COMPUTER APPLICATION IN STORE MANAGEMENT

(A CASE STUDY OF NATIONAL IRON ORE MINING COMPANY, ITAKPE)

BY

RABIU, O. OLANREWAJU MAROOPH
PGD/MCS/2OO1/1092

THIS PROJECT WORK IS SUBMITTED TO THE DEPARTMENT OF MATHEMATICS/COMPUTER SCIENCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF POST GRADUATE DIPLOMA IN COMPUTER SCIENCE, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGER STATE.

NOVEMBER, 2003

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CERTIFICATION

This is to certify that the Project titled Computer Application in store Management (A case study of National Iron Ore Mining Company, Itakpe) is an original work undertaken by MAROOPH OLANREWAJU OMONIJE RABIU (PGD/MCS/2001/1092 of

THE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE, FUT, MINNA.

....

MALLAM AUDU ISAH Date

Project Supervisor

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MR. L.N.EZEAKO Date

Head of Department

....

External Examiner Date

DEDICATION

1. To my Mother, Alhaja A. Rabiu
2. To Mr. & Mrs. Gbenga Mudashir Lawal, NIOMCO, Itakpe, Kogi State.
3. To Mallam Tunji Lawal of NECO, Minna, Niger State.
4. To Mr. Tunji Adegboye, Maitama, Abuja.

ACKNOWLEDGEMENT

I am indeed grateful to Almighty Allah for seeing me through to the successful completion of this project work. I also wish to thank God for the following people whose joint effort has enabled me complete this work.

My supervisor, Mallam Audu Isah, who despite his tight schedule of duty speared time to give me all the necessary assistance.

My heart felt gratitude goes to Prince R.O.Badmus, of the Department of Mathematics/Computer Science, who gave me all the support in terms of encouragement and a lot of contribution and suggestion during this study.

My appreciation also goes to Prof. K.R. Adeboye (Dean School of Science and Science Education), Dr Yomi Aiyesimi, Mallam D. Hakimi, Mr. Victor Akinola, Mallam Abubakar, Dr Akinwade and the Head of the Department, Mr .L.N. Ezeakor, and to all the Lecturers and Staff of the Department for their support in one way or the other.

I also appreciate the support from my Friends and course mates: Mohammed, Joshua, Akeem, Raymond, Maikano, Idris Maman, Sadiq, Bello, Kebbi Man, Michael, Mrs. Sanbo, The Adenugas; UK.

Finally, I wish to express my deepest appreciation to my sponsor: National Iron Ore Mining Company (NIOMCO) Itakpe, Kogi State for giving me all the financial support and for training me on this course; most

especially Alhaji F.S. Mommoh (Manager Purchasing), Engr. W.A. Akinbami, DGM Commerce, Engr. Osho, AGM (MIS & Planning), Engr. T.I. Adebayo, DGM Benef. & Corporate Planning, Engr. Osho, AGM (MIS & Planning), Ahlaji Tanko, Head of Audit Section, Mr. Ayuba Bello DGM Finance and lastly, The Managing Director/Chief Executive, NIOMCO, Engr. L.A. Adegboye. It is my prayer that God will reward them accordingly.

ABSTRACT

A feasibility study was conducted on the effect of Application of Computer in Store Management System with particular reference to National Iron Ore Mining Company, NIOMCO, Itakpe.

The familiar fact-finding techniques-namely Interview, observation and document inspection/review were employed in the field work during data collection.

A Microsoft Visual Basic, which is the fastest and easiest way to create applications for Microsoft windows, was used.

The system is designed to provide management with timely information and ensure proper accountability as a result of timely report to be generated for all transactions in the store distribution.

The implementation of the proposed system will ensure improvement in terms of effectiveness, better services, better management control, flexibility, security and reliability.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODCTION

The primary function of Store Management is to provide for efficient storage and handling of goods to be redistributed to the ultimate consumer/units.

Store Management must take into consideration the purpose for which a stores operation functions, that is, holding area of materials until redistributed.

Store Management is closely linked with distribution. In this write up, we intend to see how best we can introduce the application of Computer to tackle the bundle of problems faced in the stores and to all other areas of stores management.

1.2 OVERVIEW OF COMPUTER

The term "Computer" could literally be used to identify a device that calculates. Initially, the computer was designed as a tool to manipulate numbers and solve arithmetic problems. This original use is understandable since most of the early designers were Mathematicians, Scientists and Engineers.

However, people began to realize that the computer could process symbol (e.g. alphabetic symbol) as well as numbers. Therefore, the literal interpretation of the word computer does more than just carrying out addition,

subtraction, multiplication and division. Indeed, computer can read input data, transfer or move data, and store and retrieve data, test by logical operation and general output. In view of the fact that its functions are broader than just computing, computer is sometimes more descriptively called an Electronic Data Processor (EDP) or an Automatic Data Processor (ADP).

We can broadly view computer as that which includes all equipments, components that are interconnected to perform data processing.

The equipment includes not only the Central Processing Unit (CPU) but also other devices that handles and output result. Devices attached to the CPU are sometimes called PERIPHERALS.

The computer system includes the hardware, software and the people who are an integral part of the computer's effective operation. Hence, we can say that computer is part of the computer system.

