

Inventory  
management system  
of a printing press in  
dagupan city  
flashcard



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Chapter I THE PROBLEM AND ITS BACKGROUND Rationale The success of every business depends on how it is managed, whether it is on the management of human resources, finances, operations or production.

Focusing in the production process, one aspect to consider is its proper inventory management. The need for proper inventory management system is indispensable nowadays especially in coping up with global competition. As firms deal with their inventory systems, problems still arises and most of which are experienced worldwide.

For instance, Bhattacharjee (2012) attributed the pickup in sales to inventory flow “ getting back on track, as they did not flow product appropriately. ”

This was a statement in his article as it discussed the latest experience of Abercrombie and Fitch, also known as A&F, an American retailer that focuses on casual wear for consumers aged eighteen to twenty two, got a handle on excess inventories that had discounting that worried their investors last year. Said dilemma was due to negligence of identifying excess inventories ahead of time.

Thus, inventory management, or balancing orders with demand, has been a major concern for Abercrombie. In recent quarters, it has been compelled to offer discounts to its teenaged clientele who had held back on purchases. On the other hand, Wal-Mart Stores, Inc. branded as Walmart, is an American multinational retail corporation that runs chains of large discount department stores and warehouse stores. The company is the world’s third largest public corporation, according to the Fortune Global 500 list in 2012, the biggest private employer in the world with over two million employees, and is the largest retailer in the world.

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Walmart remains a family-owned business, as the company is controlled by the Walton family, who own a 48 percent stake in Walmart. It is also one of the world's most valuable companies. The company was founded by Sam Walton in 1962, incorporated on October 31, 1969, and publicly traded on the New York Stock Exchange in 1972. It is headquartered in Bentonville, Arkansas. Walmart is also the largest grocery retailer in the United States. In 2009, it generated 51 percent of its US\$258 billion sales in the U. S. from grocery business. It also owns and operates the Sam's Club retail warehouses in North America.

Walmart has 8, 500 stores in 15 countries, under 55 different names. The company operates under the Walmart name in the United States, including the 50 states and Puerto Rico. It operates in Mexico as Walmex, in the United Kingdom as Asda, in Japan as Seiyu, and in India as Best Price. It has wholly owned operations in Argentina, Brazil, and Canada. Walmart's investments outside North America have had mixed results: its operations in the United Kingdom, South America, and China are highly successful, whereas ventures in Germany and South Korea were unsuccessful. ( <http://en.wikipedia.org/wiki/Walmart>) Walmart is recognized with their continued success in catering the needs of their customers on time. One aspect that makes this success possible can be attributed to their inventory management system. According to Chandran (2008), Wal-Mart was able to reduce unproductive inventory by allowing stores to manage their own stocks, reducing pack sizes across many product categories, and timely price markdowns. Instead of cutting inventory across the board, Wal-Mart made full use of its Information

Technology (IT) capabilities to make more inventories available in the case of items that customers wanted most.

The Company entered into collaboration with P&G for maintaining the inventory in its stores and built an automated re-ordering system. Also, employees at the stores had the “ Magic Wand”, a hand-held computer which was linked to in-store terminals through a radio frequency network. These helped them to keep track of the inventory in stores, deliveries, and back up merchandise in stock at the distribution centers. Another highlight of the company’s inventory system is their employment of Point-Of-Sales (POS) system, which monitors and tracks the sales and merchandise stock levels on the store shelves.

Wal-Mart also made use of the sophisticated algorithm system which enabled it to forecast the exact quantities of each item to be delivered, based on inventories in each store. Wal-Mart also is using bar code technology and radio frequency technology to manage its inventories and enabled accurate distribution of goods. Wal-Mart also owned the largest and most sophisticated computer system in private sector. The company used Massively Parallel Processor (MPP) computer system to track the movement of goods and stock levels.

By making effective use of computers in all its company’s operations, Wal-Mart was successful in providing uninterrupted service to its customers, suppliers, stockholders and trading partners. The processes that Wal-Mart incorporated into its system are adapted worldwide. The extent to which said processes will be implemented depends on an entity’s capability to manage

and handle the finances associated with it. The problems encountered by said firms in other countries contribute to the success and operation of local firms in the country.

However, the more adjacent the country is, the more impact it can have of the inventory system employed in the country. Just like for instance, the recent experience of China regarding their inventories was inevitable.

According to the report given by Wang (2012), after three decades of torrid growth, China is encountering an unfamiliar problem with its newly struggling economy: a huge buildup of unsold goods that is cluttering shop floors, clogging car dealerships and filling factory warehouses.

The problem crosses from manufacturing industries, car dealers up to real estate industries. Actually, interviews conducted by Wang (2012) with business owners and managers across a wide range of Chinese industries presented a picture of mounting stockpiles of unsold goods. It was also provided in the article given by Wang (2012) that Huang Yi, the chairman of Zhongsheng Group, China's fifth-largest dealership chain, said that inventory levels for them now are very, very high. If they hadn't done special offers in the first half of the year, their inventory would be even higher.

Wu Weiqing, the manager of a faucet and sink wholesaler, said that his sales dropped 30 percent in the last year and he has piled up extra merchandise. Yet the factory supplying him is still cranking out shiny kitchen fixtures at a fast pace because they cannot cut production. This massive problems experienced by China has called out the attention of firms in the Philippines to look into the flaws of their inventory system for possible downturn. Thus,

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concepts and theories on inventory given by different authors became significant.

In the Philippines, many academicians provided their own version and understanding of inventories. According to Guerrero (2010), most manufacturing firms consider their inventories a major investment of the firm; these must be accompanied by appropriate systems. This is the use of proper inventory management which is a method for storing and issuing materials to ensure that the company's investments in inventories are protected. In addition to these, Agamata (2011) stated that a company may either choose to use traditional or modern inventory management system to its inventory process.

