

**ABC INVENTORY TECHNIQUES AND SUPPLY CHAIN PERFORMANCE OF  
MIDSTREAM OIL AND GAS COMPANIES IN RIVERS STATE**

**Acee-Eke, Beatrice Chinyere**

*Email: Bettyacee1@gmail.com*

**Department of Marketing, Faculty of Administration and Management  
Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt**

**ABSTRACT**

This study focused on ABC inventory techniques and supply chain performance of midstream oil and gas companies in Rivers State. A correlational design was formulated to handle the hypotheses formulated for the study. The survey research method was adopted for the study on a population comprised of fifteen (15) midstream oil and gas companies in Port Harcourt. Subsequently, the simple random sampling method was adopted to draw two management staff from each of the identified companies, to arrive at four management staff for each company and 60 management staff for the whole sample. A 5-point likert-scale questionnaire was administered to 60 respondents, of which 53 copies of the questionnaire were returned, obtaining a 93% percent response rate. The study adopted descriptive statistics and the Pearson's Product Moment Correlation technique course of action to establish that inventory management techniques dimensions; ABC inventory technique and vendor managed inventory, were helpful in relating to cycle time of delivery and order processing of midstream oil and gas companies. The results revealed that ABC inventory technique has a strong, positive, and significant relationship with cycle time of delivery and a moderate, significant and positive relationship with order processing. Therefore, the study concludes that ABC inventory techniques positively and significantly relates with supply chain performance of midstream oil and gas firms in River State, and recommends amongst others that, managers of midstream oil and gas companies should position strategically.

***Key Words: ABC Inventory Techniques Inventory Management Techniques, Supply Chain Performance***

**INTRODUCTION**

Supply chain management subsists as decisive corporate strategy for viable improvement and achievement. Companies are still faced up to by countless challenges which ad infinitum impinge on their performance, despite the reimbursements of supply chain performance. These challenges as noted by Rimiene and Bernatonyte (2013), take account of globalization, escalating cost, discriminating customer expectations, price heaviness, and condensed product existence succession (Therefore, most predictable business necessitates developmental representation that gives confidence to reconstruction of ground-breaking activities One of such activities is inventory management practice.

Inventory Management is defined as a structure employed in companies in controlling their interest in inventory (Stevenson, 2010) On the other hand, Deveshwar and Dhawal (2013) proposed that inventory management is a method that companies use to organize, store, and replace inventory, to keep an adequate supply of goods at the same time curtailing cost. Choi (2012) designates that effective inventory management is indispensable in the operation of any business), Clearly seen inventory management embraces the recording

and observing of stock level, estimating future request, and settling on when and how to arrange. Accordingly, keeping stock is used as a vital strategy by firms to meet customers' requirements without taking the risk of recurrent deficiencies while upholding high service levels.

An inventory management practice can be defined as the deposit of policies that controls that observes inventory level and settled on what level should be sustained, how large orders should be made and when stock should be replenished. The role of inventory management in modern logistics is becoming increasingly expressive due to several factors such as the rapid increase in e-commerce transactions and the desirable values of reduced stock as well as the fast response time to the customer (Dotoli, Epicoco, Falagario. Costantino & Turchiano, 2015).

Traditionally, inventory management has been mentioned as excess inventory and insufficient management or shortage of inventory and satisfactory management practice. Several penalties could be allotted to immoderations in either direction. Inventory problems have intensified as progress in technology increases the capability of firms to produce goods faster in manifold scheme disparity and greater quality (Letinkaya & Lee, 2000). Since the mid-1980's inventory management, production planning and scheduling has become the obvious strategic benefit (Larsson *et al.*, 1995).

All these factors are indications that the effect of inventory management policies on supply chain performance in a developing economy may be different from the results from developed economies. Therefore, there is a need to examine the relationship between inventory management policies and supply chain performance. To a certain extent a lot of preceding investigations on inventory management technique have accumulated (Gokhale & Kalogi, 2018; Daniel & Assefa, 2018; Ogbo, Onekanma & Ukpere, 2015; Adebola, 2015, Imeokparia, 2013; Eroglu, 2011), and having examined both speculative and pragmatic literature, it was revealed that no empirical study has assessed the influence of inventory management technique by means of non-financial measures of supply chain performance (order picking and accumulation/sortation) in the oil and gas companies. This informs the researcher's interest in this regard and brings about a research scheme that connects oil and gas companies with inventory management techniques as a driver of most advantageous warehouse performance. For this reason, the exploration of the connection among the variables; using ABC Techniques (ABC) and Vendor Managed Inventory (VMI) on supply chain performance (cycle time delivery and order processing) of midstream oil and gas companies in Rivers State. This is the scenery that aggravated this study.

