

## Impact of Inventory Management Practices on the Performance of Small Scale Enterprises in Gwarimpa District, Abuja Nigeria

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**Abstract:** This study examines the impact of inventory management practices on the performance of SSEs in Gwarimpa District, Abuja Nigeria. The paper adopted a singular source of data collection. The data was examined using the content analysis approach. This is because of its major dependence on the secondary source data. Results reveal that inventory management practices have a positive and significant impact on the performance of SSEs. Furthermore, results also reveal that delay in delivery of materials, use of manual inventory management system/lack of technology, lack of professional personnel, holding too much/too little inventory, purchase of materials with a near expiration date, insufficient funds for procurement and use of outdated storage facilities are the major factors affecting effective inventory management practices in SMEs Gwarimpa District, Abuja, Nigeria. Subsequently, the study recommends that SMEs operators/ managers should be encouraged to adopt information technology in inventory management. Also, SMEs operators and managers should be encouraged to constantly attend conferences, seminars and workshops in Nigeria and abroad in order to improve their skills in inventory management.

**Keywords:** inventory management, Small Scale enterprises, performance, and management.

### 1. INTRODUCTION

small scale enterprises(SSEs) are acknowledged as vital and significant contributors to economic development owing to their considerable contribution to national income, employment, exports, entrepreneurship development and their acting as a vital link in the economy through their supply chain and intermediary role in trade (Nwangang et al, 2015). Small Sale Enterprises have been identified as one of the driving forces of modern economies, mainly due to their contributions to job creation and innovation in both developed and developing countries. A study by Bowen et al. (2009) also established that up to 50% of the small businesses in operation have a deteriorating performance and are said to stagnate at ‘small’ level hence do not progressively grow into medium or even large enterprises as envisaged in their conceptual plans. Despite their significance and the increased efforts to ensure the success of small scale enterprises, the International Labour Organization (2010) estimates that two-thirds of the enterprises were generating incomes equal to or below the minimum wage, a sobering finding that must temper one’s enthusiasm for the growth of SSE’s as a solution to the country’s poverty and employment problems. As observed by Baron (2010), the health of the economy as a whole has a strong relationship with the health and nature of the small enterprise sector. Given their importance to a nation’s economic growth and the role that they play in poverty reduction, an understanding of the problems negatively affecting small businesses in Nigeria is a vital first step in managing and avoiding the massive failure of these small businesses (ILO, 2010). However, SSEs in Nigeria have failed in terms of significant contribution to economic growth and development, in spite of government efforts to make SSEs solidified and wax stronger among its peers in Africa countries. To support this revelation, Kareem (2018) argue that most SSEs in Nigeria die within their first five years of existence. Equally Oloweet al. (2013) reiterates that many SSEs in Nigeria could not reach the growth stage of their life cycle. One of the remedies suggested by Baron et al. (2010) to improving the performance of businesses is wise demand management which is anchored in effective inventory management. Inventory management practices have been well researched and documented in the management literatures. Scholars, researchers and professionals acknowledged that inventory management remains a serious concern for businesses wishing to remain competitive and survive in the marketplace. Rajeev (2008) argues that inventory management plays a crucial role in inventory of business firms in enhancing effectiveness and efficiency. It has been of sympathy toward numerous years to business firms around the world. Inventory management aim is holding inventories at the most reduced conceivable cost, given the goals to guarantee continuous supplies for

progressing operations. According to Salami (2009), inventory management comprises various actions taken by the management to reduce cost, maintain production, continuous supply and reduce loss. Based on this background, the study intends to investigate the Impact of inventory management practices on the performance of small scale enterprises in Gwarimpa District, Abuja Nigeria.

## 2. STATEMENT OF THE PROBLEM

In recent years, a number of firms have faced numerous challenges especially in inventory management or material control, thus affecting the performance of organizations. There have been cases of materials overstocking which eventually get expired or out dated, under stocking, lack of stock-taking, theft of materials by workers and delays in deliveries of materials into the organizations among others (Munyao, 2015). It is therefore important for organizations particularly small scale enterprises to have sound, effective and well-coordinated inventory management systems because the business environment is rapidly changing, highly competitive and this drastically affects the performance of the organization. Therefore, it is crucial for SSEs too keen in managing their inventories and the means associated with inventory management practices. There are plethora studies on inventory management in European and Asian countries; thus very limited research has been done in the context of Africa, particularly in Nigeria. Those conducted in Nigeria such as Oladejo and Ajala, (2016) and Mshelia, (2015) none of these studies actually focused it investigation on the Nigeria small scale enterprises and the impact of inventory management practices on the performance of small scale enterprises in Nigeria. Thus, findings may not be applicable to SSEs. Therefore, the study intends to fill the gap in knowledge by investigating the Impact of inventory management practices on the performance of small scale enterprises with particular reference to Gwarimpa District, Abuja Nigeria.

