

**INVENTORY CONTROL MEASURES FOR OPERATIONAL EFFICIENCY OF  
SMALL SCALE BUSINESS IN IKOT EKPENE METROPOLIS OF AKWA IBOM  
STATE.**

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**ABSTRACT**

*This paper determined the inventory control measures for operational efficiency of small scale businesses. Two objective, two research questions and two hypotheses guided the study. A survey research design was adopted. Fifty registered small scale businesses were randomly selected for the study. The researcher designed a four point rating scale of questionnaire and was used for collection of information and data for analysis. A reliability index of .83 was obtained using Cronbach Alpha statistical tool. The data collected was process with the use of Statistical Package for Social Science (SPSS). The research questions were answered using descriptive statistics, while the null hypothesis were answered using t-test analysis. The hypotheses were tested at .05 level of significance. The results showed a positive influence of inventory control practices on operational efficiency of small scale businesses in Ikot Ekpene metropolis. The study concluded that batch and vendor-managed inventory are important indices for the successful operations and growth of small scale business. It was recommended that: Owners of small scale businesses should employ staffs that have good knowledge and skills of inventory measures as a key staff to enhance efficiency of business operation.*

**Keyword: Batch, Vendor-managed Inventory and small scale business**

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**INTRODUCTION**

Inventory is an important business asset for revenue generation for small scale business and entrepreneurs' earnings. Inventory refers to an organization's goods and products that are ready to sell, along with the raw materials that are used for production. Inventory can be categorized in three different ways, including raw materials, work-in-progress, and finished goods. It measures how often a business turns over its inventory in a given time period, it is a key metric for assessing the business's performance and profitability. *Malakooti (2019)*, Inventory is the stock of goods, materials, and items a business holds for sale, use in production, or resale, It falls into three main categories: raw materials, work-in-progress and finished products, acting as a crucial current asset to meet customer demand while balancing costs. It is essentially the stockpile that keeps a company running, from components for making products to the final items ready for customers, and the act of "inventory" also means the process of counting or listing these items.

Inventory is the raw materials and finished goods a company holds for production and sale. *Aga (2015)* inventory represents one of the primary sources of revenue generation and subsequent earnings for a company's shareholders. *Franke (2021)* to determine the value of inventory, businesses commonly use inventory management techniques. As noted above, inventory is classified as a current asset on a company's balance sheet. When an inventory item is sold, its carrying cost transfers to the cost of goods sold (COGS) category on the income statement. *Barn (2019)* observed that to effectively manage assets, businesses should enact inventory management strategies systems, which aim to reduce holding costs and

enhance operational efficiency by receiving goods only when they are needed for production or sale. The author further noted the importance of inventory to small scale business as follows:

Meets Demand: Ensures products are available for customers, preventing stock-outs.

Financial Asset: A significant current asset on a balance sheet, representing value.

Operational Buffer: Acts as a buffer between production and customer orders.

Cost Management: Balancing inventory levels avoids high storage costs and tied-up cash from overstocking.

Akpan and Sampson (2023) small scale business enterprise have been identified as a means of stimulating economic growth through the generation of employment, development of local technology and conservation of foreign exchange earnings. Small scale business enterprise is a business that is not large, in terms of size, scope of operation, financial involvement and the workforce involved. The authors further noted that a business which functions on a small scale level involves less capital investment, less number of labour and fewer machines to operate is known as a small business. Small scale businesses are the type of businesses that produces goods and services on a small scale. These businesses play an important role in the economic development of a country. The owner invests once on machinery, industries, and plants, or take is a lease or hire purchase. These businesses do invest with less capital and a few number of labour/workers to control the operations of the business to achieve set goals.

