Gather facts interview

Sociology, Communication

In most cases, information systems are formal, computer based systems that play an integral role in organizations. Some information systems include: transaction processing systems, which simply record the routine transactions needed to conduct business, like payroll, shipping, or sales orders: and office automation systems, which are intended to increase the productivity of office errors and include such systems like word processing, electronic mail, and digital filing. The various types of information systems in an organization are interconnected to allow for information sharing.

Inventory management to a layman may be defined as a system used in a firm to control the firm investment in inventory. According to (T LUCY 1 996) it involves the recording and monitoring of stock levels, forecasting future demands and decides when and how many to order. 1. 1 Background of the Study Divine supermarket is located in Nassau town along Him road, it deals in grocery. It uses the manual system of sales transactions and purchases. Sales recording, when a product is being sold the records are just written on papers and books manually.

This leads to poor data Storage and retrieval. Customer registration, the details of the customers are recorded whenever they enters the supermarket and this is done manually with a pen and the book where the same details can be recorded many times leading to data redundancy. Stocks updating, in order for the staff to know the amount of stock available, the manager just count the products one by one. This takes a lot of time and onetime leads to counting errors hence producing poor results.

The finding shows the challenges facing the manual system of inventory management system; the manual system requires everyday counting of items in the inventory, human errors are very prevalent during counting and recording and in case of disaster like fire or flood or poorcommunication, all the manual inventory records will be damaged and irretrievable. The accountant manually computes and totals the amount of monthly sales, purchases and expenses. In manual inventory, missing receipts, sales, expenses and inventory records are hard to track back. 1. 2 Problem Statement

Processes at Divine are managed manually which results into poor record keeping and management, time wastage in retrieving information, data redundancy, monetary loss resulting from poor calculations, duplication of data and data insecurity. 1. 3 Objectives of the Study 1. 3 . 1 Main objective To develop an automated inventory management system that saves time, reduce costs, and provide quality services for customers. 1. 3. 2 Specific objectives I. To study and analyses the current system. Ii. To design the system iii. To implement the system iv. To test the system 1. 4 Research Questions I. How does the current system work? I. What are requirements for designing an inventory management system? Iii. How the system is implemented? Iv. What are the methods used for testing the system? 1. 5 Scope of the Study 1. 5. 1 Geographical scope This research work covers stock control, sales management, customer registration, purchases and tends to correct anomalies in the supermarket database. It analyses stock updates and ability to view existing stock. It provides quick way of operation by capturing the manual processes and automates them. 1-5. 2 Time scope

The study covered a period of five months from September 2014 to January 2015 1. Significance of the Study . To provide an effective supermarket database that handles sales, purchases and overall stock control to save time, prevent congestion of customers and provide data recovery program for effectiveness of the supermarket operations. Ii. To act as a ground for the future scholars or academics in future research in the field of improving inventory management. Iii. To reduce the costs of information storage and retrieval. CHAPTER MO LITERATURE REVIEW 2. 0 Introduction This chapter gives a view of the selected existing system from literature on inventory management.

It covers the overview of the types of inventory kept ND system design and implementation. According to (S. C Sahara (1999). P. 509, 512). Inventory is considered as a systematic location, storage and recording of goods in such away that desired degree of service can be made to the operating shops at a minimum ultimate cost According to (Pander 1990) inventory management is stock of the product a firm is manufacturing for sale and the components that makes up a product. Firm hold inventory in a form of raw material, work in progress, finished goods and supplies.

These inventories facilitates production and sales operation, guard against the risk f unpredictable changes in usage and delivery time and take advantage of quality discount and price frustration. Donnelly (1990) states that inventory management and control process are very useful in determining the optimum level of inventories and finding answers to the problem of economic order quality, the re-order point and safety stock. 2. 1

Inventory Control and Management Inventory management is defined as the system in a firm to control the firm's investment in inventory.