In the traditional inventory management, the production costs and purchasing costs are not treated with much relevance because these costs are assumed not to change in total regardless of the order size and frequency in orders to be made. On the other hand, the modern inventory management introduces the use of electronics technology wherein communications have been strongly emphasized. Internal communications have been made open, closer, and on-line with suppliers and customers and external communications have been created on an on-line, real-time model.

The main objective of the Inventory Management System is to maintain inventories at appropriate level to avoid excessive or shortage of inventories because both the cases are undesirable for business. With this particular aim, management is to keep inventory at sufficient high level to perform production and sales accounts smoothly. This ensures that investment in

inventories is minimized at minimum level to maximize profitability. In case of manufacturing business, management must ensure that the supply of raw materials and finished goods will remain continuous so that production process is halted and demands of customers are duly met.

If this is met, carrying costs of inventories is cut down. With the implementation of this Inventory Management System, business entities can reduce the losses due to theft, obsolescence, and wastage because it would be easier to keep tracks for slow- moving items and makes arrangements for those. (<http://www.careerride.com/fa-inventory-mangement-objectives>)

Those principles mentioned above aided in the successful inventory management system of the firms in the Philippines. Belonging to the small enterprises in the country is Metro Print Asia. ———(background of MPA)  
The implementation of a specific inventory system was not an easy task for the owner himself because he has no knowledge on how to run a printing press business. He even used the words “ accidental business” to describe his involvement in such venture because he was just appointed by the family to take over the management of the business which they received as payment for the indebtedness of one company. For this reason, the researchers assessed the system and identified the problem encountered by Metro Print Asia as requested by the owner himself.

Although it has been operating for more than five (5) years, they are not able to perform at its maximum level, thus this matter needed immediate attention. This assessment purported to help not only Metro Print Asia but other small enterprises as well to help them trace whatever inefficiencies they currently have in their inventory management system. Statement of the <https://assignbuster.com/inventory-management-system-of-a-printing-press-in-dagupan-city-flashcard/>

**Problem** The main objective of the study was to assess the Inventory Management System of Metro Print Asia, Dagupan City to provide a basis for leading the company's inventory management system to contribute for its overall success.

Specifically, this study aimed to answer the following questions: 1. What is the current status of Metro Print Asia in terms of: a. Purchasing of inventory such as papers and inks; b. Warehousing of inventory; and c. Issuing of inventory to production? 2. What problems are encountered in the implementation of the Inventory Management System of Metro Print Asia? 3. What measures can be proposed to improve the implementation of the Inventory Management System of Metro Print Asia? **Scope and Delimitation**

This study focused on the assessment of the inventory management system of Metro Print Asia, Dagupan City.

This included the process involved in the purchasing of inventories such as papers and inks, warehousing of those inventories and issuing of such to production. The researchers also examined the documents used in the said areas of inventory system. And although the entity maintains many kinds of inventories, the researchers focused to dwell their study only on papers and inks as these are the entity's primary inventories. Aside from that, emphasis on how the employees involved in the said area of inventory system comply with the company's policy is also included in this study.

Relevant to this research, current operations was the main focus of the researchers since the entity experienced the same problem for the former years of their operations. Simultaneously, the physical flow of inventoriable



goods from suppliers down to issuance of inventories to production is included. In sense, the inventory study started from the moment the entity orders goods from suppliers followed by the arrangement and segregation in the warehouse monitored by the assigned warehouse-in-charge which consists of checking and updating the said inventory.

After that, the preparation and issuance of goods and inventories requested by the production personnel assigned to the job was done. The information relevant to the said process was gathered through interview with the owner, Mr. Danny Cuna and observation for the actual inventory process with the full assistance of the owner himself. The study did not cover the financial information relating to inventories and recording of such as requested by the owner.

This was to ensure that entity's financial operations are not exposed for some private reasons. Also, the study did not cover the events subsequent to the issuance of inventories to production such as conversion of raw materials to finished goods and the delivery of such to the customers. Significance of the Study (not edited) The study of the Inventory Management System of Metro Print Asia was conducted to assess their existing system. This addressed the issues and problems currently present in their process.

The study assisted the following beneficiaries: First was the company, Metro Print Asia, because the study focused on the company's Inventory Management in order to achieve an ideal system which helped in reducing cost, minimize unwanted/unnecessary processes and made the system more organized and controlled. Metro Print Asia's proprietor, Mr. Danny G. Cuna,

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was another beneficiary in the assessment, for the reason that there has been a better inventory system along with an improved flow of inventory from purchasing to issuance, therefore maximizing profits.

Companies with the same line and size of business with Metro Print Asia also benefited, since the study served as a guide or idea on how to improve their existing management of Inventory System. Lastly, business students and future researchers would gain knowledge and exposure to the actual issues on inventory systems businesses use in the real world and would not just base their understanding on the theoretical definitions provided in textbooks.

Definition of Terms (not edited) The terms were defined in operational or conceptual manners as follows:

The Inventory Management System supervises the flow of goods from suppliers to warehouses and from these facilities to point of sale. A key function of Inventory Management System is to keep a detailed record of each new or returned product as it enters or leaves a warehouse or point of sale. (<http://searchmanufacturingerp.techtarget.com>). Metro Print Asia (MPA) is a printing press located in Fernandez St. Dagupan City, under the management of Mr. Danny G. Cuna which his family received as payment for the indebtedness of one company.