According to Taula (2022), a small scale business is a business enterprise that is not large in size, scope and financial capacity, it is a business that enterprise that help in stimulating economic growth through the generation of employment, development of environment and use of local content for production of goods and service to improve the standard of living among citizens. This study focused on inventory measures and the operations of small scale business enterprise. Barn (2019) the effective operation of small scale business also depends on optimizing the amount of cash available and reduces wastages and delay. The operation of small scale business is the capacity to create goods in an economical way with sacrificing its quality. Planning methods and inventory to yield the best return is a component of operational efficiency of small scale business. Therefore, operational efficiency of small business is focused on identifying various tactics and approaches to supply goods to customers in a timely and cost-effective way to enhance high sales.

Aga (2015) a small business is a company of relatively limited size, as measured by its revenue or number of employees, or both. It is often described as the backbone of the economy, small businesses range from sole proprietorships to partnerships and corporations with multiple owners and sometimes hundreds of workers. the author further noted that small businesses are typically defined by metrics such as their number of employees and their annual revenues the author noted that for simplicity's sake, the SBA's Office of Advocacy generally defines a small business as an independent business with fewer than 500 employees. Small business actually may have as many as 1,500 employees, depending on the industry, and its

annual revenue base. Aga (2025) opined that Small businesses can choose to structure themselves in a variety of ways for tax and legal purposes. Small size business are the simplest and most common type of small business which brings development to the country. Therefore, government should be more concerned for its development and sustenance. According to Joni (2016) small businesses can benefit their owners in a range of ways:

- a. The business is likely to be less bureaucratic than a large company, allowing its owner or owners a greater degree of autonomy.
- b. If the business is profitable, its owners also stand to benefit financially more directly than they would as employees of a larger enterprise.
- c. Owning a business can also entitle a person to a long list of tax deductions for which they might not otherwise be eligible. For example, if they work out of a home office, they may be able to write off a portion of their housing costs.

Lowest (2019) explained that in running a small business is not for everyone as it is faced with the following challenges.

- a. Just as owners stand to profit more if the business succeeds, they may suffer more financially if it fails. Many owners put their life savings on the line.
- b. Small businesses may find it harder to raise capital for expansion or other purposes.
- c. They may also have more trouble hiring employees in a tight labour market if they're unable to offer wage and benefit packages that are competitive with their larger counterparts.
- d. SBA figures show that while 1.4 million business establishments opened in 2022, approximately 1.2 million establishments closed.

According to OECD (2016) many small businesses manage to overcome obstacles if they can establish themselves and maintain a proper inventory measure and foothold. The author further that Depending on its industry, a small business can have as few as one employee to as many as 1,500 or so and still meet the standard size of small scale business. Curto *et al.* (2022) liken small scale business enterprise as the most common type of small business by far is a sole proprietorship, with a single owner. Among the least common would be a C corporation, which is far more costly to set up and administer. Lowest (2019) the efficient operation of small scale business enterprise is the capacity of the business to decrease waste and improve asset capabilities in order to guarantee the high-quality products to customers. Edwin (2020) the operations of small scale business is involved in the identification of various tactics and approaches to supply goods to customers and meeting individual's customer needs and satisfaction. This requires small scale business keeping accurate stock inventory to monitor the flow of products.

### **Batch Tracking Inventory and Operational Efficiency of Small Scale Business**

Batch tracking in inventory management is a system where products with similar characteristics, like production date or supplier, are grouped and tracked together using batch or lot numbers. This allows businesses to easily trace the history of a specific batch of items

throughout the supply chain, from production to customer delivery, (QuickBooks 2023). Batch tracking is especially important for small scale businesses to its support multiple inventory-sequencing strategies. Batch traceability is the ability to trace the "genealogy" of a product including the raw materials used to produce it, the equipment it was manufactured on, the results of quality inspections and its serial number as well as the product's progress through distribution channels, from manufacturing to customer sale, using batch numbers. Its main objectives are quality control and safety compliance.

Batch tracking is an inventory management practice through which businesses can trace and monitor the history of a group of items with similar properties as those items make their way through production and distribution channels and all the way to customers. Should quality issues arise, batch tracking helps identify the source of the problem and locate other items that share it. Zipkin (2021) Batch tracking contributes to the ability to smoothly and efficiently recalls defective or potentially hazardous items. And in its most ubiquitous use, batch tracking helps food suppliers manage their sales from inventory on the basis of expiration dates, minimizing food waste and improving suppliers' profits.

