

## **EFFECT OF INVENTORY MANAGEMENT ON FINANCIAL PERFORMANCE: EVIDENCE FROM THE SAUDI MANUFACTURING COMPANY: CASE STUDY**

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**ABSTRACT:** *During this recent period of time, the world has witnessed a severe financial crisis that has affected many international companies and economies that had planned their production rates on the basis of marketing forecasts that were prepared just before the global crisis. This study explores the relationship between inventory control and the financial performance of a particular company through the use of a case study approach. It also examines factors that draw back the process of inventory control. The results showed that the profitability of a company has a significant relationship with inventory management, and this suggests that if the management of inventory is done effectively, it ensures more profitability, while poor management translates to a poor financial performance.*

**KEYWORDS:** inventory management, financial performance, manufacturing company

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### **INTRODUCTION**

The process of managing inventory is a delicate matter, and a difficult task in any business. Displaying misleading or distorted information within financial statements, which are considered to be the most reliable sources of information relied upon to make sound decisions, leads to their inability to reflect in an honest and fair manner the result of the activity and the financial position of the company or economic unit for those periods of time. The interest in developing accounting practices has increased to include sufficient disclosures in order to provide an honest and fair picture of the outcome of the activity, as well as the financial position of the economic unit (Traina, 2018).

Inventory of all kinds represent a major component of capital, and the success or failure of a business depends on the performance of its inventory management, since effective inventory management not only helps to solve the liquidity problem, but also increases the company's profitability (Panigrahi, 2013).

Inventory also plays an important role in determining the financial positions of these organizations, and it effectively contributes to determining their profitability. Since the inventory represents one of the most important elements of the financial position list, especially for commercial companies, as it represents the largest value of their assets, any defect in determining the cost of that stock or its evaluation is offset by incorrect financial statement outputs (Osadchy et al., 2018).

It is inventory management in an association that manages the recognition and recording of each item in stock. Inventory management is essentially about verifying the size and situation of stocked goods, and it is vital within various areas within an office or organization in order to secure the ordinary and organized course of creation, compared to the irregular yet troubling influence of running out of materials or goods. Powerful inventory management determines how the advantage of an organization can be augmented. The expansion of benefits relies upon

limiting expenses and amplifying income. Amplification is a productive concept which involves growing value without increasing the assets being developed. Consequently, as a business association, stock is of central significance, and in like manner the benefit of the business as well. Inventory issues with regards to having excessively high or too little amounts of available products can cause disappointments for the business. On the off chance that a private venture encounters a stock-out of a critical inventory item, output failures could result.

Financial performance refers to the emotional proportion of how appropriately a firm can utilize assets from its fundamental techniques of big business in order to produce deals. The term is also used to describe a general proportion of an organization's overall monetary wellbeing over a guaranteed time span, and can be used to investigate competitive firms throughout a comparative industry (Stevenson, 2011). While one example from the literature demonstrates that there is a positive connection between the two, others show that there is no huge connection between inventory execution and financial execution.

This paper proceeds to study inventory management as follows. The first section will examine the literature review on financial performance brought about by inventory management. This will be followed by another section that discusses the importance of inventory management, details with regard to inventory control, methods of inventory control, and side limitations on financial statements caused by errors when assessing inventory. It will also look at the related features that cause setbacks in inventory control. Finally, the paper will discuss the results from the case study and provide a conclusion.

## **LITERATURE REVIEW**

Inventory is defined as the collection of physical commodities currently owned by an individual company. Inventory management helps the persons responsible to make appropriate decisions in determining the requirements of inventory in order to make purchases in appropriate quantities to support production and distribution (Kanekiyo and Agata, 2019). Deveshwar and Modi (2013) also define inventory management as the process used by a company in organizing products, placing goods in a warehouse, and ensuring that the required goods are supplied while also minimizing costs as much as possible.

According to Stevenson (2011), inventory is defined as the resources that are stored in order to enable the existing and upcoming needs of the company. Inventory can be in the form of raw materials, finished products, and works in progress that are held by a manufacturer, retailer, and supplier in any given supply chain. Raw materials are the items that are used to create finished products through the manufacturing process. However, a raw material at one firm can be considered a finished product by another firm. The next inventory type is work-in-progress (WIP), which consists of materials still under processing, including raw materials and other items that are still going through the process of being manufactured. Next are the finished goods, which entail items that have completed the processing stage and are ready to be sold to clients.