1.3 CLASSIFICATION OF COMPUTER

Computer comes in a wide variety of sizes, ranging from tiny hand held devices to some that are several meters in height and diameter. Hence, we classify computers by size, type of logic they use and by purpose.

1.3.1 CLASSIFICATION BY SIZE

Computers are divided into four categories

i. Mainframes computers

ii. Mini computers

iii. Micro computers

iv. Super computers

(i). **MAINFRAME COMPUTER:-** It is a large computer commonly used in business and industry, it is used to solve highly sophisticated problems and it has a large memory capacity and operate at a very high speed, they can support multiple users and multiple functions.

(ii). **MINI COMPUTER:-** This type of computer has many of the capabilities of a mainframe computer, it is generally low price with smaller primary storage, though it supports a network of users terminals.

(iii). **MICRO COMPUTER:-** This type of computer often found in small business, classrooms and houses, they are less complex and execute programs at slower speed.

(iv). **SUPER COMPUTER:-** They are the most powerful machines available in the mid-1980. They are very fast and most expensive; it has the capacity to process data generated during crude oil seeking exploration.

1.3.2 CLASSIFICATION BY LOGIC

Computer in terms of logic can be classified into three main types:-

a. Analog computer

b. Digital computer

c. Hybrid computer

(i). **ANALOG COMPUTER**

This type of computer does not compute directly with numbers rather, it uses continuously, varying physical magnitudes (e.g. temperature, voltage pressure or length) to represent number

(ii). **DIGITAL COMPUTER**

This type of computers computes with number directly and precisely, rather than approximately. Examples are Micro computer, calculators etc.

(iii). **HYBRID COMPUTER**

This combines the festive of both analogue and digital computer.

1.3.3 CLASSIFICATION BY PURPOSE

Computer in terms of purpose are categorize into two: -

a. Special purpose: - This type of computer is designed for only one purpose, that is, to perform a specific operation example, speedometer e.t.c.

b. General purpose: - This type of computer can perform many operations of any kind. Example, super computer.

1.4 OBJECTIVE OF THE PROJECT

The objective of computerizing the store management can be highlighted as follows: -

a. To establish the most desirable distribution of data, services, and equipment throughout the company.

b. To keep proper records on every item supplied, purchased, issued to various departments and staff.

c. To ensure that items requisitioned by the various departments are made available at the right time and at the right place.

d. To prevent or minimize under-stocking of item (i.e. Heavy duty equipments, Household equipment, electrical and Auto spare parts, drugs in clinic store e.t.c.)

e. To reduce losses resulting from overstocking of store.

f. To make Available a balance flow of raw material drugs, tools, Heavy equipments and other commodities necessary to meet day-to-day running of the company.

g. To demonstrate the computer capability of solving problems related to store management

h. To provide responsive service to meet user and departmental needs

i. To enable the most efficient handling of data and provide management with timely information.

j. The use of automated system of store information is aimed at keeping proper records on every items supplied, issued to staff.

1.5 SCOPE OF THE STUDY

Store management covers so much area such as inventory, business, store, school and clinic store etc. Hence, we will be talking of store management within a project or company, particularly store under commerce Department (NIOMCO site store).

The company is made up of the following departments

a. Managing Director/Chief Executive's Office

b. Administration

c. Beneficiation and corporate planning

d. Estate

e. Finance

f. Engineering services

g. Commerce (involving sales unit, purchasing unit and store unit)

Attention will be paid to commerce Department, under which store division charged with the store management is.

1.6 RELEVANCE OF THE STUDY

The benefits of an effective system of store management in the company are as follows:-

a. It increases efficiency

b. To generate a procedure for an orderly flow of relevant information for use in the store.

c. The rate of operation will be faster, effective and accurate.

d. Better management control.

e. Establishment of accurate store management system.

1.7 HISTORICAL BACKGROUND OF NIOMCO

The history of the NATIONAL IRON ORE MINING COMPANY, NIOMCO dates back to April 14th 1971, when the Federal Government Promulgated Decree No. 19 setting up the Nigeria Steel Development Authority (NSDA) to plan, operate and maintain Iron and steel plants in the country as well as to carry out steel raw materials surveys, suitability tests and Mining operations to guarantee adequate raw materials feed to the Nigerian Steel Industry.

1.7.1 THE LAW ESTABLISHING NIOMCO

In 1979, Decree No. 60 of 19th September dissolved the NSDA and established six companies, one of which was the Associated Ores Mining Company Limited (AOMC). The responsibilities of AOMC were in the field of Mining and Production of Iron Ore and other Mineral raw materials required for steel making.

In order to minimize overlap in functions, the parent Ministry (power and steel) rationalized the roles and responsibilities of its parastatals in February 1987, renaming AOMC as National Iron Ore Mining Company Limited (NIOMCO). Accordingly, NIOMCO responsibilities of exploring, exploiting and processing Mineral raw materials for the Nigeria steel industry by their name seem restricted to iron ore. Our enabling decree, however, has not divorced us for the responsibilities over other steel raw materials.

1.7.2 CORPORATE OBJECTIVE OF NIOMCO

NIOMCO'S corporate objectives are to explore, exploit and process iron ore in the country, to meet the needs of the Nigerian steel industry.

The industrial plant was designed for supplying 2.15 million tones (2.15mt) per year of 63% fe grade concentrate to Ajaokuta steel co. limited (ASCO) and 550,000 tones per year of 67/68% fe grade, super-concentrate to Delta steel co. limited (DSC), at the initial stage.