Abby (2023) batch tracking is a practice used in inventory management to group items with similar production characteristics, like expiration dates, manufacturing date and location, and specific parts or raw materials used (and their supply chain sources). Batch tracking improves inventory accuracy, provides faster tracking of specific batches or items even after they're sold, and supports various delivery sequencing strategies; such as first in, first out (FIFO), last in, first out (LIFO) and first expiring, first out (FEFO), among other capabilities. According to MRPeasy (2023) batch tracking involves the use of numbers to identify and monitor a batch or lot of products that share similar production characteristics. This inventory method is used to track defective products to investigate the source of a problem, simplify recall processes and improve inventory movement efficiency through fulfilment sequence strategies.

NetSuite (2022) Batch tracking is a practice used in inventory management to group items with similar production characteristics, like expiration dates, manufacturing date and other metrics. Batch tracking, or lot tracking, is the systematic management of product groups using unique identifiers and detailed records. Batch tracking is a practice that is used in inventory management to group items with similar production characteristics like manufacturing date and location. Batch Tracking is a system that allows you to group and monitor a set of stock that share similar properties. Batch tracking refers to the process of tracking a group of items or goods that were produced at the same time, by the same manufacturer or supplier. The author also opined that batch tracking is a system that allows an organisation to group and monitor a set of stock that share similar properties.

In basic stock tracking, all of the same product or material available in inventory is aggregated, with each item receiving a stock keeping unit (SKU) number for individual tracking. Nicholas (2017) batch tracking gathers together items with similar properties like the sources of parts used or manufacturing dates and locations within the larger group of products. The author further explained that batching makes it easier to track defective

products or products simultaneously approaching their expiry date, for example. Products still get a SKU number, but also a lot or batch number.

According to, Biah (2023) the importance of batch tracking and how it solves inventory management challenges lies in the value of the information it delivers, in the form of the ability to track the component sources and manufacturing characteristics of products in a business's inventory, along with the subsequent distribution of the finished products. To illustrate that information value, suppose a customer receives a defective item and contacts the company, requesting an exchange or refund. The author noted that it is easy to know where that product was sourced or manufactured and what materials were used to produce it. The remaining products from the same batch can be checked for quality control, and the company can then remove any defective or expired products from circulation before they reach other customers. Also, the author further explained that batch tracking uses unique codes to identify a collection of specific products. Not to be confused with another type of inventory which identifies individual products in inventory as a batch number is assigned to all products that come from the same manufacturer on the same date, made with the same materials. So, if an issue arises with an item, a business can use the item's batch number to investigate the source of the problem and, if necessary, pull the entire batch off the market.

### **Vendor Managed Inventory and Operational Efficiency of Small Scale Business**

The idea of vendor-managed inventory (VMI) is not very new to business enterprises. Franke (2021) it is a potential inventory to improve supply chain performance which have always been apparent. But what have only become available in the past few years are the AI-powered, cloud-connected technologies that take VMI from a *nice idea someday* to an essential component of a more collaborative, resilient, and competitive supply chain. Vendor-managed inventory (VMI) model, the supplier manages and maintains inventory at the business's premises, where the business is the final seller and distributor of those products. Joni (2016) VMI, is also known as supplier-managed inventory from a customer's point of view, is a data-driven initiative where suppliers manage the inventory levels of their own products, components, or materials at the on-site location of the vendor or distributor.

Franke (2021) VMI helps to reduce both shortages and surpluses, increases efficiency, reduces overheads and improve supply chain responsiveness and agility. According to Zavene and Zenoni (2019) using automated data flows and advanced analysis, the VMI model improves order accuracy, reduces rework, and increases inventory turnover. Suppliers use real-time sales and demand forecast data to optimize shipments and maintain high in-stock rates, allowing them to respond quickly to market changes and protect against the supply chain bullwhip effect.