The following hypotheses was tested at 0.05 level of significance:

**Ho<sub>1</sub>:** ABC inventory technique does not significantly relate to cycle time delivery.

**Ho<sub>2</sub>:** ABC inventory technique does not significantly relate to order processing.

### **ABC Inventory Technique**

ABC inventory technique involves categorization of inventory according to some measure of significance and apportioning control efforts accordingly in order to determine level of control and frequency of review of inventory items. It is also referred to as ABC analysis where; A is very important, B is moderately important, and C is least important. The categorization system is used to institute policies that center on the few decisive aspects and not the many trifling ones while other criteria such as projected engineering changes,

delivery problems, quality problems, high unit cost may be used. Such policies employed may embrace: more highlighting on supplier development for A items; tighter physical inventory control for A items and more care in forecasting A Items Cycle counting is often used with ABC analysis to determine cycle inventory by performing physical count of items in inventory where and recording items counted on a periodic basis (Heyl, 2011).

Cycle counting management addresses the questions of how much accuracy is required, when should cycle counting be carried out and who should do it? This eventually eradicates shutdowns and interruption, yearly inventory modification by guaranteeing maintenance of precise inventory records through trained personnel while causes of blunders are identified and corrected early. A company can utilize any of the following inventory counting systems to authenticate the cycle counting; Physical count of items made at periodic intervals; System that keeps track of removals from inventory continuously, thus monitoring current levels of each item; two containers of inventory to allow for reorder when first becomes empty; and universal bar code printed on a label that has information about the item to which it is attached.

The ABC stock control technique relies on the decision that a little bunch of the things may typically tackle the weight of money estimation of the total stock. It is used as a part of the era method, while a remarkable number of things may happen from a little part of the money estimation of stores. For that reason, to manage stock control high regard things are more sturdily controlled than low regard things. ABC examination is an essential action method that follows the Pareto Principle regarding a company's arrangement of stock. Most company attempts and lapses are depleted on managing A Items. C Items get the base thought, and B things are in the centers. The ABC approach ranks by means of the following criteria: A Items represent 70–80% of the firm's annual consumption approximation and just 10–20% of aggregate stocked items. B Items represent 15–25% of annual use esteem and 30% of aggregate the stock, and C things characterize 5% of the annual application of esteem and half of total stocked items.

ABC examination is the classification of stocks into three classes to be specific: A –stock items which are of medium value and medium volume; B –stock items baring minimal value but are of great volume; C –stock items that are of high value and material to the organization but low volume such as land, building and motor vehicles. Successful control of inventories can be expensive, time and exertion devouring. In any case, not all things kept in stock require such meticulous and close-study checking especially if such things are low-esteem things that are haphazardly utilized in the generation framework (Lysons, 2013).

The ABC stock control procedure depends on the rule that a little bit of the things may normally speak to the heft of cash estimation of the absolute stock utilized in the creation procedure, while a generally enormous number of things may frame a little piece of the cash estimation of stores (Lysons, 2013). The cash worth is found out by increasing the amount of material of everything by its unit cost. Everything of stock is given A, B or C section contingent on the sum spent for that specific thing. "An or the most noteworthy worth things ought to be under the tight control and under obligation of the most experienced staff, while "C" or the least worth might be under basic physical control. The ABC investigation orders items dependent on significance. Significance may originate from money streams, lead time, stock outs, and stock out costs, deals volume, or gainfulness. When the positioning element is picked, break focuses are picked for classes A, B, C, etc.

Mandal (2012) shows that the ABC stock control strategy depends absolutely on the rule that a little piece of the things may normally establish the greater part of money cost of the general stock utilized inside the creation way, while a prominently enormous number of things may from a little a piece of the money cost of stores.