The said company offers different kinds of printing like offset printing, letter press printing, Risograph Quick printing, Docucolor printing, color separation, plastic lamination and metal engraving. Status of Inventory Management System of Metro Print Asia refers to the current condition of the entity's process of purchasing, warehousing and issuing inventories to production.

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This involves the methods and practices adapted by the company in the said areas of inventory management. The company is using the traditional system which is highly labor intensive to ensure appropriate stocking levels of inventories.

Purchasing of inventory starts when Mr. Danny Cuna, the owner or Myrna Lambino, the operating manager usually chooses the supplier where to purchase inventories such as papers and inks at the lowest possible cost. Then either of them now negotiates purchase contracts, prepares purchase orders, and follows up deliveries depending upon the job order requested by the client. Warehousing of inventory involves the storing of inventories purchased by the purchasing officers of the warehouses-in-charge, Nerissa Pael and Dennis Roquiza.

Upon admission, the warehouses-in-charge then maintains material ledger cards for every inventory stored in the warehouse. Issuing of inventory to production arises when there are job orders from their client which shall be approved by Marivic Domagas, the marketing manager. Such approved orders are given to Vanessa Serafica, the head of the pre-press department. She will then assign the job to one of the production personnel whom shall request the materials needed for production from one of the warehouses-in-charge.

Problems Arising from the Implementation of the Inventory Management System of Metro Print Asia were the flaws existing in the company's process as to purchasing, warehousing, and issuing of inventory to production.

Proposed Measures to Improve the Implementation of the Inventory

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Management System of Metro Print Asia were the actions suggested by the researchers based on the findings in the study conducted in their system.

Chapter II REVIEW OF RELATED LITERATURE AND STUDIES This chapter covered different related literature for the purpose of putting together concepts and theories relating to the present study.

The reviewed materials aided as a useful guide in assessing the study and outlining data- gathering tools. Conceptual Literature Making use of thematic approach, this segment tackles diverse ideas and aspects pertaining to purchasing, warehousing and issuing of inventories such as papers and inks to production. Purchasing of inventory It was cited in The Journal of Commerce (2011), manufacturing companies, which are flexible and dynamic just like any other company, should be changing with time as goods are manufactured for stock and order for consumption.

So it is required that manufacturing companies produce goods by looking at the future trends of demand. With that, manufacturing companies should also have to complete the task of making the right quantity and quality of goods according to customers' orders, taking into consideration the future requirements and uncertainties in their estimate of inventories and ordering of raw materials. This concern has been established for the continual existence of any manufacturing company. Starting with raw materials, these are bought and kept for further production so as to pass through the manufacturing process.

These raw materials are known as stock. The keeping of stock is called inventory. " Inventories are stock of materials of any kind stored for future

use, mainly in the production process. Today's inventory is tomorrow's production. Therefore, the success of any organization depends on its effective and proper management of its inventory. According to Hall (2008), the ideal process used in purchasing inventory materials in a good inventory control system begins with recognizing the need to restock inventories through the observation of the inventory records.

Inventory levels decline through either direct sales to customers (a revenue cycle activity) or transfers into the manufacturing process (a conversion cycle activity). Inventory requirement information is set to both purchasing and accounts payable processes. The purchasing process determines the quantity to order, selects a supplier, and prepares a purchase order. The information is sent to both the supplier and the accounts payable process. After a period of time, the firm receives the inventory items from the suppliers. Goods received are inspected for quality and quantity and sent to the stores and warehouse.

Information about the receipt of inventory is used to update the inventory records. The accounts payable receives the invoice from the supplier. Accounts payable reconciles this with the other information it has compiled for the transaction and records and obligations to pay at some future date, depending on the terms of trade with the supplier. Usually, payment will occur on the last possible date to take full advantage of interest earned and discounts offered. The general ledger then receives the summary information from accounts payable and inventory control.

This information is reconciled for accuracy and posted to the accounts payable and inventory control accounts. Inventory management consists of everything from accurate record-keeping to shipping and receiving of products on time. An inventory management that is properly maintained can keep a company's supply chain running smoothly and efficiently. It was also mentioned that a flawed or unrealistic business plan for a business for the future is one of the problems encountered by firms in their inventory management system.

To predict how well a company may do in the future, you have to collect enough data and accurately analyze it. This affects inventory management because if a company predicts more growth than they actually experience, it can lead to an overstock of inventory. Another problem encountered by most firms regarding their inventory management system is falling victim to the "bullwhip effect". This is an over-reaction by a company to changes in the market. As the demand of a market changes, a company may panic and order an overstock of inventory, thinking the new market conditions will move the inventory.

Also, another is not keeping up with the rising price of raw materials. By not keeping current with the rising price of raw materials, a company will lose profits because they are not adjusting the price of their finished products. Finished items in inventory must be relative to the cost of raw goods.

(<http://www.wbiconpro.com/462-aarti.pdf>) Warehousing of inventories

Proper storage of inventory is vital. Improper storage can cause a product to ruin, resulting in a loss of inventory and money. According to Bizmanualz,

Inc. 2008), storage refers to protecting inventory from both damage and <https://assignbuster.com/inventory-management-system-of-a-printing-press-in-dagupan-city-flashcard/>

shrinkage or theft. Coltman and Jagels (2008) provide the following control practices that should be used for product storage: 1. Immediately after goods have been delivered and all receiving checks performed, they should be moved to storage areas or sent directly to the departments that requested them. Proper storage facilities should be used. 2. Storage areas should be locked when the storekeeper is not present. Access to storerooms should be limited to the storekeeper and other authorized employees. 3.

Storekeepers should not maintain or have access to formal inventory records, nor should accounting department employees who maintain those records have access to storerooms except to take inventories. 4. Inventory counts of stored products should be taken periodically by accounting office employees and compared to material ledger cards (if used). A material ledger card is maintained for each separate item in stock. It has recorded on it, for each item, quantities received in and quantities issued from the storeroom to provide a running balance of what should be in inventory. 5.