Finally, there are the MRO types of goods, otherwise known as maintenance, repair, and operating supplies. These are goods that are needed in operating and maintaining the equipment being used in manufacturing raw materials into finished products (Pontius, 2020). The above goods are an example of cash that is held until the time that the inventory leaves the company

when the products are purchased. A properly managed process will see the company maximizing its profits to their fullest.

The inventory being held by the company is advantageous in various ways. It ensures that the company can perform and complete the manufacturing process, and it also enables the firm to store its resources, especially as works in progress. The inventory also ensures that there is a constant balance between the goods being supplied into the business and those that are leaving the business. Furthermore, it helps the company to eliminate the problem of stock outs. Hence, the company can subsequently retain customers who may move on to other competitors.

Inventory management is a very beneficial aspect of a manufacturing company, and it determines how decisions concerning inventory are performed in order to ensure that the highest quantity of all items is present in the store. The process greatly eases the operations of a company, thus leading to success in carrying out the distribution of manufactured products and a strong financial performance. The management must ensure that the costs of supplying, holding, and other costs regarding inventory are each well-balanced (Stevenson, 2011). The return on assets (ROA) determines the level of financial performance of a company, and the ROA is affected when the levels of inventory changes. ROA increases when the amount of inventory reduces, and reduces when the amount of inventory increases. Thus, it is important to maintain ROA in order to ensure profitability by maintaining a low level of inventory.

However, there is a risk to the company if the inventory is reduced towards nil, as it may cause resources to get depleted, and thus yield no finished products when demand rises (Usama, 2012). Inventory decisions must create a balance between the costs included in holding and supplying inventory. Inventory management at the manufacturing firms located in developed countries is more progressed than at those in undeveloped nations. Studies on different manufacturing companies regarding the effect of inventory management on financial statements have shown different results. One research study showed a positive relationship within the variables, but other studies refute these findings (Usama, 2012).

## **INVENTORY CONTROL**

Inventory control is a process that entails supervising the warehouse, the supply of products, and its accessibility so that there is an adequate supply of the goods to customers and raw materials to the manufacturing company. The main goals of the process are to control the stock and to accurately provide information on inventory. Moreover, inventory control is defined as observing the materials needed for production and working to provide them according to the planned timelines in order to ensure the regularity of operations and the use of capabilities, which leads to reducing costs and the regular flow of ready-made products to customers on specified dates (Marand et al., 2019).

The importance of inventory control stems from the importance of determining the economic quantity of demand and determining the point of re-ordering and reducing inventory to the lowest possible extent. The project may be able to accurately determine the quantity of the stock if it is under static conditions that are characterized by stability and certainty, but the current and future conditions are characterized by the mobility and dynamism of irregular conditions, which affects the difference in the quality of the stock of raw materials, semi-

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finished materials, or finished goods, as well as rates of use, supply dates, or periods (Rajeswari, 2019).

The importance of inventory for economic, industrial, and commercial units emerges as significantly alike, as it is an indispensable element under any circumstance. Consumers request goods and services at the appropriate time and place, and therefore units need to store those materials in a manner that meets those needs first-hand, without any interruption in production. The stock represents the connecting link and valve that connects the most important activities within the economic unit, starting from the stage of purchasing goods in commercial units, or raw materials for economic units, through the cycle of production and storage and the costs associated with them over those stages, and finally ending with how they are formulated and sold through the sales cycle in response to customer requests (Rabta, 2020).

The commodity inventory is currently one of the most important current in terms of its enormous value when compared to other assets, especially in industrial units, and any error in determining its value leads to errors in determining the total current assets and the total equity. This error applies to determining the basic elements in the income statement, and thus affects the total and net profit, and this error in evaluating the commodity stock in a certain period will affect the subsequent periods as well. This is because the stock at the end of the current period is the stock at the beginning of the subsequent period, thus affecting the validity of the subsequent period by the amount of error that occurred in determining the value of last-period inventory in the previous period (Herath and Lu, 2018).

## **METHODS OF INVENTORY CONTROL**

Business organizations need to determine the prices of stocks received and issued (whether for sale or production) for various purposes, including determining the remaining quantities of inventory items and the prices of the entry and exit of those stocks, as well as for control purposes, as a result of the continuous changes in prices, whether for goods or supplies.