The cash cost is learned by increasing the amount of texture of each thing by utilizing its unit charge. In accordance with this system to stock administration (Onwubolu & Dube, 2016), sees that high worth contraptions are more firmly controlled than minimal effort things. Each thing of stock is given A, B or C group contingent on the amount spent for that exact thing. "An" or the most astounding charge devices should be under tight control and underneath obligation of the most experienced work force, even as "C" or the base cost can be beneath straightforward physical oversee. Lyson, (2013) observes that ABC evaluation is a nicely-set up categorization method based at the Pareto precept for determining which objects have to get priority in the management of a corporation's stock. ABC analysis is a way for prioritizing the management of inventory. Inventories are categorized into 3 instructions-A, B, and C. maximum management efforts and oversights are expended on coping with A objects. C objects get the least attention and B items are in-among (Lyson, 2013).

### **Supply Chain Performance**

According to Li et al. (2006), effective supply chain performance provides valuable potential for a competitive advantage. It leads the organization to improve their performance, especially for both financial and non-financials dimensions. In addition, Wu (2006) believed that excellent supply chain performance takes the lead in increasing an organization's market share, return on investment, and overall organizational performance. In short, firms with high levels of supply chain performance will have high levels of organizational performance.

### **Measures of Supply Chain Performance**

#### **Cycle time of Delivery**

Fulfillment cycle-time, or the time it takes to pick an item from inventory, pack it into a box, and load it on a truck for shipment, is one of the main inputs in determining how quickly an online retailer can promise customer order delivery. The faster the fulfillment cycle-time, the later an order can be received and still make the appropriate truck for guaranteed, on-time arrival (e.g. same-day, next day, 3-5 business days). Thus, the customer experience is improved, as they are allowed to place an order later and still receive their purchases quickly. To take advantage of this, the retailer must first be able to measure cycle-time appropriately within their facility (Hugh, 2015).

Delivery cycle time is the time span between the acceptance of an order from a [customer](#) to the ultimate delivery of the product to the customer. This is a critical process measurement, since being able to process an order within the minimum possible amount of time is a marketable skill that can be used to attract more customers. Management wants to see this figure at the level of the individual order so that it can investigate those orders that require an unusually long time to process.

#### **How to Calculate Delivery Cycle Time**

There is a two-step process involved in calculating delivery cycle time, which is as follows:

1. *Identify the start and end points.* Determine the time when an order is placed, and when it is delivered to the customer. These are the start and end points.
2. *Subtract the start time from the end time.* Subtract the order placement date and time from the delivery date and time to arrive at the delivery cycle time.

In addition, you might consider calculating the average delivery cycle time for a batch of orders. To do that, add up all individual delivery cycle times and divide the sum by the number of orders, to arrive at an average delivery cycle time.

A business has several options for improving its delivery cycle time, and therefore the associated customer satisfaction level. One option is to have customers directly enter their orders into the company's order processing system, which eliminates order entry time and reduces order errors. Another option is to overstock all variations on the inventory being sold, so that instances of inventory backorders are quite rare. Finally, the seller could use an overnight delivery service to ensure that the completed order reaches the customer as soon as possible.

### **Order Processing**

Order processing is essential in any business' marketing and distribution strategy to save money on production costs and grow revenue through effective marketing strategies. Learning to process orders effectively helps improve customer relations and enhance customer satisfaction by ensuring timely product delivery. Order processing is fulfilling a customer's request for goods or services. In order processing, suppliers accept the orders, then deliver the products to customers. The suppliers receive and verify the order, select the products or services, and ensure that they are delivered to the customer promptly and accurately (Maier,Heur, Nyhuis & Schmidst, 2021).

This process can include steps such as verifying the availability of the products, calculating the cost and taxes, and processing payment. Order processing is a crucial step in selling goods or services. It ensures that customers receive what they have ordered and helps to build trust, increase customer satisfaction and foster a positive user experience. There are several reasons why businesses should consider adopting and implementing effective order processing practices. Good order processing practices help companies avoid overstocking and understocking issues by accurately tracking and forecasting demand. They also save businesses money by reducing excess inventory holding costs and lost sales due to stockouts.

Streamlined order processing helps businesses fulfill orders more quickly and accurately, which reduces mistakes and improves customer satisfaction. The process frees up time for other tasks and allows firms to handle more orders without increasing labor costs (Kritchanchus & MacCarthy, 1999).

Accurate and timely data on order history and trends can help businesses make informed decisions about inventory levels, staffing needs, and other operational matters. Efficient order processing can help enterprises offer faster turnaround times and better service, giving the business a competitive advantage in the market.