The best procedure for taking inventory is to make two accounting office employees responsible. One completes the actual physical count; the other compares this with the perpetual inventory card figure and then records the actual count on an inventory sheet. 6. If there are any significant differences that cannot be reconciled between the inventory count and what should be in inventory according to perpetual inventory cards, the differences should be investigated to determine the cause. 7. To aid in inventory count, preprinted inventory sheets that list items in the same order as they are located on storeroom shelves should be used.

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Some of the problems encountered by most firms regarding their inventory management system such as existence of unqualified employees in charge of inventory and too many companies put people in charge of their inventory distribution who either don't have enough experience, are neglectful in their job, or don't have adequate training. Another is when the supervisor in charge of inventory management failed to look over their inventory on a regular basis to make sure enough products are in stock. Identifying shortages ahead of time is an important factor in achieving Customer Satisfaction.

Waiting for the shipment to come in can slow down the supply chain process. Not having enough products in stock to meet customer demand can lead to bad customer relations. Also, too much distressed stock in inventory can lead to another problem. Distressed stock is products or materials in inventory that has or will soon pass the point where it can be sold at the normal price before it expires, excessive inventory in stock and unable to move it quickly enough. This is probably the most common problem for most businesses. Cash-flow comes from moving inventory.

If a company buys an amount of product for their inventory and they do not move it, the company ends up losing money. Without proper organization, items in-stock gets misplaced. Even if the computer accurately shows the item as in stock, it may have been misplaced somewhere at the warehouse, or in the wrong location within a store. This can lead to a decrease in profits due to lost sales and higher inventory costs because the item must be re-ordered. Plus, the company must spend the time for employees to track down the misplaced item. (<http://www.biconpro.com/462-aarti.pdf>) Issuing <https://assignbuster.com/inventory-management-system-of-a-printing-press-in-dagupan-city-flashcard/>



of inventories to production After properly keeping the inventories in the warehouse, the determination of the inventory requirement and the authorization of the release of raw materials into production will take place. There must be controls to consider in determining which materials to be issued to production, these are as follows: (Coltman and Jagels) 1) The person responsible in receiving a purchase order from a customer must pass on the details of inventory needed for production to the storekeeper. ) The storekeeper should be the only person authorized to have access in the inventories located in the store room. 3) The storekeeper then be required to release these inventories to the specified person assigned to that job. These control practices should be followed in order to arrive at a good and properly organized inventory management system. Otherwise, problems may arise from non-fulfillment of control policies. These inventory management problems can interfere with a company's profits and customer service. They can cost a business more money and can lead to an excess of inventory overstock that is difficult to move.

Factors enumerated above gave the researchers an overview on the typical problems that entities encountered in their respective inventory systems. These problems together with the other related studies conducted by various individuals and groups guided the researchers in assessing the status of the inventory management system of Metro Print Asia. Such guideline directed the researchers in pointing out the strengths and weaknesses in Metro Print Asia's current inventory system which aimed to help the entity in improving its inventory management system.

Research Literature Operating a printing press can be physically and mentally demanding, and sometimes tedious. Press operators are on their feet most of the time. Often, operators work under pressure to meet deadlines. Most printing presses are capable of high printing speeds, and adjustments must be made quickly to avoid waste of inventories.

(<http://www.umsl.edu/services/govdocs/ooh20002001/363.htm>). One of the strong points that would make this study more comprehensible is its comparison with another study with the same objective; that was to assess the inventory management system of a certain entity. The study conducted by Adupa on Monitor Publication Ltd. in Uganda gave the researchers a guide on the flow of the study since both studies aimed to assess the inventory system of Monitor Publication Ltd. and Metro Print Asia respectively and they were in the same line of business. As a result of his study, Adupa (2011) said that the inventory control and customer satisfaction in Monitor Publication Ltd. as mainly based on three research objectives that are to investigate the inventory control techniques used by the organization, to determine the level of customer satisfaction in the organization and to determine the relationship between inventory control and customer satisfaction in Monitor Publication Ltd. Manufacturing companies like Monitor Publication Ltd. faced inefficiencies in its attempts to maintain optimal inventory levels as well as inconsistencies of poor color prints, delayed deliveries, long supplier lead time, poor quality prints of its advertisements and magazines, low customer turn over and uncertainty of customer demand.

This had greatly compromised inventory control and operation efficiency of Monitor Publication Ltd. (Adupa, 2011). Despite the considerable effort by

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Monitor Publication Ltd. to solve the above inefficiencies by training staff in latest techniques of inventory management, reducing supplier lead time, improving on the quality of color prints and magazines and training customer care personnel, a high level of customer complaints still exists. The study employed a cross section design together with descriptive and analytical research design, based on both quantitative and qualitative data.

Questionnaires and interview guide were used to collect data and a sample size of 45 respondents was selected using stratified sampling technique. Data was summarized, sorted, edited and analyzed using statistical packages for social scientists (SPSS) and Microsoft word and the findings were presented in a report format. Recommendations on Inventory control were that Monitor Publication Ltd. needed to train and sensitize employees regarding the importance of Inventory Control and also ensure that all items were inspected so that they do not get problems concerning Inventory monitoring and record keeping.

Recommendations on Customer satisfaction were that Monitor Publication Ltd. needed to put more effort on improving product quality as well as improve on its distribution channel so as to make its products more convenient and attractive to customers. Therefore more effort was given on Inventory control to achieve Customer satisfaction. His findings revealed that the enumerated inventory control techniques were not well understood by majority employees even if inventory control was conducted annually by the organization.