## 3. OBJECTIVES OF STUDY

- i. Establish the impact of inventory management practices on SSEs in Gwarimpa District, Abuja, Nigeria.
- ii. Evaluate the impact of inventory management practices on the performance of SSEs in Gwarimpa District, Abuja, Nigeria.

## 4. RESEARCH HYPOTHESIS

The study is geared towards addressing the following hypothesis, which is deduced from, the above research objectives using null hypothesis.

H<sub>01</sub>: Inventory management practices have no significant impact on small scale enterprises.

H<sub>02</sub>: Inventory management practices have no significant impact on the performance of small scale enterprises

## 5. LITERATURE REVIEW

### 5.1 Concept of Inventory Management

Coyle, et al (2003) define inventory as raw materials, work-in progress, finished goods and supplies required for creation of a company's goods and services. It is also the number of units and/or value of the stock of goods a company holds. Dave (2001) on the other hand also defines inventory as "the stock of any item or resource used in an organization". In a broader context, inventory can include inputs such as financial, energy, human, equipment, and physical items such as raw material; inputs such as parts, components, and finished goods; and interim stages of the process, such as partially finished goods or work-in-progress. Lysons and Gillingham (2003) postulate that inventory management refers to the entire activities involved in developing and managing the inventory levels of raw materials, semi-finished materials (work-in-progress) and finished good so that adequate supplies are available and the costs of over or under stocks are low. Inventory management is the process of effectively overseeing the constant flow of units into and out of an existing inventory. This process usually involves controlling the transfer of the units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of a business into jeopardy. Effective inventory management seeks to control the costs associated with the inventory, from the perspective of the opportunity cost of the capital tied up in the inventory, the holding cost and the ordering costs. According to Kanguru, (2016), Economic Order Quantity(EOQ), Just in Time (JIT), ABC Analysis and Rules of Thumb are major inventory management practices. Gitau, (2016) argues that Automatic Replenishment, Activity Based Costing (ABC) Inventory Model,

Just-In Time(JIT) Inventory, Economic Order Quantity EOQ and Vendor Managed Inventory are inventory management practices, while Onyango, (2016) also assert that Re-Order Level, Economic Order Quantity, Just-In-Time, Vendor Managed Inventory and Activity Based Costing Analysis are main inventory management. For the purpose of this study, the inventory management practices discussed are Activity Based Costing Analysis, Just-In Time (JIT) Inventory, Economic Order Quantity EOQ) and Vendor Managed Inventory which mostly applicable in small scale enterprises.

## 5.2 Activity based costing analysis

ABC analysis is where stocks are classified into three categories namely: A – stock items that are of high value and material to the organization but low volume B – stock items which are of medium value and medium volume; C – stock items bearing minimal value but are of great volume (Onyango, 2016). ABC analysis helps allocate money and time thus allowing firms to deal with multitude of Stock-keeping Units (SKU) and multiple product lines.

## 5.3 Just-In Time (JIT) inventory

This is a system of stock control that endeavors to decrease levels of stock by planning free market activity by the point where the sought thing touches base for utilize in the nick of time (Coyle, et al, 2003). Osei (2015) notes that the Just-In-Time (JIT) System ties to eliminate waste by maintaining just enough inventories at the right place at the right time to make just the right amount of product. Stock and Lambert, (2001), further explained that in Just in time (JIT) System, anything over the minimum amount necessary for a task is considered wasteful. Thus, Just-In-Time (JIT) attempts to minimize inventories through the elimination of safety stock (Osei, 2015).

## 5.4 Economic Order Quantity (EOQ)

This is the optimal ordering quantity for an item of stock that minimizes cost (Lysons, 2003). According to Osei, (2015), Economic Order Quantity approaches have proven to be effective inventory management technique when the demand and lead time are relatively stable, as well as when significant variability and uncertainty exist. Stock (2001) also argue that Economic Order Quantity (EOQ) focuses more on minimizing inventory cost rather than minimizing the inventory itself.

## 5.5 Vendor Managed Inventory

This is a supply chain method whereby the vendor or supplier is given the duty of managing the purchaser's inventory. Wailer and Barry (2009) assert that Vendor Managed Inventory (VMI) is one of the maximum extensively discussed partnering tasks for improving company deliver chain performance and that it is also referred to as continuous replenishment or supplier-managed inventory (SMI). According to Onyango, (2016), vendor managed inventory saves an organization immense time and finance since the supplier will be able to monitor its customer's levels of inventory and make a point of replenishing them.