To achieve this target NIOMCO must mine over 7 million tones of run-of-mine (Rom) ore, in the course of which enormous quantity of waste

amounting to approximately 28 million tones has to be excavated, the stripping ratio (waste to ore ratio) of the deposit being 4:1

1.7.3 STRUCTURE OF NIOMCO

NIOMCO is a Federal Government- owned Parastatal under the supervision of the Ministry of power and steel.

A Managing Director/Chief Executive heads the Management.

The company is made up of nine departments each of these departments has a departmental head. The head (s) of department are usually the Deputy General Manager (DGM) and they (DGM) are answerable to the Managing Director/Chief Executive.

Each of the heads also has some other sub-ordinate whom he delegates responsibilities to be carried out i.e. Assistant General Manager, AGM, Manager and Assistant Manager etc.

The Head Office is situated at ITAKPE, KOGI STATE. While the liaison office is at Abuja.

The nine departments are: -

(1). **MANAGING DIRECTOR/CHIEF EXECUTIVE'S OFFICE**

This department is headed by the MD/Chief executive himself. And the unit under this office includes Legal unit, Medical unit (clinic), insurance unit, public relation office, Abuja liaison office, security division.

(2). **ESTATE DEPARTMENT**

Headed by a Deputy General Manager. The unit under this department are; property development, maintenance

(3). **ENGINEERING SERVICE DEPARTMENT**

Headed by a Deputy General Manager. The section under this department includes Auto workshop, ore rail line and transport section.

(4). **POWER & UTILITIES DEPARTMENT**

This department is headed by a Deputy General Manager the division under this department includes power supply, water supply division, Telecommunication division, Osara dam.

(5). **BENEFICIATION AND CORPORATE PLANNING**

Headed by a Deputy General Manager. The section under this department are industrial plant, corporate planning section, Manpower Development/Human resources Development, Vocational Training College, VTC.

(6). **FINANCE DEPARTMENT**

Headed by a Deputy General Manager. Sections under this department include Treasury, Final Account and Budgeting and Costing and Audit section.

(7). **ADMINISTRATION DEPARTMENT**

Headed by a Deputy General Manager. The section under this department includes General Admin, Personnel, School (NIOMCO

Nursery & Primary School and NIOMCO Secondary School), Motel, Guest House.

(8). **MINES OPERATIONS**

Headed by a Deputy General Manager. The divisions are exploration, Mining, Mine laboratory/Quality control and main mine workshop.

(9). **COMMERCE DEPARMENT**

Headed by a Deputy General Manager. The units under this department includes sales unit, purchasing unit and store unit.

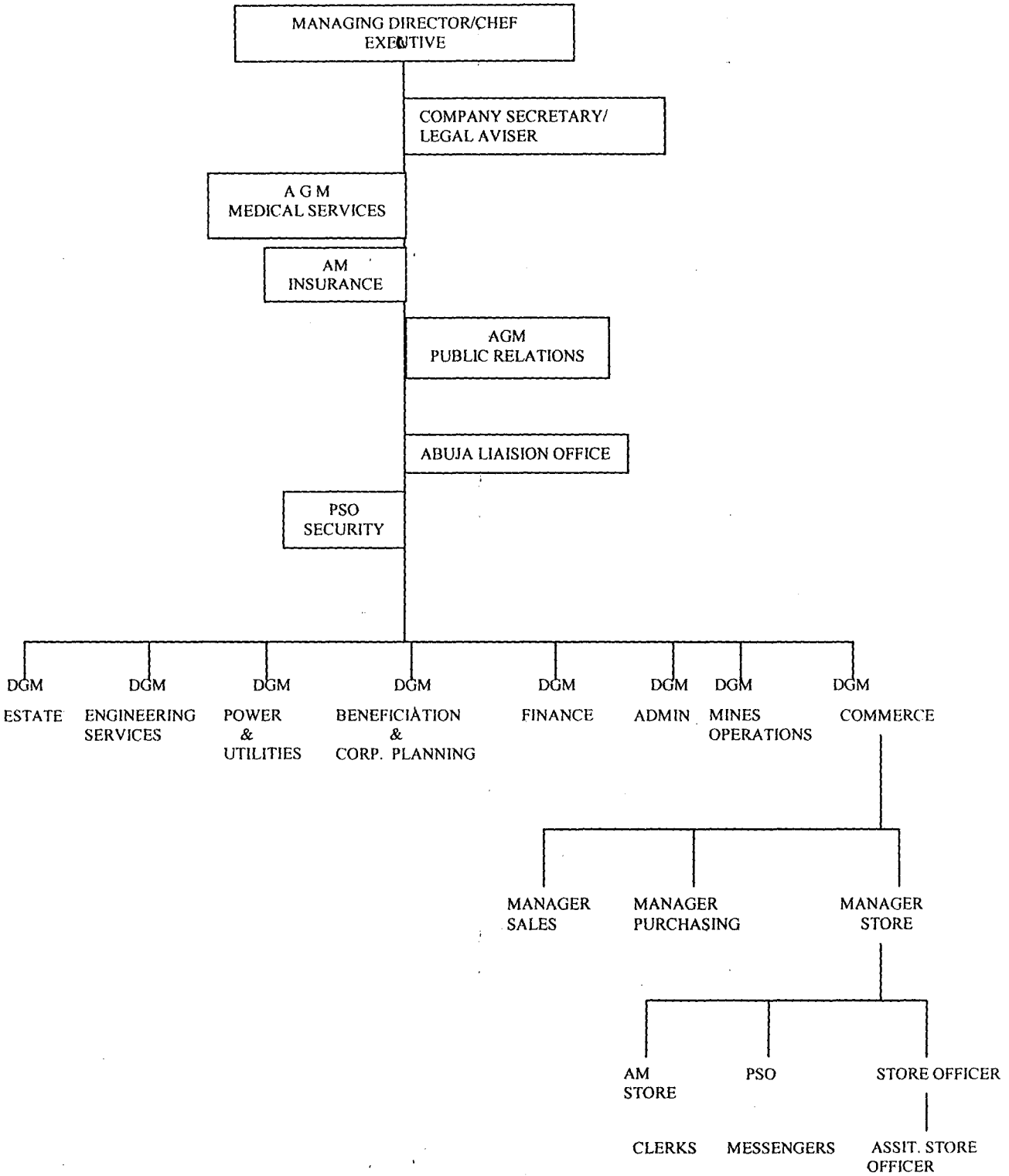
Besides, store unit can be divided into five divisions namely Heavy Duty store, Auto and electrical store, manager's office, Camp store (Household furniture and stationeries) clinic store and fuel and lubricant division.