Zipkin (2021) suggested that before starting a VMI relationship, the organisation and the suppliers will need to agree upon key performance indicators (KPIs), such as inventory turnover rate, stock-to-sales ratio, and sell-through rate to ensure mutual goals are met. This collaborative model ultimately leads to a more efficient and responsive supply chain, benefiting both suppliers and customers. Retailers and vendors also set the terms and conditions (T&C) that govern the VMI partnership. Payment terms, particularly around

payment times, are covered in the agreement, addressing, for example, whether the retailer will pay for the stock when they acquire it or sell it.

Also Tempelmeier (2016) observed that when VMI adopted, the organisation can not only boost efficiency across the supply chain, but can also achieve the following results:

- a. **Streamlined inventory management:** By transferring inventory management to suppliers, one can simplify operations and reduce time spent on managing inventory.
- b. **Reduced inventory carrying costs:** VMI optimizes stock levels to meet demand, minimizing storage costs and freeing up cash flow.
- c. **Timely replenishment:** Automated replenishment ensures just-in-time restocking, helping to prevent shortages and surpluses.
- d. **Optimized inventory levels:** When suppliers have access to real-time sales data, it allows them to maintain ideal stock levels and to develop more strategic and precise ordering.
- e. **Resilience and risk reduction:** When this core area of your business is being more strategically managed, you have more time and resources to devote to building a more resilient supply chain that can better predict and respond to disruption or risk.

Turu (2020) noted that VMI benefits include better inventory accuracy, forecasting, and service. It can also reduce inventory-related costs for both retailers and vendors because the vendor uses appropriate tools and software to manage inventory, replenish stock and reduce costly overstocking, VMI also reduces stock-out risks, making it less likely the retailer will lose achievable revenues from being unable to meet customer demand. According to Senegah (2024) VMI also helps streamline a retailer's supply chain management (SCM) operations while reducing overhead and management burden for tasks such as creating POs whenever they need more inventory. The author noted that VMI improve relationships between retailers and vendors. Retailers prefer to work with trustworthy vendors willing to tackle inventory management. VMI helps retailers avoid lengthy customer on boarding processes and helps vendors nurture long-term business opportunities.

According to Spider (2022) VMI can present challenges in communication, cultural resistance, and setting clear lines of responsibility. Communication issues are especially common when there are inventory changes, such as when the retailer introduces or removes products. A lack of current inventory data can create problems like stock-outs and overstocks. Inadequate or insufficient data can affect demand forecasts, which can make it difficult for the retailer to meet demand or adjust to sudden demand spikes Malakooti (2019) observed that following as potential risks of a vendor-managed inventor:

**Lack of control/dependency on supplier:** You may lose control over inventory levels and become too dependent on suppliers.

**Communication failures:** Miscommunication can lead to inventory discrepancies and inefficiencies.

**Data security concerns:** Sharing sensitive data increases the risk of breaches. Implement advanced cyber security measures and encryption protocols to protect data integrity and confidentiality.

**Inflexibility to market changes:** Predefined algorithms may hinder swift responses to market shifts. Use of flexible AI-driven analytics tools to adjust forecasts and inventory strategies based on real-time data from both inside and outside your supply chain.

**Demand changes:** Unexpected demand spikes or reductions can disrupt forecasts and restocking. Good data analytics will help you forecast many potential scenarios. But it's essential to have alternate contingency plans and workflows in place with your teams and vendors.

Bulk (2016) observed that the VMI approach is best used by small size business that (re)sell many types of products from many different vendors. When multiple vendors are involved, retailers find it burdensome to manage the incoming inventory from all of them. Shifting the responsibility for inventory management to various vendors reduces the burden. It also enables the vendors to proactively and quickly replenish the retailer's stock, driving their own continuous sales and revenues. Vendor Managed Inventory (VMI) is an inventory management approach in which a supplier or vendor (the inventory seller) manages and maintains the inventory, even after the inventory is in the retailer's (the inventory buyer's) warehouse. The supplier takes all inventory-related decisions and replenishes inventory levels for the retailer.

