- Thogori M., & Gathenya, J. (2014). Role of inventory management on customer satisfaction among the manufacturing firms in Kenya: A Case Study of Delmonte Kenya. *International Journal of Academic Research in Business and Social Sciences*, 4(1), 31-89.
- Verma, A. P. (2013). *Operations Research*. S. K. Kataria & Sons.
- Wangari, K. L. (2015). Influence of inventory management practices on organizational competitiveness: A case of Safaricom Kenya LTD. *International Academic Journal of Procurement and Supply Chain Management*, 1(5), 72-98.
- Yesufu, T. M. (2010). *The human factor in national development*. Ibadan: Spectrum Books Limited.