Inventory controls must be introduced and oriented to all employees to achieve an efficient process. Also, the organization puts greater emphasis on monitoring optimal inventory levels and keeping inventory records. In this particular aspect of their study, the researchers, guided by specific criteria were of the same opinion. And because raw materials and finished goods occupied the highest level of activity, not all inventories were inspected by the organization and that economic order quantity was not the most preferred inventory control techniques.

With this, the entity is expected to apply a more effective inventory control technique that would address all their weaknesses in their existing system. The study of Adupa (2011) about Monitor Publication Ltd. was made extensively and was conducted in a sufficient time frame of three years. He was able to gather all necessary and relevant data from the customers and the management because they were open in distributing such, regarding the study. He had pointed out issues concerning the assessment, traced its causes and had able to make recommendations that addressed the problem.

The conduct of the study covered almost all necessary concerns and delivered those with an intense analogy and is expected to be responded accordingly. With the appropriate data gathered in the study conducted by Adupa (2011), the researchers accumulated necessary data and studies in the Philippine setting so as to identify the similarities and differences with the system applied in the foreign country. So, the researchers were able to gather another related study regarding the enhancement of the inventory control system of MDC pharmacy in Laguna, Philippines.

Said study was conducted by the Bachelor of Science in Accountancy students in Colegio de San Juan de Letran-Calamba. This served as compliance to their requirements of their thesis subject. With this, the researchers decided to make their study as a basis for the continuance of their study since both studies cover the same topic on inventory management of MDC pharmacy and Metro Print Asia, except that the inventories involved are different in nature; medicines for MDC pharmacy and printing materials for Metro Print Asia.

The study conducted with MDC pharmacy revealed that the flaws of the inventory system employed in their business was due to several factors such as limited number of employees with no accounting knowledge and no proper training in handling inventories, overstocking and understocking of inventory supplies, weak internal control in the segregation and storage of inventories and absence of criteria in selecting suppliers that would comply with their inventory needs.

Their assessment were also based on their problems identified wherein they have assessed the current status of MDC pharmacy, pointed out their weaknesses and strengths and made recommendations on the flaws discovered. Their enumerated problems are the same problems that this study anticipates to point out. After the study, some of the recommendations given by the students were designed to address MDC pharmacy's problem on inventory valuation, receiving, storage, rotation and segregation. This involves the introduction of ROP system, EOQ model, stock rotation and others to MDC pharmacy.

The discussion of these principles was evident in related literature of their study and is not included herein as the researchers focus only on the details significant to the inventory system of Metro Print Asia. Also, the research design used by the Colegio de San Juan de Letran-Calamba students is almost similar with the research design of the study with Metro Print Asia. Interview and observation was used as a major means of gathering the data needed. With the nature and line of business of Monitor Publication Ltd. and the focus of the study of MDC Pharmacy, the researchers were able to relate to the study conducted by the former researchers. The problems cited in the studies were the same problems that the researchers expected to identify in their assessment of Metro Print Asia except Adupa's concern about customer's satisfaction and MDC pharmacy's medicine inventory. With regard to the methods of research implemented by Adupa and the Accountancy students of Colegio de San Juan de Letran-Calamba which were both descriptive and analytical in nature, the researchers were guided by the descriptive-assessment method.

The researchers assessed the Metro Print Asia's Inventories Management System based on criteria. And at the end of the study, the researchers proposed a solution to the problem of the said entity as inefficiencies were proven to exist. The theories and concepts adapted by Adupa (2011) in his study were general and were explained globally, such fit the concerns of the researchers of this study as well. While the results of the study conducted in MDC pharmacy resembled the same scope and focus of this study with Metro Print Asia. The only difference between them was the nature of the business that they are into.

So as a summary, the study conducted by Adupa (2011) helped the researchers foresee the extent of the study conducted since the nature of their business is similar in nature although it is based in a foreign country. As for MDC pharmacy, the students' focus on enhancing the current inventory system was the same objective that the present researchers attained in their study of Metro Print Asia's inventory system. With all the aforementioned information gathered by the researchers, the assessment of the inventory system of Metro Print Asia was possible for they already have related studies.

This served as a basis for the researchers in formulating criteria guided by the objectives of proper inventory management. Chapter III RESEARCH DESIGN This chapter indicated the procedures by which the study population was selected, how these subjects were used to yield the required data, how the data were collected, and how these data were analyzed. Research Method The researchers assessed the Inventory Management System of Metro Print Asia, therefore, descriptive assessment method was used by the researchers because it concentrated on the recent condition of the entity.

The researchers have no control over the entity and only reported about what had happened. Specifically, under this method, the descriptive assessment method was used to relate to the practices or policies implemented by Metro Print Asia. Essential information for this research work was collected through primary and secondary sources the combinations included: (i) Interview with the owner of the company. ` (ii) Observation of the purchasing process, warehousing and issuing of inventory to production

was done. Materials handling and storage were also observed and so was the inspection procedures.

Locale of the Study Dagupan City, is found in Northwestern Philippines, on the island of Luzon, particularly in Pangasinan Province. Located on Lingayen Gulf, Dagupan is the chief port and commercial center of the province. (Encarta, 2009) Since Dagupan is regarded as a first class city and the commercial center of the province, many business entities were established here. For about hundreds of business establishments here in Dagupan City, few of them are printing presses. Printing presses are a great help in one's business' success.

Today, every business needs to advertise their products and services they offer to gain the public's attention. One way of advertising is through distribution of pamphlets, brochures, etc. which are produced by the printing presses. In that way selling expenses of the businesses will be minimized compared to TV or radio advertisement. One of these printing presses is Metro Print Asia which is located at Fernandez Street at the back of Malimgas Market. The reason why the MPA Figure 1. Map of Dagupan City, Pangasinan indicating Metro Print Asia Figure 2.