### **Statement of the Problem**

Over the years small scale businesses in Ikot Ekpene metropolis have faced the problem of operational efficiency which has affected the growth and sustainability of these natures of business. The researcher observed that many small scale businesses have closed down, many are struggling to survive despite its importance in generation of employment, economic empowerment, commercialization of environment, and bringing about improved standard of living. The researcher worries about the capital lost, negative impact this may contribute to an entrepreneur, the economy and what could be the reason for the failures of some small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State despite its location close to a big market city of Abia State. The researcher also perceived improper record keeping, poor inventory measures, inadequate business skills, inability to utilise available cash, poor budgeting, poor strategic planning, non-separation of business from family affairs, poor forecasting, poor operational methods and poor risk management when occurred. The researcher has a mind-set of establishing a business in Ikot Ekpene metropolis hence this have prompted the researcher to the present study to examine inventory control measures and operational efficiency of small scale businesses in Ikot Ekepene, Akwa Ibom State.

### **Purpose of the Study**

The study sought to examine inventory control measures and operational efficiency of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State. The study was guided by the following specific objectives:

1. The influence of Batch Tracking inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State.
2. The influence of Vendor-Managed inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State.

### **Research Questions**

This study was guided by the following research questions:

1. What is the influence of batch tracking inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State?
2. What is the influence of vendor managed inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State?

### **Research Hypotheses**

The following null hypotheses were formulated to guide the study and were tested at .05 level of significance.

- H0<sub>1</sub>. There is no significant influence of batch tracking inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State.
- H0<sub>2</sub>. There is no significant influence of vendor managed inventory on the operations of small scale businesses in Ikot Ekpene metropolis of Akwa Ibom State.

### **METHOD**

The descriptive survey design was used for this study. This method allowed the researcher to use both quantitative and qualitative methods in the selection and collection of data for this study. The research was conducted in Ikot Ekpene metropolis of Akwa Ibom State; this area was selected for the study because of availability and accessibility of small scale businesses with diverse business nature of operations and it is highly commercialized by small scale businesses.

The population of the study was one hundred registered small scale business owners. The researcher randomly selected fifty registered small scale businesses for this study this represented 50% of the population.

The researcher developed a ten item instrument titled: Inventory Control Measures and the Operational Efficiency of Small Scale Businesses in Ikot Ekpene, Akwa Ibom State Questionnaire (ICMOSSBQ). This instrument was used for data collection. The instrument was designed based on the independent and dependent variables of this study. The questionnaire was divided into two segments: Section A introduced Personal Data and Demographic Variables. While section B described questions on Batch Tracking and Vendor-Managed Inventory. A four point rating scale of: very strong influence (VSI) = 4 points, strong influence (SI) = 3 points, weak influence (WI) = 2 points, very weak influence (VWI) = 1 point was adopted.

The instrument was face validated by experts from Marketing Department and Business Education Department all of University of Uyo.

The instrument was administered to ten (10) small scale business owners in Uyo metropolis for reliability test. The data generated from the respondents were applied using the statistical package of social science (SPSS) to determine the Cronbach's alpha, the result gave

a reliability index of .83 this was considered appropriate for the study. A total of 50 copies of the instrument was produced, administered and retrieved on the spot for data analysis.

The data collected was process with the use of Statistical Package for Social Science (SPSS) version 22. The research questions were answered using descriptive statistics, while the null hypothesis were answered using t-test analysis. The hypotheses were tested at .05 level of significance. The null hypotheses were rejected when the P-value was greater than the critical F-value. The null hypotheses were accepted when the calculated F-value was less than the critical F-value.

**Decision Rule**

Decision on research question was based on real limit as follows:

Response Options	Value	Real Limit
Very strong influence (VSI)	4	3.50 – 4.00
Strong influence (SI)	3	2.50 – 3.49
Weak influence (WI)	2	1.50 - 2.49
Very weak influence (VWI)	1	1.00 – 1.49

The probability value (p) was used on the decision relating to the test of null hypotheses; the p-value was compared with .05 level of significance. When  $p \leq .05$  less than or equal to .05, the null hypotheses ( $H_0$ ) was rejected. On the other hand, when the p-value was greater than  $p \geq .05$  the .05, null hypotheses was retained.