Businesses follow steps to process orders effectively without errors. Here is the order management process flow. Mielcarek and Piekarczyk (2024) identified the following steps in order processing:

Placement

The first step in order processing is placement. It involves receiving and accepting an order that a customer places. Different businesses have different ways of taking orders, such as online sales through an e-commerce site or over the phone.

#### Receive

The next step is receiving the order, which involves checking to ensure that the customer has sent all the necessary information. The stage includes ensuring the customer has entered all required information and that everything is correct in the order details.

#### Pick

The next step is the picking process, which involves determining which products or services are necessary to fulfill the order. In this stage, you can check to see if the ordered products need restocking.

#### Sorting

In the next step, products are separated into groups before they are packed and prepared for delivery. This process can eliminate any confusion or delays in the order processing process.

#### Packing

In this step, the products are packaged, labeled, and sealed to prepare them for transport.

#### Shipping

In this step, the products get shipped to the customer. Depending on the business's order distribution methods, this process can use either online or offline delivery channels.

#### Delivery

In the last step, the products get delivered to the customer. A third-party provider handles this step unless a business chooses to own and operate its fleet of delivery channels.

## **Empirical Review**

### **ABC Inventory Techniques and Supply Chain Performance**

Chebet, Gokhale, and Kaloji (2018) conducted a study on inventory management and its impact on profitability in Foundry Industry at Belagavi. The study established that inventory management covers the efficient and effective use of raw materials and spares which are consumed in producing the finished goods in manufacturing concern. The study revealed that long run profitability of firms could be jeopardized when management of inventories is ignored.

Daniel and Assefa (2018) examined the impact of inventory management practice on firms' competitiveness and organizational performance by means of data collected from 188 micro and small enterprises (MSEs) operating in the manufacturing sub-sector. The analysis was performed using the structural equation modeling (SEM), and the results specify that higher levels of inventory management practice can lead to an enhanced competitive advantage and improved organizational performance. Also, competitive advantage can have a direct, positive impact on organizational performance.

Ogbo, Onekanma and Ukpere (2015) considered the relationship between effective system of inventory management and organization performance in the seven-up bottling company, Nile Mile Enugu, using a total of eighty-three respondent as the sample for the study. Four research questions and Four hypotheses were generated and tested at 10% (that is 0.10) significant level by means of descriptive statistics and non-parametric test (chi-square that is,  $F_{\alpha}$ ). The outcome of the analysis illustrates that flexibility in inventory control management is an important approach to achieving organizational performance. It was

established that organizations benefit from inventory control management by way of easy storage and retrieval of material, improved sales effectiveness and reduced operational cost. The study also institutes that there is a relationship between operational feasibility, utility of inventory control management in the customer related issues of the organization and cost effectiveness techniques are implemented to enhance the return on investment in the organization.

Ganas and Hyz (2015) investigated the effects of inventory management on the profitability of a sample of small and medium enterprises (SME) in the region of Epirus, in Greece within the period from 2002 to 2012. Data was collected from 612 enterprises, and the results confirm that there is statistical significance between profitability, measured through gross margin, and inventories management. Besides, managers can create profits for their companies by handling correctly inventory turnover ratios and keeping each different component (raw materials, work in process and finished goods).

Based on the empirical literature review, the study proposes the following hypotheses:

**H<sub>o1</sub>:** ABC inventory technique does not significantly relate with cycle time delivery of midstream oil and gas companies in Rivers State.

**H<sub>o2</sub>:** ABC inventory technique does not significantly relate with order processing of midstream oil and gas companies in Rivers State.

### **Research Design**

The study adopted the quasi-experimental research design (Igweze et al., 2008). Quasi-experimental research is an in method adopted in social and management sciences.

### **Population of the Study**

The population of the study according to Fubara and Mguni (1995) is the "aggregation of elements from which the survey sample is actually selected". Therefore, the accessible population for this study is fifteen (15) midstream oil and gas companies in Rivers State, whose authentic list was ascertained from FinLib.Com as at August 2025. The study adopted the entire firms as study units.

### **Sampling and Sample Size Determination**

Sampling is a statistical run-through concerned with the selection of individual or observations envisioned to harvest some knowledge about a population of concern, expressly for the purposes of statistical extrapolations. The population of the study consists of fifteen (15) registered midstream oil and gas companies. The study adopts the census method and acknowledges the entire companies as study units.