COMMERCE DEPARMENT

DEPARTMENTAL OBJECTIVE

To ensure that items requisitioned by the various departments are purchased and made available at the right time and at reasonable prices without sacrificing quality and to market company's products.

1.7.4 ORGANOGRAM



NIOMCO OGANIZATIONAL CHART

1.8 STUDY METHODOLOGY

The techniques employed for the fact-findings were; Interviewing, Observation and Document inspection or review.

(i). INTERVIEW

This is a fact-finding technique used to collect information from individuals/groups. During interviews, facts about what is happening come to light together with the opinion of the individual regarding the weakness in the system.

The respondents here are the current users of the existing system. Interview technique is the most widely used and most productive. It is very important to gain confidence of the individuals concerned in order to tap out the information on all ambiguous-related issues, which might not be clear if another method not an interview is used.

(ii). OBSERVATION

This fact-finding technique gives first hand information about how the activities are carried out. It enables the observer see how goods/documents and processes are carried out and whether or not specified steps are actually followed. Besides, it involves watching for a period to see for oneself exactly what happens.

(iii). **DOCUMENT INSPECTION/REVIEW**

This technique enables us to look into the existing records with respect to its organizational chart, policy manual, regulation standard procedure, statistics and other relevant documents.

This provides an introductory knowledge of the company actual operation with record in existence.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Management could be defined as "The art or practice of managing a business or money". One useful breakdown of the management job is that suggested by Luther Gulick (1930).

Gulick used the word POSDORB from the initials of the seven functions: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting (the last "O" is to make the word pronounceable).

Store Management can therefore be seen as a system which has inputs that includes customers' needs, Information, Technology, Labour and Management, Fixed assets and variable assets that are relevant to the information process.

The transformation process incorporate planning, operating and controlling the system. The output of the system includes products and services and may even be information such as may be provided by consulting organizations.

The operations of the system are influenced by many external factors, such as safety regulation or fair labour practices.

2.2 STORE MANAGEMENT

The success of any function lies in the Management Policies that are established and the quality of assigned personnel. Store Manager must recognize the full concept of his responsibilities and must select, train and update its personnel accordingly. Not only should personnel be well trained in handling stores, they should also be familiar with the total plant operation to help execute a better job in their own function. Management may use in-house personnel and outside specialists to teach store house personnel how to accomplish this objective.

2.2.1 RELATIONSHIP TO OTHER DEPARTMENTS

Store Management is generally organized as a unit within the purchasing department. This strengthens coordination between the two interrelated materials, function of buying and storing, whether total material management concept has been adopted or not. Under material management organization, the Stores Management Unit should have equal departmental status with other functions of purchasing, traffic, materials control, and manufacturing or production planning under a single head.

In companies which do a large amount of warehousing, the stores management function may be nearly synonymous with physical distribution. In this case, traffic, purchasing, and other supply and material control departments may well report to store manager.

2.2.2 DUTIES AND RESPONSIBILITIES OF PURCHASING OFFICER

(i) Determines the material needs of the company

(ii) Assist in the selection of suppliers

(iii) Assists in the determination of proper price terms and conditions of contract of sales.

(iv) Conducting market survey.

(v) Taking receipt of materials purchased and issuing delivery orders.

(vi) Writing of Local Purchase Order, LPO.

2.3 FUNCTIONS OF STORES

The primary function of store(s) is to provide for storage and handling of goods to be redistributed to the ultimate consumer or user's department.

It is particularly important that in any organization, the stores division and purchasing department work closely together since their combine efforts are essential for keeping stores inventory at the most economical level. The entire inventories in the stores stock are purchased by the purchasing department on the basis of the information from the stores division. The stores division should furnish information regarding inventory on stock, the rate of use, maximum and minimum stocking quantities, and estimated future requirements.