**Results**

**Research Question 1**

What is the influence of batch tracking inventory on the operational efficiency of small scale business in Ikot Ekpene metropolis of Akwa Ibom State?

Table 1: Mean and Standard Deviation scores on batch tracking inventory on the operational efficiency of small scale business N = 50

S/N	Batch Tracking and Small scale Business	Mean	SD	Remark
1	Enables new purchases	3.33	0.52	HI
2	Enable the actual number of products	3.11	0.49	HI
3	Helps to know the frequently sold products	3.24	0.54	HI
4	Use of numbers to track product is involved	3.25	0.39	HI
5	Products are coded	3.16	0.53	HI
	Cluster mean	3.51	0.51	HI

Source : questionnaire 2025, HI = High Influence

The result presented in Table 1 above is sample data on batch tracking inventory. From the above data all the items measured batch tracking inventory in small scale business in Ikot Ekpene, Akwa Ibom State and were based on the mean cut-off point of 2.50. The clusters mean score of 3.51 shows that there is high level of influence of batch tracking inventory by small scale businesses. The standard deviation ranges from 0.39 – 0.54 this shows that the respondents were not divergent in their opinions. This implies that if small scale

businesses adopts batch tracing inventory the business will know when the to place orders for new products and also invest more on fact moving products to enhance revenue.

**Research Question 2**

What is the influence of vendor managed inventory on the operational efficiency of small scale business enterprises in Ikot Ekpene metropolis of Akwa Ibom State?

Table 3: Mean and Standard Deviation scores on vendor managed inventory on the operational efficiency of small scale business N = 50

S/N	Vendor-managed inventory and small scale business	Mean	SD	Remark
1	Used by small size business to check stock for decision making	3.31	0.52	HI
2	It enables organisation to known when to stock the store with product	3.42	0.40	HI
3	Enable the organisation to know the level of stock	3.34	0.47	HI
4	Checks over stocking of a particular product	3.34	0.40	HI
5	Checks accurate number of products sold.	3.27	0.53	HI
	Cluster mean	3.47	0.52	HI

Source : questionnaire 2025, HI = High Influence

The result presented in Table 3 above is sample data on vendor-managed inventory. From the above data all the items measured vendor managed inventory in small scale businesses in Ikot Ekpene, Akwa Ibom State and were based on the mean cut-off point of 2.50. The clusters mean score of 3.42 shows that there is high level of influence of vendor managed inventory by small scale business in Ikot Ekpene metropolis. The standard deviation ranges from 0.40 – 0.53 this shows that the respondents were not divergent in their opinions. This implies that if small scale businesses adopt vendor-managed inventory the business would be able to place more purchases and keep in the storehouse and by so doing the business will expand and customers will be sure that any point in time they go to that particular store they will surly have the product. This will increase customer base and capital base of small scale businesses in Ikot Ekpene metropolis.

**Research Hypothesis 1**

There is no significance influence of batch tracking inventory on small scale business in Ikot Ekpene metropolis, Akwa Ibom State.

Table 3: Summary of t-test analysis on batch tracking inventory on small scale business N = 50

Respondents	N	Mean	SD	t-cal	P-value.	Decision
Batch Tracking	50	3.33	0.57	-4.29	.000**	Accepted
SSB	50	3.62	0.73			

Source : questionnaire 2025, .05 level of significance

Table 3 above shows that the calculated t-cal -4.29 and the p-value is less than .05 level of significance. This means that there is high utilisation level of batch tracking on small scale business in Ikot Ekpene metropolis of Akwa Ibom State therefore, the null hypothesis was rejected and the alternate is upheld.

### **Research Hypothesis 2**

There is no significance influence of vendor-managed inventory on small scale business in Ikot Ekpene metropolis, Akwa Ibom State.