The sample size of this study was 15 midstream oil and gas companies. To arrive at the number of respondents, four (4) executives were drawn from each company under study. Specifically, the purposive sampling technique was employed to identify four departments that are more relevant in the topical area which include procurement, operations, logistics and customer service. One management staff was purposely drawn from each of the identified departments, making a total of four management staff for each company and 60 management staff for the entire sample.

### **Methods of Data Collection/ Instrumentation**

Equally secondary and primary data sources were used for this study. The primary data is reflected as new because collection is made for the first time hence, original in character

(Kothari, 2004). Primary data was collected through survey questionnaire containing questions related to customer relationship management that were prepared and distributed to identify number of respondents from the oil and gas companies for the study.

### **Methods of Data Analysis**

The data analysis consists of descriptive and inferential statistics. The descriptive statistics involved ascertaining the demographic data of the respondents which covers summary statistics of their profiles and psychological features. This was analyzed using simple percentage charts and tables. The inferential statistics involved the use of Pearson's product moment correlation coefficient (PPMC). The descriptive and inferential statistics was executed primarily with the aid of computers using the statistical package for social science (SPSS) version 22.0 package.

### **Relationship between ABC Inventory Techniques and Cycle Time of Delivery**

**H<sub>01</sub>:** There is no significant relationship between ABC inventory techniques and cycle time of delivery of midstream oil and gas companies in Rivers State.

**H<sub>1</sub>:** There is significant relationship between ABC inventory techniques and cycle time of delivery of midstream oil and gas companies in Rivers State.

### **Relationship between ABC Inventory Techniques and Cycle Time of Delivery (N=53).**

	ABC Inventory Techniques	Cycle Time of Delivery
ABC Inventory Techniques Pearson's correlation	1	.8988
Sig. (2-tailed)		.0000
N	53	53
Cycle Time of Delivery Pearson's correlation	.8988	1
Sig. (2-tailed)	.0000	
N	53	53

**\*\* Correlation is significant at 0.01 level (2-tailed).**

Table 1 shows that the correlation coefficient between ABC inventory techniques and cycle time of delivery is  $r=0.89$  implying there is a very strong positive correlation. This implies that an increase in ABC inventory techniques by midstream oil and gas companies has significant relationship with cycle time of delivery.

### **Relationship between ABC Inventory Techniques and Order Processing**

**H<sub>02</sub>:** There is no significant relationship between ABC inventory techniques and order processing of midstream oil and gas companies in Rivers State.

**H<sub>2</sub>:** There is significant relationship between ABC inventory techniques and order processing of midstream oil and gas companies in Rivers State.

**Table 2: Relationship between ABC Inventory Techniques and Order Processing (N=53).**

	ABC Inventory Techniques	Order Processing
ABC Inventory Techniques Pearson's correlation	1	.8221
Sig. (2-tailed)		.0000
N	53	53
Order Processing Pearson's correlation	.8221	1
Sig. (2-tailed)	.0000	
N	53	53

**\*\* Correlation is significant at 0.01 level (2-tailed).**

Table 2 shows that the correlation coefficient between ABC inventory techniques and order processing is  $r=0.82$  implying there is a very strong positive correlation. This implies that an increase in ABC inventory techniques by midstream oil and gas companies has significant relationship with order processing.

### **Relationship between ABC Inventory Techniques and Cycle Time of Delivery and Order Processing**

The results of the first and second hypotheses show that the ABC inventory technique to a very high extent relates with cycle time of delivery ( $0.898: 0.000 < 0.05$ ) and order processing ( $0.822: 0.000 < 0.05$ ). As an important part of inventory management practices, ABC inventory technique shows that it is relevant, effective and important with cycle time of delivery and order processing of midstream oil and gas companies in Rivers State. This is evidenced by the results in Tables 4.10 and 4.11 with beta values of .898 and .822 and p-values of 0.0000 making us reject the negative assumption of no correlation between the variables. According to our preliminary expectations, these findings show that ABC inventory technique can have a positive, very strong, positive and significant relationship with cycle time of delivery ( $0.898: 0.000 < 0.05$ ) and order processing. It is also the finding of this study that the combination of more than one business metric (cycle time of delivery ( $0.898: 0.000 < 0.05$ ) and order processing) with one piece of information technology espousal in business is not the same. Given the difference, the relationship between a good espousal of ABC inventory technique, can lead to a successful venture that ushers in cycle time of delivery ( $0.898: 0.000 < 0.05$ ) and order processing. This corroborates Chebet, Gokhale, and Kaloji (2018) who found that long run profitability of firms could be jeopardized when management of inventories is ignored, and Ogbo, Onekanma and Ukpere (2015) who revealed that flexibility in inventory control management is an important approach to achieving organizational performance.