Metro Print Asia Site Map researchers chose Metro Print Asia is because of its accessibility. Also, Metro Print Asia's location is in the Dagupan proper which is near the researchers' university wherein for practical reasons, expenses were minimized. Metro Print Asia had already established its own name and already had a good reputation in the industry specifically here in Dagupan. Subject of the Study Interview was conducted where a set of preconceived



questions were asked to the general manager regarding material control policies of the entity.

The interviewers raised questions not specifically included in the interview schedule and obtained further information during the flow of conversation and made observations of the actual inventory process. This helped the researchers have a deeper understanding of the subject of the study. Data Gathering Instrument The researchers used an interview schedule wherein questions were formulated to specifically assess the current status of Metro Print Asia. The researchers have come up with the questions and necessary information essential to the study was gathered.

Each member of the team was asked to formulate questions regarding the inventory management system of Metro Print Asia after which, questions were finalized by all the members. These set of questions was based primarily on the standards of inventory management system stated in chapter II. This interview schedule actually established a link between the existing inventory management system of Metro Print Asia and the recommendations that may be beneficial or practical to improve their inventory management system as problems were identified.

Said interview schedule can be seen in the appendices. Since the questions formulated by the researchers were general in nature and further clarifications were raised, semi-structured interview was conducted in which set of open questions were asked with the opportunity for the interviewer to explore particular themes or responses further. A semi-structured interview does not limit subjects to a set of pre-determined answers. Semi-structured

interviews are used to understand how interventions work and how they could be improved.

It also allows subject to discuss and raise issues that researchers may not have considered. Data Gathering Procedure Research as an intensive form of study, necessitates the collaboration of information which talks about center of study. Thus, data gathering was indispensable in this type of study. The kind and method of accumulating data were clearly defined by the researchers. In deciding the method to be used, the kind of data needed was pointed out simultaneously. Since the study used interview as data gathering tool, the researchers formulated an interview schedule.

The researchers designed the interview schedule that they used to know the actual status of Metro Print Asia's inventory management system and assessed if such system was properly followed. Said questions were subject for further corrections by the research professor after which, the researchers conducted the interview. The researchers were equipped with necessary instruments such as recorder, notepad, pen, and the interview schedule. The group leader decided on the division of duties during the interview. This included decisions on who will record and jot down important notes.

Then, the researchers set their schedule with the interviewee. With the aid of the interview schedule, the researchers obtained the answers to their primary concerns directly from the interviewee. Answers given by the owner gave rise to follow-up questions from the researchers that gave more elaboration about the issue, beneficial to both parties. Data Analysis and Interpretation Data alone is not sufficient without thorough analysis. Proper

procedure is needed to interpret these data to become useful information that is essential to the researchers and users.

The data gathered by the researchers through interview and observation were compared for evaluating the truthfulness of the data. After the procedure of comparison, further analysis was done to evaluate the existing process of purchasing, warehousing and issuing of materials to production. This compiled information served as the basis for the interpretation of the researchers' findings. Chapter IV DATA PRESENTATION, ANALYSIS AND INTERPRETATION This chapter presented, analyzed and interpreted the data gathered by the researchers in the assessment of Inventory Management System of Metro Print Asia.

This gave emphasis on the problem stated in Chapter I. The presentation is in the sequence of the specific questions and includes the following topics: 1) the status of the inventory management system of MPA, 2) the problems encountered and 3) the necessary recommendations to improve the existing inventory management system as to purchasing, warehousing and issuing of materials to production. Current Status of Inventory Management System of Metro Print Asia This section covered the inventory management process of Metro Print Asia where it discussed the three stages which are the purchasing, warehousing and issuing materials to production.

Purchasing of inventory such as papers and inks This stage starts when the owner, Danny Cuna, or the operating manager, Myrna Lambino, usually selects the supplier from whom they can purchase the materials at the lowest possible price. The cost and quantity of materials to be ordered are

primary concerns of the company that is why they consider purchasing their items from Metro Manila rather than here in the province because items in Manila are cheaper when purchased in large volumes.

After the owner and the operating manager were informed of various sources of supply and their prices, the owner or operating manager then now negotiates purchase contracts, prepares purchase orders and follows up deliveries depending upon the job order requested by their client. Rarely, upon delivery, Nerissa Pael, one of the warehouse-in-charge, checks if goods received are in good condition before accepting it from the shipping company.

This part of the process resembles the quality control of the company to ensure that inventories received met the specifications of the orders of the company. According to the standard cited in Chapter II by Adupa and Hall, a good inventory management system in purchasing process should consider the cost of materials to be purchased specially when acquiring materials of large quantity. Aside from these, it is also essential to consider the proper timing, selection of suppliers and the preparation of the purchase order.

When the goods arrived it should be inspected by the authorized personnel to ensure that the conditions of the goods are in good condition, and then it should be properly stored. Based on the status of the company, consideration of the cost, quantity, selection of suppliers and inspection on goods received has complied with the standards. But the companies have also violated some of it such as taking into account the timing of the

purchase which leads to delay in production. In addition, the owner and the operating manager sometimes miscommunicate resulting to double orders.

Warehousing of inventory such as papers and inks In this process, purchased materials by the purchasing officer are received, recorded and stored in a certain place which serves as the company's warehouse and keep the materials therein prior to their use in the production process. In the case of Metro Print Asia, two warehouses are designed to accommodate all their inventories arriving in different time intervals. Each warehouse keeps different set of inventories as the company maintains varieties of inventories in the form of papers and inks.