Table 4: Summary of t-test analysis on vendor-managed inventory on small scale business N = 50

Respondents	N	Mean	SD	t-cal	P-value	Decision
Analytical Technique	50	3.31	0.57			Accepted
Fraud Detection	50	3.78	0.55	.31	.002**	

Source : questionnaire 2024, 0.05 level of significance

The result in the Table 4 shows a t-cal of .31 and P-value of .002 which is less than 0.5 level of significance; this means that there is high level utilisation of vendor-managed inventory small scale business in Ikot Ekpene metropolis, Akwa Ibom State. Therefore the null hypothesis was rejected and the alternate accepted. This implies that small scale businesses should adapt vendor-managed inventory practices for stock control.

### **Discussion of Findings**

#### **Batch Tracking Inventory and Operational Efficiency of Small Scale Businesses**

The result on Table 1 showed that batch tracking inventory has a positive influence on the operational efficiency of small scale businesses in Ikot Ekpene, Akwa Ibom State. The tested hypothesis showed a significant influence of batch tracking inventory on small scale businesses; this is as a result that the mean value of batch tracking inventory was statistically higher. The cluster mean value fall within the real limit of high influence. This implies that small scale businesses should adopt batch tracking inventory practice to trace and monitor products, also to employ an experienced employee to take charge of inventory measures to enhance appropriate inventory measure which will enable effective operation of the business and availability of product to customers. The findings of this study supports Batch tracking as an inventory management practice through which businesses can trace and monitor the history of a products or group of items with similar properties as those items which make way through production and distribution channels all the way to customers. Should quality issues arise, batch tracking helps identify the source of the problem and locate other items that share it. This study in in line with Zipkin (2021) batch tracking contributes to the ability to smoothly and efficiently recall defective or potentially hazardous items. And in its most ubiquitous use,

batch tracking helps food suppliers manage their sales from inventory on the basis of expiration dates, minimizing food waste and improving suppliers' profits.

### **Vendor-Managed Inventory and Operational Efficiency of Small Scale Businesses**

The result on Table 2 showed that vendor-managed inventory has a positive influence on the operations of small scale businesses in Ikot Ekpene, Akwa Ibom State. The tested hypothesis showed a significant influence of Vendor-Managed inventory on small scale businesses; this is as a result that the mean value of Vendor-Managed inventory was statistically higher. The cluster mean value fall within the real limit of high influence. This implies that small scale businesses should adopt Vendor-Managed inventory to avoid wastages and shortages in the business. This study supports Frank (2021) who opined that vendor managed inventory (VMI) helps to reduce both shortages and surpluses, increases efficiency, reduces overheads and improves supply chain responsiveness and agility. Also, Zavene and Zenoni (2019) noted that automated data flows and advanced analysis, the VMI model improves order accuracy, reduces re-work, and increases inventory turnover. Suppliers use real-time sales and demand forecast data to optimize shipments and maintain high in-stock rates, allowing them to respond quickly to market changes and protect against the supply chain bullwhip effect.

### **CONCLUSION**

Conclusions were drawn based on the findings of this study on inventory control measures and operational efficiency of small scale business in Ikot Ekpene metropolis, Akwa Ibom State. The findings of the study revealed that inventory control measures are important indices for the successful operations of small scale business. The study also discovered that batch tracking inventory enhances the tracing and tracking of all items orders and sold for effective record keeping which will enhance operational efficiency of small scale businesses also, vendor-managed inventory showed that small scale businesses should adopt it to make space for store-house or warehouse to make large purchases that will care for customers demand. To this end small scale business owners are encouraged to adopt inventory control measure to sustain and grow its business.

### **RECOMMENDATION**

Based on findings and conclusion of this study, the following recommendations were made:

1. Owners of small scale businesses should possess necessary skills that would enhance effective operations of small scale businesses.
2. Owners of small scale businesses should employ staffs that have knowledge on inventory practices as a key staff to enhance efficiency of the business operation.
3. Owners of small scale business enterprise should go for training on inventory control and adopt the best practice inventory that suit the nature of its business.

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