The economic unit acquires other inventory from time to time, as economic units do not acquire their stocks all at once during the accounting period for several reasons, including the accumulation of those goods in warehouses and their lack of disposal, the limited storage capacity of their stores, or the unwillingness of the economic unit to suspend a large part of the capital in the stock. Therefore, it is necessary to determine the prices of the imported and exported goods from its warehouses, and thus to determine the costs of the inventory (sold or remaining) during that particular period or at any other moment that the economic unit wishes to determine, which varies according to the method used (Petering et al., 2019).

Inventory costs and prices can be distinguished in terms of the movement of inventory to and from stores for input evaluation and output evaluation (Hoberg et al., 2017). Input evaluation is the purchase of goods of all kinds that are recorded based on their cost, which may include the purchase cost and the expenses of inbound transportation, unloading, storage, handling, and arrangement, taking into account the discounts granted by suppliers that are not intended to expedite payment. The finished and semi-finished products and the current ones, and each type carries the cost of its production or transfer from its early stages to the stage it ultimately reaches (Sorensen et al., 2017). For output evaluation, according to Sorensen et al. (2017), there

are many methods for evaluating units spent from stores, and the most common of these methods are the specific identification and average methods.

Specific identification is characterized by absolute objectivity in determining the cost of inventory and the cost of goods sold, if the cost of the goods sold is priced at its original price that was actually paid and is fixed on the purchase invoice. This method of output evaluation is suitable for large establishments that deal with a wide variety of commodities, such as auto parts stores. The average method is based on three different methods or assumptions for calculating the cost of goods sold or stored, which differs according to the timing and mechanism of calculating the rate.

## **EFFECTS OF ERRORS IN INVENTORY ASSESSMENT ON FINANCIAL STATEMENTS**

The inventory represents most of the capital of various organizations, as these organizations evaluate the inventory on the basis of the historical cost related to preparing financial statements. There is a relationship between the cost of goods sold and the inventory. The presence of errors in inventory directly affects the financial statements of a company. Most errors come up due to carelessness in handling inventory data, and can also be caused by personnel not conducting the physical counting of materials. The systems for updating inventory could also bring about errors when transferring goods during transportation. The following examples would affect the values of financial statements.

First, errors in inventory may be made at the beginning of each financial period. For instance, errors could be made in overstating the cost of goods sold or understating the value of net income at the beginning of the financial reporting period. This will translate to understating the cost of goods sold and claiming a higher net income. Errors made on inventory data at the end of a financial period will also influence both the balance sheet and the income statement. Erroneous high values at the ending period give rise to lower values in the cost of goods sold, high values of net income, and high values of assets and equity. On the other hand, understating values of inventory at the end of a financial period gives rise to overstatements in the cost of goods sold, low values of income, assets being valued lower than their actual value, and an understatement in equity.

Mistakes in terms of determining the cost of the end-of-period inventory will directly affect the financial statements, as the calculation of net income depends on the cost of goods sold, which in turn depends on the value of the end-of-term inventory, one of the main components of the asset item in the balance sheet. An error in the value of the end-of-period merchandise affects the number of current assets in the balance sheet, and it is worth noting that the error in the inventory of end-of-term merchandise extends its impact on the income statement for the following fiscal year, as the end-of-period goods for the current year are considered to be the same as the first-period merchandise for the following year (Jermakowicz et al., 2018).

According to Budagaga (2017), errors resulting from the valuation of inventory below or above its actual value affects the income statement, financial position, and the financial statements for the subsequent period. Also, the error of having an incorrect inventory balance extends its effect on both the financial position and the income statements, as the incorrect balance affects the calculation of the cost of goods sold. Any error in the calculation of the gross profit and net

income has an adverse effect on the cost of goods sold, as well as the gross profit and net income in the next accounting period, because the inventory at the end of the first accounting period is the inventory at the beginning of the second period, where the total cost of the goods will be calculated. The sales, gross profit, and net income for the two periods can be correct, while the allocation of these amounts between the periods can be incorrect (Bayrakdaroglu et al., 2017)

## **CAUSING PROBLEMS IN INVENTORY CONTROL AND THEIR SOLUTIONS**

In order for the goal of minimizing costs while maximizing profit to be achieved, a proper inventory control system must be put in place. But some problems can still arise, thus reducing the effectiveness of inventory control systems. These issues could include a lack of consistency due to no standard procedures of operation being in place.