## 5.6 Concept of SSEs

Small scale business enterprise can be defined in terms of annual sales, asset valuation, net profit, balance sheet totals and the size of the business including the numbers of employees available in the business. Different authors, scholars, and schools have different ideas as to the variation in capital outlay, number of employees, sales turnover, fixed capital investment, available plant and machinery, market share and the level of development, these features equally vary from one country to the other. In Nigeria, the Third National Development plan defined a small scale business as a manufacturing establishment which employs not more than ten people, or whose investment in machinery and equipment does not exceed six hundred thousand naira. The Central Bank of Nigeria (1983) in its credit guidelines, classified small scale business as the business with an annual income or asset of less half a million naira (N500, 000). The Federal Government Small Scale Industry Development Plan of 1980 defined a small scale business enterprise in Nigeria as any manufacturing process or service industry, with a capital not exceeding N150, 000 in manufacturing and equipment alone. The small scale industries association of Nigeria (1973) defined small scale business as those having investment of capital, land building and equipment of up to N60, 000 pre SAP Value and employing not more than fifty persons. The Federal Ministry of Industries (1973) defined it as those enterprises that cost no more than N500, 000 (pre-SAP Value) including working capital to set

up. In 1990 budget, the Federal Government of Nigeria defined small scale enterprises for the purpose of commercial loan as those enterprises with annual turnover not exceeding N500, 000 for merchant loan and those for the purpose of commercial loan as enterprises with capital investment not exceeding N2 million (excluding cost of land or a maximum of N5 million). According to Umar (1997) the concept of the small size firm is a relative one and it depends mainly on both the geographical location and the nature of economy activity being performed. A small scale enterprise is a privately owned and operated business, characterized by a small number of employees and low turnover. A small enterprise usually only shares a tiny segment of the market it operates in. Small scale enterprises (also, small scale businesses) are essential to the economy for industrial growth and diversification. According to the size various countries have different specification of the numbers of employees a small business enterprise should have. The U.S. Small Business Administration states that small-scale enterprises generally have fewer than 500 employees within a 12-month period in non-manufacturing industries. A company must consider any individual on its payroll as an employee. In Australia, however, a small-scale enterprise is one that has fewer than 15 employees on payroll, as defined by the Firework Act. The Small Business Act for Europe states that small enterprises are those that have 250 employees or less. Small scale enterprises in Asian countries generally have 100 or fewer employees, while small scale in African enterprises hire 50 or fewer workers. Using financial measures such as net profits, balance sheet totals, the value of assets and annual sales as a means of defining small scale business enterprise In the United States for example, a non-manufacturing small scale enterprise is one that does not earn more than \$7 million in a year. Financial measures can vary by industry, as annual receipts may be higher for industries that have higher overhead costs to operate. In general, small scale enterprises are businesses that do not dominate their respective industry (MOPFED Report, 2010).

## 6. RESEARCH METHOD

The paper adopted a singular source of data collection. The secondary source of data generation, which comprises of the use of textbooks written by different authors on the subject matter, journals, magazines, information from the internet and other published and unpublished materials applicable to the work. The data was examined using the content analysis approach. This is because of its major dependence on the secondary source data.

## 7. CONCLUSION

This study examines the Impact of Inventory Management Practices on the Performance of Small Scale Enterprises, Gwarinpa, and Abuja, Nigeria. The study establishes that most SSEs in Gwarimpa use Economic Order Quantity while other latest techniques are yet to be implemented.

Furthermore, the study affirms that inventory management practices have positive and significant impact on SSEs performance in terms of production costs reduction, prevention of shortages and stock out reduction in delivery lead time. The study also confirms that delays in delivery of materials leading to insufficient inventories, use of manual inventory management system/Lack of technology, lack of professional Personnel, holding too much/too little inventory, purchase of materials with a near expiration date, insufficient funds for procurement and use of outdated storage facilities are the factors affecting inventory management practices in SSEs.

## 8. RECOMMENDATIONS

Subsequently, the study recommends that SSEs operators/ managers should be encouraged to adopt information technology in inventory management. Automation assists procurement function in stock control by setting stock control levels and calculating the amount of stocks to hold and dispatch, thus improving the performance of the procurement function. Also, SSEs operators and managers should be encouraged to constantly attend conferences, seminars and workshops in Nigeria and abroad in order to improve their skills on inventory management.

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