A continuing concerted effort is necessary to maintain the most economical system for purchasing releasing, receiving, distributing and paying for stores materials.

2.4 DUTIES AND RESPONSIBILITIES OF STORE OFFICER

The running of the stores has to be seen as being more closely allied to engineering than any other activity. The duties are:

- Taking charge of stores
- Safekeeping of stocks
- Receiving and issuing materials and concluding periodic surveys and checking of stocks.
- Preparation of reports on the state of stores.

The manager is responsible for the proper use of an accumulation of wealth which is represented by tangible assets. It is his paramount duty to employ all the resources of that enterprise, so as to produce for profit a service which is exactly what is wanted by someone else.

The manager must be aware of what the business is there for, and should know exactly where his unit stands in relation to the rest of the organization. He has to make decisions and put in system which makes his unit efficient. He must be constantly appraising himself and his subordinates.

The manager should ensure that statistics of records are kept. He must keep records which indicate the volume of work passing through his department, such as the number of orders processed, the number of

items/materials per order, the length of time taken to process each order, and so on.

The manager should ensure that proper checking and control over the affairs of the store in general. Some of such checking should include surprise checks, periodical checks and annual production audit.

2.4.1 SURPRISE CHECKS

The manager should make it of his duty to see that items are placed where they should be on a routine check. He should ensure the cleanliness and tidiness of the store as a maintenance of high morale. He should also make it a habit to look at, and ensure, that the gangways and clear ways are always kept clear. The manager must check invoices which are directly linked with goods inwards as-well-as all expense invoices. He must make sure that someone should be made personally responsible for keys for proper security.

2.4.2 PERIODICAL CHECKS

The manager should make it a practice to check the inventory and at the same time to see not only that these items are serviceable, but that they are safe to use.

He should lay out a proper parking and vehicle movement system. He should inspect all outside walls. Check on all fencing and check on all common walls with neighbors. Have the roofs and gutters inspected. All

contacts should be regularly looked at and brought up to date. Fire alarms and sprinkler system should be regularly checked.

2.4.3 ANNUAL PRODUCTION AUDIT

It cannot be said too often that it pays to have regular and good on machinery make it an established part of weeks work to have a discussion meeting. This breaks the monotony of routine work. Overhaul filling system at least once in every twelve months. Space is valuable and time for filling is expensive. Choose the items which must be kept and get rid of everything else. Make it a practice, at least once a year, to ensure that all proper signs and notices are still where they should be.

He should constantly review insurance contracts. Even though this may not be the specific providence of the store officer, he should know that the company covers the department and that the cover is adequate.

2.5 STOCK TAKING

Stock taking is one of the chores of ware house or store work. In almost every organization, where some sort of stores exist, different rules exist and the quality of the effort at stock-taking time varies also. But there are some facts which are universal and worth bearing in mind:

(1). The materials and goods in the stores should be seen, as if they were heaps of bank notes and the staff of the stores should be taught to see things in this light.

(2). Stock Taking is more than just the verification of the stocks with the paper records. It is an assessment of the assets of the company. The accuracy of the results as shown in the firm's Financial Accounts.

(3). Stock should be test-checked by the store officer especially the valuable or attractive stores.

(4). Stocks should be examined to see if they are still useful for the purpose for which they were purchased.

2.5.2 There are two methods of Taking Stock:

(1). **Fixed Stock Taking:** This is when the stock is counted and verified at fixed periods, e.g. annually or every two years.

(2). **Current Stock Taking**: This is a system whereby the stock is divided up, say into six, which means that the stock can be counted and verified on two months basis, one-sixth at a time.

2.6 TYPES OF STOCK

In any organization where a non-profitable store exists, such stores contain different types of stock items. To give these items a general look and approach, we can classify them as:

(i) Raw Materials and Purchased Parts Stock: This is recognized generally as the stock of raw materials (such as steel, rubber or heavy duty equipments) and purchased parts and components waiting processing or assembly.

(ii) Work in Process: This includes parts in progressive stages of completion, such as raw materials just issued from stores materials in various stages of processing, and parts or assemblies awaiting final acceptance as finished stock.

(iii) Finished Stock: Finished Stock comprise units of the manufactured product awaiting sale or consignment.

(iv) Supplies: Supplies are the expendable items which are required to manufacture the product but do not become a part of that product. Such as tools, cleaning materials and cutting oils. These are commonly termed as MRO, that is, Maintenance, Repair and Operating supplies.

2.7 APPLICATION OF COMPUTER TO MANAGEMENT INFORMATION SYSTEM

Use of information system includes the receipt of a report, the submission of input for a system, and the operating of a terminal or a similar activity. In today's complex society, a knowledge of computer based information system is vital for an educated individual, particularly for the professional manager. For most organizations to come in the future, if not those present already, the determining factor for any meaningful development and competition will be the processing and analysis of information.

2.7.1 MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS is a formal information network using computer capabilities to provide management with information necessary for making decisions.

No matter what types of operations an organization performs, its management information system must provide:-

(1). Reports that are decision oriented i.e. Reports that provide information that is accurate, timely, complete, concise and relevant.

(2) Room for expansion and growth – The survival and growth of an organization depends on how well it adapts to a changing environment. Therefore, the MIS must be flexible enough to handle the information's changing needs.

(3). Results that the user needs:- An MIS can not be successful if it does not meet the user's requirement.