Inconsistency can also arise due to not dividing duties equally, thus one employee being over-relied upon to shoulder the burden of a significant number of tasks. This eventually leads to erroneous work, and possibly even fraud. Leaving work to one single department will not lead to a proper manufacturing process. However, integrating workers and departments to each become part of the whole firm will ensure that they are responsible for production. Communication should also be enhanced throughout the whole manufacturing system in order to effect these changes.

Another problem potentially arises when there is a very fixed management system in place. As such, problems concerning inventory may arise, but rigid management may not correct them on sight. This problem overflows into the future, hence affecting the profits of the company. The rigid regime could be corrected by creating an easy-flowing structure that could lead to an effective quality management system. The company also needs to change alongside evolving systems that constantly change due to technological advancements.

The supply chain in the inventory system may also have problems due to the effects of globalization. Although globalization has enabled the expansion of many industries by lowering production costs, supply chain problems have often subsequently developed, because inventory has to be procured from a variety of different sources. Moving the finished goods to customers also requires higher levels of expertise, which is more difficult to achieve. Manufacturing industries also face the problem of inadequate resources and not enough time. This problem has brought about a lower quality of materials, which reflects poorly in the financial statements. Therefore, the company needs to concentrate its strengths and resources on improving quality for optimum results.

Another error could arise due to material discrepancies, which can happen by recording the wrong value of inventory compared to the real inventory being held. This causes differences in the cost of goods sold. If inventory is overstated, it will raise the gross profit, while conversely showing a reduced gross profit if the inventory is understated.

Some manufacturing companies have adopted inventory control practices due to external forces such as competitors and customers. As a result, employees may not have the required motivation necessary to shoulder the new processes, which will certainly lead to failure. Furthermore, the system needs employees who are well-informed in order to handle its

operations, as unmotivated workers will ultimately contribute to the failure of the inventory management system. Workers could be given rewards that are both intrinsic and extrinsic in order to improve their work morale.

The new levels of increasing technology brought about by inventory control systems may be met with resistance by employees. This may be because of inadequate skills and time wastage and resources. Thus, the top management of the company must devote itself to use new technologies and embrace change in order to motivate junior employees to do so as well.

Inventory control methods may also not be compatible with company practices and regulations. Manufacturing firms should first create a way to assimilate the new systems into the company while not forgetting its goals. An improper communication system and employee togetherness may also affect inventory management systems. Employees should have a healthy connection with the management in order to create a conducive work environment. The current inventory systems require that employees be trained, and a lack of training causes employees to feel unfit for their position. Personnel being well-trained increases their levels of confidence.

Other ways to correct discrepancies in inventory control include the physical recounting of materials in order to ensure that the data matches. Companies with warehouses in different locations should also check to see whether a certain inventory item in question can be found in another warehouse. Moreover, errors that may arise by using the wrong unit of measurement should be corrected, and it is advisable to always countercheck whether the correct units have been used. Another solution is ensuring that all paperwork is present in order to avoid the error of some data not being properly captured. Security measures should also be improved to ensure that inventory is not stolen. Finally, it is important to maintain up-to-date information on inventory in order to have the correct data with which to process through the financial period. Therefore, a company must prioritize solving inventory management problems if they want to reap strong profits.

## **THE DIFFERENCE BETWEEN INVENTORY CONTROL AND INVENTORY MANAGEMENT**

Inventory control technology has evolved over time in order to cut across all aspects of manufacturing companies. There is a slight difference between inventory control and inventory management, but inventory control ensures that productivity is optimized, and thus to ensure customer satisfaction.

The main inventory control systems include perpetual and periodic inventory systems. Barcode systems and radio frequency identification systems are examples of inventory management systems that fall under the area of inventory control. These systems ensure the good tracking of materials by providing ample information required in controlling it. The system requires a method with which to recognize inventory and their data through the use of barcode tags. There is also a need for the presence of a main database that includes all materials and further analysis of information, the creation of reports, and a final reporting of the inventory management process (Pontius, 2020).

The perpetual inventory system ensures the continuous updating of data on inventory whenever materials are added or removed from the warehouse, or when being moved from one place to another (Pontius, 2020). This system of inventory is preferred, because its results are more accurate. The system is used with information concerning the quantity of inventory and the location of bins that is updated in the required time by the warehouse employees.