### **CONCLUSION**

The study examined ABC inventory techniques and supply chain and supply chain performance of oil and gas companies in Rivers State River States by several estimates, and there is reasonable assurance that new inventory management practices component material has been discovered. Existing research has strongly linked industrial performance, providing the best solution to claim that the so-called variables studied enabled the midstream oil and gas companies mentioned in the study in doing business. The study therefore concludes that, there is a significant relationship between ABC inventory

techniques and supply chain performance of midstream oil and gas companies in Rivers State

## **RECOMMENDATIONS**

In line with the observations and conclusions highlighted above, the following recommendations are made:

1. Since ABC inventory technique has a significant relationship with cycle time of delivery and order processing, the study therefore recommends that the management of midstream oil and gas companies should strive to attain a stable and more realistic ABC inventory technique programs that will boost cycle time of delivery and order processing and maintain internal and external balance. This is because companies with a high degree of poor cycle time of delivery and order processing will lose out on competitiveness to companies with more stable ABC inventory technique program.
2. The management of midstream oil and gas companies should invest in modern technologies by increasing specific efforts and strategies regarding choosing, establishing, comprehending, orientating, enhancing and improving technology.
3. The management of midstream oil and gas companies should ensure that collaborative awareness supports inter and intra-organizational relationships. Hence, they should employ synergy and collaboration among supply chain partners, and this could enhance all aspects of the business to attain supply chain performance.

## **REFERENCES**

- Adebola, D. K. (2015). An empirical review of inventory management and control system in International Breweries Plc. *International Journal of Research and Scientific Innovation (IJRSI)*, VI (XI), 211-215.
- Chebet, E., Kitheka, S., Chogo, C. Chogo, C. & Talal, A. (2019). Effects of Inventory Management Techniques on Procurement Performance: An Empirical Study. *International Journal of Innovative Research & Development*, 8 I(8), 143-150.
- Choi, T. (2012). *Handbook of EOQ inventory problems – Stochastic and deterministic models and applications*. New York, Heidelberg, Dordrecht, London: Springer
- Daniel A., & Assefa, B. (2018). The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical evidence from micro and small enterprises in Ethiopia, *Cogent Business & Management*, 5,1,1-16,
- Dotoli, M. Epicoco, N. Falagario, M. Costantino, N. Turchiano, B. (2015). An integrated approach for warehouse analysis and optimization: A case study, *Computers in Industry* 70, 56-69.
- Eroglu, C. & Hofer, C. (2011). Inventory types and firm performance: Vector autoregressive and vector error correction models. *Journal of Business Logistics*, 32(3), 227-239.
- Ganas, J., & Hyz, A. (2015). Inventory management and its impact on firms' performance: An empirical study in the region of Epirus, Greece. *4th International*

*Conference in Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences (I.C.Q.Q.M.E.A.S.)*

- Heyl, J. (2011). *Inventory Management, Operation Management Strategy Decisions*, Pearson Education Inc., publishing as Prentice Hall.
- Hugh, C (2015). Cycle-time Analysis and Improvement Using Lean Methods within a Retail Distribution Center. Master's Thesis. MIT Sloan School of Management, MIT Department of Mechanical Engineering
- Kritchanchai, D., & MacCarthy, B. L. (1999). Responsiveness of the order fulfillment process. *International Journal of Operations & Production Management*, 19(8), 812-833
- Larrison, S. E. (1995). *Inventory System and Control Handbook*, London: McGraw-Hill.
- Letinkaya, S. & Lee, C.Y. (2000). Stock replenishment and shipment scheduling for vendor-management inventory system. *Management Science*, 46(2), 26-32.
- Mielcarek, P., & Piekarczyk, A. (2024). Synchronized scheduling and order processing as the leverage of digital supply chain transformation process. *Management and Production Engineering Review*, 15(4), 1–11 DOI: 10.24425/mper.2024.153112
- Ogbo, A. I., Onekanma, I. V., & Ukpere, W.I. (2015). 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), 109-118.
- Wu, F., Yenyurt, S., Kim, D., & Cavusgil, S. T. (2006). The impact of information technology on supply chain capabilities and firm performance: A resource-based view. *Industrial Marketing Management*, 35(4), 493-504