It involves the recording and monitoring of stock level, fostering future demand and deciding on when and how to order. The objective of inventory management is to minimize in total, the cost associated with inventory (T Lucy, 1996). According to Salem (1 997), inventory control refers to a planned method of purchasing and storing materials at the lowest possible cost without affecting the production distribution schedule. Inventory control therefore is a scientific method of determining what, when and how much to have in stock for a given period of time. 2. Importance of inventory Management Systems Inventory management is an important part of a business because inventories are usually the largest expenses incurred from business operations. Most companies will use an inventory management system that will track and maintain the inventories required to meet customer demand. Most systems used by companies are linked to meet the management or accounting information systems increasing the effectiveness of their operations. (Kumara Nixon 2006) 2. 2. 1 Inventory Orders Inventory management system help business order inventory by accurately recording consumer sales.

Electronic inventory systems can track sales in a real time- time format, ordering inventory automatically when current stock hits a predetermined minimum levels. Electronic ordering known as electronic Data interchange (EDI), allows companies to maintain the proper amount of stock by not increasing costs through over- ordering of inventory . EDI also ensures

placed orders are placed immediately, ensuring shortly amounts o lead times to receive new inventory(junkyards Nixon 2006) . 2. 2. 2 Stock Maintenance Computerized inventory management system allows companies to properly order and maintain several different types of goods.

Different styles, colors or size can easily be managed to ensure that consumers demand is met through offering a variety of goods. Most companies use inventory management to pep stock items separate from similar goods this allows management to determine which items are selling and which items need to be reduced from inventory based on poor sales. (Saxons 2003) 2. 3 The existing inventory management system This is the manual system where the customer buys a product by moving around the stock looking for the product without specific directions and after words goes to the cashier and pays for the product.

A t this stage the accountant just write using a pen and a book to record the transaction and the total amount for sales and purchases are computed manually using a calculator. And lastly a receipt is issued. This consumes a lot of time and even leads to data redundancy Customer registration is done manually whenever he/she enters the supermarket using books for record keeping which leads to redundancy of data. When stock is added, they just use man counting around stock to know the current status. 2. 3. Difficulties in the Manual Inventory System The current system operates manual inventory system, from stocks, products, ordering and purchases etc recorded in a book. This is faced with errors, incompleteness, and insufficient data for analysis. Information regarding tock, products, sales and purchases

are still in black and white which is not properly organized and managed. From the wholesalers to retailer bills, tickets, vouchers, receipts of products are recorded in a book but further operations are not being properly handled. As a result it is difficult in processing, updating and managing.

The factors for these difficulties are: Time Consumption, Manual inventory systems are time consuming, as the business owner must keep track of inventory sales on a daily basis, while updating the system manually at the end of the day. Poor Communication, A annual inventory requires employees and managers to write down each time an item is removed from the inventory. If one employee forgets to mention that the last coffee product has been removed from the inventory, a manager expects the item to still be available for a customer during a sale.

Compared with a technical inventory system, a manual inventory system does not help the communication in the workplace. Physical Counts, A manual inventory system does not provide any number, as all numbers from the inventory are gained through physical inventory counts. One of the difficulties of running a annual inventory system is that physical inventory counts must be performed frequently to control the items in the inventory. This is time consuming and can cost the businessmoney, if employees must come in to help out outside of business hours.

Daily Purchases, Keeping track of daily purchases is another difficult controlling measure with manual inventory systems. A manual inventory system requires the employees to write down the items sold during a single work day. This can be a difficult task, as one employee may lose the list of

items sold or another may forget to write down a sale. Ordering Supplies, A manual inventory system does not update at the end of the day with updated inventory counts. This means you must go through the inventory items each time you need to place an order for new raw materials, products or supplies for the inventory.

This can be a time consuming process, as you will physically have to go through each product box and browse through the items. 2. 4 The proposed inventory management system This is an automated inventory management system where all transactions are done electronically. In this, when a customer picks a product from stock takes it to the checkout assistants. Then the checkout assistants use bar code readers to scan purchases which are linked to the application program that uses a bar code reader to find the price of the item from the product database and then the stock is automatically reduced by the system.