The periodic system of inventory does not keep track of data on inventory from day to day, but rather at the beginning of an inventory financial period as well as at its end. This system uses a physical method of counting inventory. The purchases account is then updated after the physical count has been performed so that adjustments can be made in the final financial statements (Pontius, 2020).

## **RELATED WORKS**

Several studies have shown that a relationship exists between inventory control and financial performance. Ionescu et al. (2018) tried to identify aspects related to the stock assessment of sold goods and to determine the effect of the stock valuation methods applied in Romania on the financial situation and financial performance of the companies. As a method of pricing and comparing those indicators with each other, the primary objective of the research is an analysis of the effect that stock valuation methods can have on the financial position and financial performance, from which the main research hypothesis was launched predicting that stock valuation options have a different impact on the financial position and financial performance of the economic unit. This was confirmed based on a theoretical study and applied analysis, as these verified that stock accounting options have different effects on both the financial position and financial performance of the facility.

The research study conducted by Alrjoub and Ahmad (2017) aimed to clarify the effect of various inventory types (raw material stock, in-progress inventory, finished stock, total stock) on the company's performance, in addition to the fact that the relationship is affected by some additional factors, such as the cost of capital, which has not been previously examined. This study focuses on these particular impacts. The moderate cost of capital with regards to the relationship between types of inventory and the performance of companies, as data collected for 48 companies for the period confirms (2010-2016), indicated that inventory management, taking into account their types, affects the company's performance in the long term. The relationship between inventory management and the company's performance is modified, but the interaction between the cost of capital and the types of inventory has a variety of different implications, and the researcher recommended that companies consider the cost of capital when deciding on inventory types and to adapt inventory control in order to match any possible changes in their business environment.

Also, a study by Jonek-Kowalska (2014) aimed to examine the financial aspects of changes in the level of finished stock in the mining establishment. The study investigated the increase in the level of finished stock, which is often the result of the lack of permanent cost advantages in recruitment companies, in addition to the correlation between changes in the level of finished stocks. And economic fluctuations in the global markets for energy resources in the mining markets was also examined, in which case the researcher studied the level of finished stocks in the largest Polish mining company. Data from the period from 2003 to 2012 were studied, and given the considerations and research discussed in this study, it can be concluded that for the

studied mining establishment, there are periods of surplus levels from finished stock, an excess stock event that indicates sales problems in the years 2005, 2009, and 2012. However, the level of stock rose regularly throughout the examined period, and finished goods provided by the establishment were relatively homogeneous, and its quality standards do not face large fluctuations over time. Consumer preferences, mainly within the industrial energy sector, do not change, either, and the value of the stock remains steady. The manufactured product in the studied mining establishment reaches its highest value in periods when the prices of hard coal in the European market are the lowest, at which time the mining enterprise loses the advantage of price competitiveness, as it does not control the cost of the manufacturing unit, which increases regularly throughout the period. In the level of completion, finished stock in the institution that has been examined is closely related to economic fluctuations in the global market for energy resources. The effects of increased levels of inventory include prolonging the trading cycle in terms of number of days, quickly reducing the level of liquidity, and clearly reducing operational cash flow. In addition to that, the institution should conduct an adjustment of indirect costs that are subject to stock inventory. The possibility of using the frozen resources in the stock in an alternative way has been lost, as well as the possibility of searching for additional sources with which to finance operational activities. Therefore, the average cost of financing the stock is equivalent to \$2.5 to \$5.6 million in periods of average stock levels, and increased to \$6.2 billion in strong periods.

## **RESEARCH METHODOLOGY**

This study specifically uses a case study approach. The significance of a case study approach is that it allows for an in-depth analysis and the detailed comprehension of a problem (Miller and Brewer, 2003). It also allows for the investigation of real settings and actual practices. In addition, the case study approach is the most appropriate method of investigating and examining environments that are difficult to understand, or that have scarce amounts of information available about them (Smith, 2019). Information and data from such environments cannot be accessed through normal research approaches such as surveys and the examination of records from publicly available archives.

This study uses a variety of different methods of data collection and analysis. Some of these methods are in the form of document analysis and observation. Brewer and Hunter (2006) postulate that the use of more than one method of data collection allows the researcher to compare and verify the information's accuracy. This increases the reliability and validity of the findings, since mistakes and biases that could arise from using a single method of data collection are avoided.