2.7.2 MANAGEMENT AND MIS

To management, the MIS is the very computer based information system that supports all of their decisions.

Within the MIS, there are four subsystems that carry out specialized information roles. They are:-

a. The Management support system, MSS

b. The Decision Support System, DSS

c. Functional Information System, (FIS)

d. Office Information System

e. Expert Systems.

(a) **MANAGEMENT SUPPORT SYSTEM (MSS):-** The MIS subsystem that is aimed at helping manager make effective decisions by providing them with reports that are timely and to the point is called Management Support Service. Operational Managers depend a great deal on the information from the report generated through the Management Support System to make their decisions. While statistician and upper level managers also use reports generated by the MSS, their decision are not easily programmed like those of lower level, since they must depend intuition and problem solving talents as well as reports. For this reason, they also use information from other sources.

(b) **THE DECISION SUPPORT SYSTEM (DSS):-** To aid the upper levels of decision makers, a DSS combines data with models and graphics to answer a decision maker's question about the data.

(c) **FUNCTIONAL INFORMATION SYSTEM (FIS):-** Each functional area of a business **Marketing, Manufacturing, Personnel, Accounting**, etc. Needs its own information subsystem in order to carryout its operations in many situations, the FIS is either informal or not very well developed. However, as more managers functional areas, FIS will become more formalized and the computer will be used to implement them e.g. in the **Marketing area,** a computer-based information system is useful in managing

lists of active and potential customers, in Manufacturing, an information system has many uses in managing the inventories, scheduling etc.

(d) **OFFICE INFORMATION SYSTEM (OIS):-** An OIS attempts to make the work of so called knowledge workers easier, an OIS is a machine or machines combined with communication system and users to make more efficient the job of obtaining, organizing, storing, retrieving, and preparing needed information.

Output form on OIS can be data that have been converted to a form usable by the computer, a report, a proposal or brief without an adequate OIS, the reports generated by the MSS might never be written, and a manager's decisions might never be transmitted to the parties who must carry then out.

(e) **EXPERT SYSTEM:-** A new type of information systems that is being used more and more to support managerial decision marking. It is an organized collection of people, procedures, databases, and devices used to generate expert advice or suggest a decision in an area discipline. These computer systems are like a human specialist who has many years of experience in a field. It is important to note that Expert Systems do not replace humans; they are programmed to behave in pre-designed ways by human experts in a particular field.

2.8 STOCK CONTROL SYSTEM

Stock control is the operating of continuously arranging receipt and issue to ensure that stock balances are adequate with due regard to economy. It involves the related process of provisioning which is the means whereby instruction are given for the placing of order. In some industrial concerns, the production control department may take a large share in provisioning, at least, as far as production materials are concerned.

The objective is to have just enough materials/items to meet users order but not to create excess or unusable material/items.

2.9 DEFINITION OF KEY TERMS

PURCHASE COST

The amount expended on the store item during purchase.

CARRYING COST

These are cost related to the carrying item in stock. These include interest charge on investment, storage cost such as rent rate, insurance, taxes obsolesce and spoilage costs expenses in holding product in out stock.

RE – ORDER POINT

A term used to describe the quantity in a duckling stock at which a new order of specialized size must be issued, if the stock is not drop below minimum stock. It is the quantity which will last during the lead time for the batch quantity concerned.

INVOICE

This is a document showing the character, quantity price, details of transaction, terms, company initials and provision for signature of authorizations and other particular of goods sold or of services rendered.

ENQUIRY/QUOTATION

When competitive tenders are required, it is customary to send an enquiry to potential supplier and to receive quotation from suppliers in order to select the most suitable by analysis of tender received.

EXPEDITING

This is the process of ensuring that goods are promptly delivered to the right place and time within the organization. This process may carry through Telephone calls, letters, E-mail, Fax, personal visit, e.t.c.

DELIVERY NOTE

This is a document in which the supplier records all goods being delivered to the buyer, stating the code number, description, quantity and so on.

ACKNOWLEDGEMENT

Acceptance of the order is usually convened to the buyer by acknowledging receipt of the order. Some organization include on additional copy in their purchase order from titled "ACKNOWLEDGEMENT".

BLANKET ORDER

This is where an order is placed for estimated or actual quantities of designated items for a period of time usually one year. Processes are however agreed upon to the issue of the order.

OBSOLESCENCE

This can be referred to as materials going out of stock but not completely out of stock.

REDUNDANT/SURPLUS

When the quantity of an item in stock is more than as reasonably necessary to provide an adequate service, the excess over the normal holding is said to be redundant/surplus.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 INTRODUCTION

The method of determining how best to use computers with other resources to produce results which meet the information needs of an organization is known as system analysis. The system analyst has to work hand in hand with the users of the system and assist to ensure that the needs of the users are met. In system analysis and design, the actual problem has to be considered. If the wrong issues are addressed the result will be a total failure. System analysis and design comprises a number of aspects such as problem definition, preliminary study, system analysis, system design, program acquisition, implementation and maintenance.

3.2 FEASIBILITY STUDY

Feasibility Study was done in order to examine the present system of store management and transaction with respect to the production of the company. This study covered the stores handling the stock and product.

The study was conducted with the co-operation and assistance of the store officer.