The program then reduces the number of such items in a stock and displays the price on the cash register. And customers' details are recorded. Most companies use inventory management to keep stock items separate from similar goods this allows management to determine which items are selling and which items need to be reduced from inventory based on poor sales. Saxons 2003) 2. 4. 1 Benefits of the proposed system I. Optimize the security and validity of the number of supplies, sales, purchases, expenses every month. Ii. Easier tracking down the purchases, expenses and inventory records. Ii. Support for inventory management that helps record and track materials on the basis of both quantity and value. Iv. Uses less of time for

the accessing data or information. V. All data or information that currently stored in the drawers or racks will be transfer to the database system that will be safely saved in the computer. CHAPTER THREE RESEARCH METHODOLOGY 3. 0 Introduction This chapter contains the research design, population study, sampling design, data collection and system analysis. A qualitative research will be used by the research. . 1 System investigation This will involve investigating the weaknesses of the system where the system investigation techniques like case diagrams will be used. Case diagrams depict the system's operation where they demonstrate system processes. Questionnaires given to a large number of users Formal interviews with selected key personnel Observing a sample of users as they go about their daily tasks with the current system Analyzing existing documents to understand what data is created and how it is then manipulated by the system. . 2 Population study The study area was Divine supermarket and the study population consisted of the manager, and staff and customers. The sample size 30 respondents were interviewed with the use interviews, questionnaires and observations 3. 3 Data gathering techniques 33. 1InterviewThis will involve face to face direct conversation were questions and answers where he main theme. The researcher will approach the users directly in order to obtain comments and notes about the current supermarket inventory management system.

The interview questions will be designed in line with the objectives Of the study . The interviewees mentioned the problems that where encountered in the use manual system and also gave the possible causes of the problems which where faced. It is unlikely that a single interview with a user will cover

everything the analyst needs to know. Therefore part of the plan should include 3 interview types I. An initial interview This interview is to scope out the overall problem that the new system is to solve and any shortcomings in the current system.

This interview provides the analyst with a context for the project. This information is recorded in the definition part of the the requirements document ii. Gather facts interview The initial interview allowed the analyst to have a view of the project and begin to understand what needs to be done. This second interview is intended to gather detailed information about the system. This information helps build up the draft requirements document iii. Final interview The draft requirements document has been written.

This interview goes through the relevant part of it with the interviewee (who could be user, management or customer). They confirm that the requirement document is correct or they provide feedback if any changes need to be made. 3. 3. 2 Observations. This will includeobservationof the services of the current system. The researcher will use this process to verify the data collected from the above methods and also to capture some more data that could have been ignored. And will be done by looking at the systems performance of the supermarket. Methods of observation could be either direct or indirect. . Direct. As in sitting next to the user and viewing work done. This has the advantage f being able to ask questions as you go along but has the disadvantage of users being uncomfortable with someone looking over their shoulder. This may lead to people carrying out the task as it 'should' be done rather than how they really do it. Ii. Indirect With their

permission, users could be viewed with remote video cameras. This avoids the awkwardness of being right next to them but it has the disadvantage of being less able to ask questions on the spot.

It is also more costly to set up and may be impractical in open-air environments (for example fire-brigade or ambulance systems perhaps). 3. 3. Questionnaires The questionnaires were closed ended to enable the respondents to understand them and answer them appropriately with ease. It will include the liker scale that is Agree, strongly agree, not sure, disagree, and strongly disagree. I. Closed questions (multiple choice), These are easy to analyze but the choices provided must be different enough to make it simple for the user to select one. They must also include the most relevant choices. I. Open questions, these offer the chance to obtain more detailed answers and to seek opinions. They are however more difficult to analyze than closed questions and people may not provide useful answers. 3. 4 System analysis This will involve careful analysis and study to understand how the designed system would differ from the old system. It describes what system should do so as to satisfy the needs of the user. It will also involve study of sets of interacting entities, including computer systems analysis. This field is closely related to requirements analysis or operations research.

It is also " an explicit formal inquiry carried out to help someone (referred to as the decision maker) identify a better course of action and make a better decision than he eight otherwise have made. " This will be done in form of expressing responses as squares correlation of the population and by use of frequency distribution tables and SPAS. 3. 5 System design This will involve a

detailed specification of the computer-based solution to the above-mentioned requirements. Context diagram, Data flow diagrams and entity relationships diagrams will be used for designing the proposed system. . 5. 1 Data Flow Diagram The DEED Diagram for Inventory Management System is a data flow diagram of graphical representation and commonly used also for the visualization of tortured design data processing through an information system, it's an important technique for modeling process aspects with a system's high-level detail by showing what kinds Of data will be/how to input and Output from the system, where the data will come from and go to by sequentially, and where the data result will be stored through functional transformations.