Data for the document analysis were collected from various different sources. These sources include standards, procedures, guidelines, stock take and loss reports, and financial statements. Observation was also vital, which entailed observing the various processes in supply chain management, because it helped to increase the reliability and validity of the study's findings. This involves transferring finished goods from supply chain management to a customer's warehouse, receiving goods from suppliers, and receiving and transferring raw materials. In addition, the observation process was vital during the company's cycle count activities. The collected data were analyzed in three stages: data reduction, data representation, and data conclusion (Malhotra, 2010).

## **DESCRIPTION OF THE STUDY CASE**

The company selected for this study is a manufacturing company that for our purposes we will call the DIA Manufacturing Company PLC. Due to confidentiality concerns, the real name of the company cannot be revealed. The reason for choosing this company was that it allows researchers to access its documents and to observe the various operations conducted by the company. The company manufactures and produces a wide variety of pipe solutions that are used in the transformation of natural gas and water.

## **FINDINGS AND DISCUSSION**

### *Effectiveness of the process of cycle count activity*

There are two primary methods through which stock count activity can be conducted. First, the finance department and the auditor requests the stock count, and then it is conducted as a normal routine or usual process in the logistic department. However, even though there are two distinct ways to approach the stock count, the final result must still be submitted to the finance department in order to review and analyze the results.

The initial step of beginning the stock count involves a discussion with the finance department and logistics department. The purpose of this discussion is to request and plan for stock count activity and to decide on a tentative date for the actual stock count activity. Afterward, the finance department is required to distribute an internal memo to all departments informing the staff of the scheduled stock count activity. The staff will also be notified of the cut-off sales order and the production shutdown, followed by a resume date. The memo will outline the number of staff members per department that will assist the supply chain management department in stock counting. During the actual day of stock counting, all of the staff involved will assist in counting stock based on their assigned area. After the counting is concluded, the results will be submitted to the finance department with approval from the supply chain management department. And after receiving the result, the finance department staff will key in the results and compare the system's record with the actual physical stock.

The second method of stock counting is simple, and will only involve staff members from the logistics department. The stock count activity is conducted monthly in order to ensure that the company's system's total inventory is accurately tallied.

This study found that several problems arise during stock counting activities. These problems include improper count sheets, mixed types of inventories, a lack of cooperation from various departments, a lack of a specific location of inventory, and insufficient amounts of staff members to coordinate the process of stock counting. Other problems include improper reconciliation of records, irresponsible staff members, and inaccurate submission of the finance department's results.

The staff's skills and competencies for handling and coordinating stock count activities are questionable due to failing to efficiently conduct the cycle count activities. Also, the staff members responsible for the process failed to find solutions to the problems mentioned above.

This study also found that the company conducts the stock count only as requested by the external auditor. This is because there is no specific counting schedule provided by the supply chain management. Even though an internal cycle count is conducted, the final results are not submitted to the finance department for analysis and adjustment. All adjustments are made during the yearly cycle count, thus rendering the amount quite significant and Table 1 shows total differences between stock in the system and actual in just one department. As a result, the large figures affect the financial figures, especially in the cost of sales.

Table 1 Total differences between stock in the system and actual

#	Material description	Stock in the System		Actual Stock		Differences
		QTY	AMOUNT	QTY	AMOUNT	
1	SKU # 01	845	\$654,337	0	0	-\$654,337
2	SKU # 02	10,417	\$415,110	224	8,946	-\$406,165
3	SKU # 03	378	\$266,066	41	28,595	-\$237,470
4	SKU # 04	97	\$149,159	0	0	-\$149,159
5	SKU # 05	221	\$152,961	38	26,341	-\$126,620
6	SKU # 06	101	\$116,993	0	0	-\$116,993
7	SKU # 07	82	\$110,617	0	0	-\$110,617
8	Other Materials	3,175	\$717,237	52	22,048	-\$695,189
<b>Total Differences</b>						<b>-\$2,496,550</b>

Therefore, it is imperative to carry out a predetermined and regular cycle count. This will ensure that possible weaknesses are identified as early as possible, and thus remedial and corrective measures can be taken before the identified deficiencies result in disastrous financial losses. For example, stock losses cannot be massive if monthly provisions are provided. At the end of the trading period, any possible losses and costs incurred are accounted for.