Each warehouse is also given separate warehouses-in-charge, Nerissa Pael and Dennis Roquiza, to keep the inventories monitored and updated. Upon admission, both the warehouse-in-charge then maintains a material ledger card for every inventory stored in the warehouses. However, these material ledger cards are not regularly updated and maintained. Papers and inks, as their primary inventory materials, the former is sensitive to light, air and humidity and the latter may not be usable if not properly stored so storage for such materials is of great importance.

Though the responsibilities of administering the warehouses are given to each of the warehouses-in-charge, the owner himself also monitors them to ensure that those responsibilities are carried out regularly. Aside from keeping the inventories stored in a safe place, it is also the responsibility of both the warehouse in charge to issue materials to be used in the production. Here are the control policies set as to keeping inventories in the

warehouse as indicated in Chapter II. After delivery of purchased inventory, it will then be moved to the warehouse or directly sent to production.

The warehouse must be locked when the warehouse-in-charge is not around thus the access is only to the warehouse-in-charge and other authorized personnel. Also, material ledger cards for the inventory item must be maintained by the warehouse-in-charge. In addition, list of items of each shelf is necessary to have a well-organized inventory. The company complied with the standard of Coltman and Jagels in moving the delivered goods in both warehouses, but facilities in the second warehouse are not maintained so there is a high risk for damage.

Locking of the warehouse is also neglected when the warehouse-in-charge is not around resulting to unrestricted access of inventories. Failure in updating the material ledger cards and proper organization of inventories in the warehouse results to problems such as theft. Issuing of inventory such as papers and inks to production When there are job orders, Marivic, the marketing manager, will authorize the approval of such orders to Vanessa, head of the pre-press department.

She will then assign one of the production personnel who will do the job and request from one of the warehouse-in-charges to issue the materials needed for the production of that specific order. Both the warehouse-in-charge, Nerissa and Dennis, will now be responsible for the issuance of the inventory needed in the production. But sometimes when the warehouse-in-charges are not around or are doing other jobs assigned to them by the owner, they are not the ones who get the needed materials from the warehouse. This

issuance of inventories is given a maximum of twenty percent allowance of allotted number of inventory needed in case of spoilage.

These are the following standards or control policies which a manufacturing company should follow with regard to its issuance of materials to production in order to arrive at a good and properly organized Inventory Management System. First, the person responsible in receiving a purchase order from a customer must pass on the details of inventory needed for production to the store keeper. Second, the warehouse-in-charge should be the only person authorized to have access in the inventories located in the warehouse.

And lastly, the warehouse-in-charge is then required to release inventories to production personnel assigned to a specific job. The first standard, which serves as an internal control was not being followed by the said company with regard to its issuance of inventory to production because Marivic, the marketing manager, who is responsible in receiving purchase orders authorize the approval of order to Vanessa, head of the pre-press department. Vanessa also assigns other personnel to request from one of the warehouses-in-charge to issue the materials needed for the production.

Any personnel can enter in the warehouse which does not limit the access of inventory in the warehouse. This only shows that the company did not comply with the second standard as stated above. As for the last standard, the researchers found that the company was not in entire compliance because there were times when the warehouses-in-charge are assigned to do other duties which sometimes require them to be outside the warehouse

thereby leaving it unattended. As a result, other personnel directly get the inventory from the warehouse. Problems encountered by the business

Problems are always present in various parts of a business. These problems must be properly addressed in order to take preventive measures to counterfeit the existence of a more serious one. This is why in any kind of research study, problems are identified and taken into account as an entire analysis for further recommendations by the researchers. In this sense, the researchers were able to identify Metro Print Asia's problems in their Inventory Management System. This system was a critical part of a printing press being a manufacturing company.

Different problems arising from purchasing, warehousing, and issuing of materials to production were considered for it can interfere with the company's profits and customer services. These problems were inevitable but the effect of such can be minimized. Most of the problems identified in Metro Print Asia's inventory management system rooted from the inconsistency of proper implementation of the company's policy with their inventory control procedures, no segregation of duties and knowledge of the employees in their inventory system is not enough.

Such problems encountered in each phase are as follows: Purchasing of inventory such as papers and inks In a manufacturing business, purchasing comprises the initial phase of the whole inventory management process. In this phase, raw materials are acquired to be used in the production process. However, this task requires the combination of knowledge, experience and expertise in handling inventory. Failure to do so will lead to disorganized



purchasing process. One of the problems that arise in Metro Print Asia's inventory management system was the failure of having updated inventory count.

Because no updated counts are available, purchasing process becomes time consuming in the sense that the warehouse-in-charge still needs to count the inventories before purchasing. According to Hall (2008), the purchasing process determines the quantity to order, selects a supplier, and prepares a purchase order. It begins with recognizing the need to restock inventories through the observation of inventory records. Also, it was mentioned by Coltman and Jagels (2008) that the inventory counts of the stored products should be taken periodically by specific personnel and compared to perpetual inventory cards.

Metro Print Asia has complied in the said procedures stated by Hall (2008) wherein they first gather information on materials to be ordered, conducts canvassing to suppliers, and prepares purchase order. In gathering information on materials to be ordered, it takes time for the warehouse-in-charge to give such information because it is the only time that she will update the said inventory. This problem not only affects the purchasing process, but also the warehousing procedures which make the inventory management system of Metro Print Asia disorganized.

Also, even if the company assigns the purchasing of materials to Myrna Lambino, the operating manager, she still needs the approval of the owner to order materials from the supplier. There are times when the owner himself does the ordering without properly communicating with the operating

manager. With this scenario, the materials are oftentimes ordered twice. It is a practice, especially in large companies, to control inventories by segregating the responsibilities of personnel to avoid conflict and connivance that may lead to fraud.