In trying to study the present system, it is very important that all the facts are gathered in order to ensure that all the strength and weaknesses of the present system are discovered, thus when a new system is designed as

many of the weaknesses as possible are eliminated while retaining the strength.

3.3 EXISTING SYSTEM

STORAGE FACILITIES

In any store where goods are kept, there must be facilities which will ensure the safe keeping of items. In National Iron Ore Mining Company, NIOMCO, the following storage facilities/documents are available.

1. Goods Received Note, GRN
2. Store Ledger
3. Bin Card
4. Internal Store Requisition
5. Lift Crane
6. Fire Extinguisher
7. Security Guards
8. Store Issue Voucher, SIV

When items/materials or spare parts are supplied or purchased and brought to the company store by the contractor or purchasing officer or supplier, the supplier is notified that items/materials are to be inspected by the authorized official in the store. The sample of the items supplied will be examined or tested by the Audit official (internal Audit or staff). For testing the quality, making sure that it is measured to standard.

If it is fine, then the items/goods are taken or the test will be received and entered into Goods Received Note. In case, where items are not the right type in quantity and quality, they are immediately rejected.

The sample method is also applied to fuel and lubricant. It has to go through some series of quality control test in order to make sure or ascertain its fitness for company consumption.

Store ledger is used to keep the proper account of all the items in the store. These includes those issued and those present.

Bin Card gives all the necessary information about a particular item in the stores.

Lift Crane is used in the store to lift heavy equipments during up-loading or un-loading the equipments or changing their positions.

Fire Extinguisher was provided in case of any fire outbreak in the store.

Security Guards are provided to keep the store properly secured.

Store Issue Voucher, SIV is used for stock issue. It contains details about the person to whom issues are made.

3.4 FEASIBILITY REPORT

The existing system may serve as one sources of information for the development of the new computerized system. From the findings, it is understood that the system handles the following functions. These are;

Issuing of the items to various users, departments from the store. Items/materials like safety materials [i.e. Respirator, Miners Eye Goggles, Safety Boots, Helmet, Rain coats/Boots, Hand Gloves and others].

Keeping the adequate records of items/materials like Heavy Duty Equipments (i.e. Dump Truck Parts – Dumpers, wheel – loaders parts, caterpillar parts, and Bulldozers parts).

Keeping the adequate records of materials like Auto/Electrical Parts, Building and Civil Engineering materials. And Household Furnitures, Stationeries.

Keeping the adequate records of drugs in NIOMCO Clinic Store.

Lastly, the existing system also creates an environment that is efficient and convenient for retrieving information from stored database.

3.4.1 LIMITATION OF THE CURRENT SYSTEM

In performing these functions, the problems of the present system are identified as:

(i) Administrative problems

(ii) It is ineffective

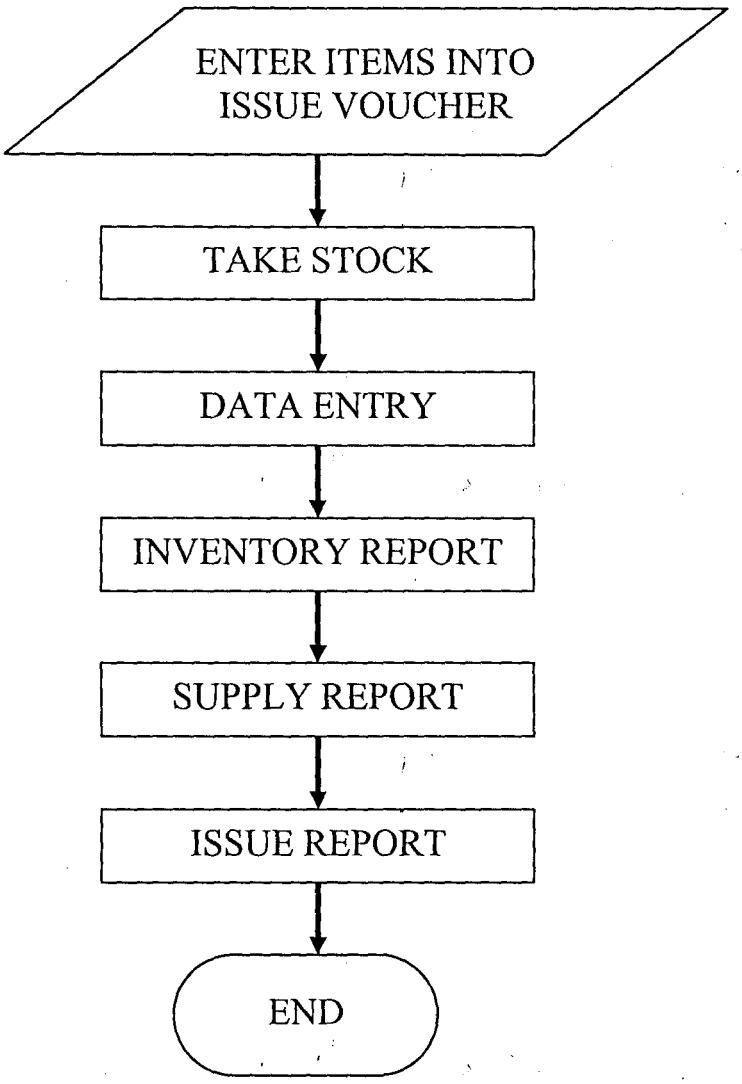
(iii) Not feasible to changes

(iv) Misplacement and lost of vital documents papers

(v) Insecurity of information data

(vi) It is an old or archaic computerized program.