This research found that there is no awareness of financial fraud or other work-related matters, and the company needs to have mechanisms in place to detect and prevent the different types of fraud and malpractice that are related to inventory recording. There are various potential inventory-related fraud schemes within the company, such as double counting, which happens when a particular stock item is counted twice. This may occur when a company moves a certain inventory item from one location to another, where the moving inventory was already counted. It is possible to manipulate financial records as a result of double-counting.

#### *Practices and Procedures of Inventory Control and Management*

In the logistics department, one of the processes involving inventory management is the transfer of packaging materials to the company's plant in order to facilitate the production of products as scheduled. This process involves sales, planning, procurement, and the logistics department. The processes begin at the sales department, where the sales executive is required to send sales projections to the logistics department to analyze the available physical stock. The logistics department executive then conducts the analysis and planning in order to ensure that sufficient materials are ordered. Afterward, the logistics department executive sends the request

to the production department to produce the products within the stipulated time. After receiving the request for production, the department creates a schedule and provides updates about the quantity of the materials that it requires in order to produce the products. Consequently, the production department informs the logistics department executive about the amount of materials needed. The logistics department executive again analyzes only the raw materials. Finally, the logistics department executive sends an order of the required materials to the procurement department.

However, this study found that the DIA Manufacturing Company PLC lacked a proper operating procedure for this process. The fundamental significance of having a standard operating procedure is to ease the difficulty of employees' tasks, ensure consistent output, and reduce errors or discrepancies in the required quality. Due to the lack of standard operating procedures at this company, orders are made verbally, and production is not effectively executed. Also, a lack of standard operating procedures affects the production time and results in many unscheduled requests. This interruption of the normal production activities of various departments translates into a loss of production time, low productivity, and revenue loss.

Furthermore, this study found that the company's management overlooked several aspects. For example, the monthly reconciliation was not properly conducted. Also, the purchasing of stock was primarily based instead on the level of inventory that was required. When an inquiry was placed with regard to the reasons why the base oil was purchased based on offer instead of the level of inventory, the company pointed out that this was done since the price of base oil had fluctuated. This indicates that the company has poor inventory management in the forecasting and projection of future price changes. This activity exposed the company to unpredictable cash outflows, as well as the possibility of selling the product at a loss if the selling price is not adjusted, as per the price of the raw materials. Therefore, it is prudent for the company to be proactive in identifying and forecasting potential risks that may adversely affect the company, instead of responding to the risks when they have already occurred and have already affected it. The company can adopt several strategies, such as risk avoidance, risk reduction, risk sharing, and risk transferring, in order to protect the company's activities.

## **CONCLUSION**

This study's primary purpose has been to examine the effectiveness of the cycle count activities and to identify problems in the practice and procedures in the inventory management of a particular company. In this study, the DIA Manufacturing Company PLC, which is involved in manufacturing, was selected as a case study. Many inventory management problems were identified that were due to the inconsistencies of practices conducted within the company. For example, the study found that scheduled cycle count activity was not adequately prepared, and the standard operating procedures were flawed.

The specifications of staff duties for receiving raw materials and keying information into the system were also lacking. This can result in mistakes that are not identified or prevented as early as they occur. Also, stock can be easily lost or stolen, since there is no staff members monitoring or supervising. As such, too much trust and too many responsibilities were conferred onto the employees, and thus the physical stock and records in the company's system were not frequently reconciled. Additionally, the verbal requisition of materials was common in the company, and thus the company failed to follow the required standard operating

procedures of supply chain management. This led to a significant number of undocumented processes and inaccurate financial figures.

There are several recommendations from this study. First, the logistics department should perform cycle count adjustments quarterly. Therefore, it is recommended that the management should not only perform the cycle counts when requested to do so by an external editor. Secondly, all of the employees need to be aware of and understand their key responsibilities and accountability with regards to the inventory. Third, the quarterly cycle count should not only involve the supply chain department, but it should also involve other departments, just as the yearly cycle count activity does. Also, the reports and adjustments must be made appropriately. Essentially, during the cycle count activity, there should be a cut-off date in order to ensure that there is no transaction that takes place during the cycle count activity, which ensures that the records of physical stock and the recording system are accurate.

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