But taking into account that Metro Print Asia is a small entity, they maximize their work force by assigning other duties to their employees. The operating manager is an example of this; she was authorized by the owner to purchase inventory materials aside from doing her usual job. The owner was the former person in charge in purchasing their inventory materials, but since he is hands-on in running his business and is out from time to time, he is no longer capable in doing such task.

But even as he had delegated this work to Myrna, he still oftentimes purchases the needed materials without referring to Myrna. With respect to the problems identified in purchasing, miscommunication between the owner and the operating manager as to ordering inventories can be solved. The existence of purchase orders will not confuse both the owner and the operating manager on what, when and how much inventories are to be ordered. Warehousing of inventory such as papers and inks Warehousing is the phase where the purchased materials are stored and kept in good condition intended for its use.

The complexity of the warehouse structure depends on the type of materials stored therein. Just like in the case of Metro Print Asia where their main inventories are papers and inks, papers must be properly stored since they are sensitive to different weather conditions. The researchers found

problems concerning the disorganized storing of materials like large sized papers lying directly on the warehouse floor which may cause spoilage or damage. Bizmanualz, Inc. (2008) cited that storage refers to protecting inventory from damage, shrinkage and theft.

Coltman and Jagel (2008) also provided a control practice that immediately after goods have been delivered and all receiving checks performed, they should be moved to storage areas or sent directly to the department that requested them. Proper storage facilities should be used. Metro Print Asia provided two warehouses in order to have room for all the inventories. However, these inventories are still not protected from damages because they do not have enough warehouse storing facilities such as cabinets and shelves. In addition, items are not properly labeled, maintained and updated by the warehouses-in-charge.

One standard to aid in the inventory count is the use of preprinted inventory sheets that list items in the same order as they are located on storeroom shelves. Metro Print Asia segregated its inventories according to their sizes where one warehouse accommodates smaller papers, and the other big sized ones without labeling them. Thus, they find it hard to physically check and count the inventories stored. Moreover, the warehouse-in-charge has no regular inspection on the conditions of the materials which can result to high percentage of obsolescence or damage.

Both the warehouses-in-charge also do other duties aside from administering the warehouses causing poor performance on their primary duty. It was stated that segregation of duties must be followed, but since it was also

mentioned that Metro Print Asia is a small company, it is inevitable that employees are expected to be assigned to do another job. Therefore, every so often, Nerrisa or Dennis is busy doing his/her other duties and leaves the warehouse unattended that is why production personnel can get materials easily for production without authority, because of these, inventories are susceptible to theft.

It should be followed that storage areas should be locked when the storekeeper is not present and that access to storerooms should be limited to the storekeeper and other authorized employees. Stated in chapter II of this study, one of the common problems with inventory system is due to unqualified employees in-charge of inventory. In Metro Print Asia's case, two of its warehouses-in-charge lack knowledge regarding the management of inventories. The owner did not give a specific policy for hem to follow, thus the responsibilities and objectives of a properly controlled inventory were not clear to the assigned personnel. Issuing of inventory such as papers and inks to production Issuance of materials to production can also be critical. This requires issuing the materials to the right person assigned to the job. However, this is not strictly implemented since any of MPA's personnel are allowed to get hold of the items whenever the warehouse-in-charge is assigned to work outside office or on another job.

When this happens, the warehouse-in-charge needs to go elsewhere thereby leaving the warehouse open to anybody who needs materials. The standard mentioned in the chapter II of this study states that person responsible in receiving a purchase order from a customer must pass on the details of

inventory needed for production to the storekeeper. Metro Print Asia failed to <https://assignbuster.com/inventory-management-system-of-a-printing-press-in-dagupan-city-flashcard/>

comply with this standard since any of the production personnel can present the request for materials to the warehouse in charge. Another problem is when they issue damaged materials for production process and were only identified during production.

This happens when the warehouse-in-charge or other employees simply get materials in the warehouse without properly checking if those are free from damages. The standard in chapter II indicates that the storekeeper should be the only person authorized to have access on the inventories located in the warehouse and release these inventories to specified person assigned to the job. Said standard was not followed by Metro Print Asia since accessibility to the warehouse is made open to anybody who needs the materials especially when the warehouse in charge is not around.

Thus, in certain cases, damaged materials are issued to production because checking of materials before issuing is not done. Also, Metro Print Asia failed to track the right inflows and outflows of inventories in the warehouse.

Another standard mentioned by Coltman and Jagels (2008), storage areas should be locked when the warehouse in charge is not present. Metro Print Asia did not conform to this standard so access to inventories is not limited to the authorized personnel only.

Proposed measures to the problems identified With every problem, there is always a solution. In Metro Print Asia's case, the researchers proposed the following measures in order to help improve the recent condition of Metro Print Asia's Inventory Management System in terms of purchasing, warehousing and issuing of materials to production. Purchasing of inventory

such as papers and inks. As to failure of having updated inventory count, the management should impose a well-defined process of updating inventory count, e. g. maintaining and placing a list in every material, so as to determine the level of stocks per item. In this manner, level of materials to be ordered can be determined easily thus, resulting to a controlled ordering process. Log books are needed in each warehouse in order to monitor the flow of materials from purchasing to issuance for production. And with regard to overstocking of materials due to miscommunication of the two persons in charge in purchasing, the operating manager will be the only person in charge to do the purchasing.

The owner will only inspect by checking the bulletin board provided by the operating manager which shows the updated inventory that are still needed to purchase. Warehousing of inventory such as papers and inks. The researchers suggested that the management should properly orient their employees before sending them to actual operations regarding their tasks and duties. The researchers also proposed that the management should set a specific poli