3.5 FLOW CHART OF THE CURRENT SYSTEM



3.6 PROPOSED SYSTEM

3.6.1 DESIGN APPROACH

The Micro Computer System proposed is IBM. The system needs are listed below.

(i) Two high capacity disk drives

(ii) Laser jet printer

(iii) Four video display units for interaction interface with the computer.

3.6.2 SYSTEM SOFTWARE

The Software used in the implementation of this project for the system being developed consist of Microsoft Visual Basic, the fastest and easiest way to create applications for Micro Soft Windows.

A Window 95 Operating System and above with Microsoft office must be installed.

A Visual Basic Compiler/a Visual Basic Database Management System, VBDBMS.

3.6.3 HARDWARE REQUIREMENT

This relates to the physical and electronics devices used to carry out the project work. It consists of the following;

(i) Central Processing Unit (CPU)

(ii) Printer

(iii) Magnetic Disks/3 ½ floppy disk

(iv) Visual display unit/a colour monitor

(v) UPS, Uninterrupted power supply

(vi) Air conditioner

(vii) A Pentium 233 ml+3 recommended of hard disk or above 8GB or Above and 1288D RAM or above.

CPU:- The eclipse CPU is a powerful sophisticated machine with main frame capacity. It has a built in Floating Point Processor and a Micro Processor (Pentium Processor) subsystem that runs diagnostic on the whole

system. It supports four megabytes of main memory, a separate input/output processor. The 32 bits machine has an addressing capacity of over 9 kilobytes and the library system programs and file can be as large as 52 megabytes.

PRINTER:- The Printer is used for printing documents and it also serves the purpose of providing hard copy of production system information i.e. Laser Jet Printer.

SECONDARY STORAGE:- The Magnetic disk is used to store large information on the system. The magnetic disk should be an industry compatible model. The secondary storage devices are useful for storing data, programs and information permanently.

VISUAL DISPLAY UNIT:- The VDU is used to display information on the screen. Each terminal consist of a Television like Video display unit and a keyboard. The screen capacity of the display unit is 1920 characters of 24 lines by 80 characters. The keyboard possesses the typewriter layout and additional keys for different function. Beside a colour monitor is preferable.

UPS (UNINTERRUPTED POWER SUPPLY):- This is a facility which automatically provides power in case of power failure to the computer and its environs for job continuity.

AIR CONDITIONER:- This is met for cooling the environment.

3.6.4 COST AND BENEFIT ANALYSIS

A cost benefit analysis is necessary to determine economic feasibility of the proposed system. In its Socio-economic view, it will bring the organization to modern technological level of operation of worthy consideration, thus in terms of cost is financial implication while the benefit could be on the expected reach of performance and result of the system's positive achievement, hence the cost and benefit analyzed below.

3.6.5 COST ANALYSIS

In order to determine the cost of operation under the existing system, it is necessary to recognise the various ways in which cost may be incurred this are categories as follows:-

(A) DEVELOPMENT COST

1.	2No Micro Computer System	@ ₦60,000	=	₦120,000.00
2.	3 No Printer	@ ₦45,000	=	₦235,000.00
3.	2 No UPS	@ ₦15,000	=	₦ 30,000.00
4.	Installation cost		=	₦ 30,000.00
5.	Training of Personnel		=	₦120,000.00
		SUB-TOTAL (A)	=	**₦435,000.00**

(B) OPERATING COST

1.	One Programmer @ ₦10,000.00 Quarterly	=	₦ 40,000.00
2.	Installation of 1No Air Conditioner @ ₦70,000.00	=	₦ 70,000.00
3.	Computer Paper as consumables @ ₦250,000.00	=	₦250,000.00
4.	Utilities (Say electricity and so on) @ ₦30,000.00	=	₦ 30,000.00
5.	Miscellaneous Expenses	=	₦ 30,000.00
	SUB-TOTAL (B)	=	**₦420,000.00**

GRAND TOTAL =A + B = 435,000.00 + 420,000.00 = ₦855,000.00

3.6.6 BENEFITS OF THE PROPOSED SYSTEM

No policy could be adopted by any organization without any benefit of adoption. The company will derive a lot of benefit from the newly design system which includes:-

(a) Automated Store Management System:- This is aimed at keeping proper records on every item supplied, purchased, issued to various departments and sold out.

(b) Avoidance of existing system problems

(c) Faster communication

(d) Efficiency:- The system is designed to be of high efficiency, ensuring the best of output of the desired report.

(e) Better services

(f) Timely decision

(g) Easier retrieval of information

(h) Better Management control

(i) Volume:- The new system can handle large amount of data.

(j). Flexibility:- The system can operate in a dynamic rather that static environment.

(k) Security:- The security of the system is taken into consideration such that facilities are provided only for authorized user to have access to it.

3.7 CHANGE OVER PROCEDURE

The conversion of files from the old (existing) system to the new format and content required by the new system and setting up the converted files into the computer were all process which when finished (the change over) where the full replacement of all the existing procedures by the new ones has been carried out.

The change over could be effected to the new system by either of the following ways:-

(i) **Parallel Change Over:-** This is a type of method where both old and new systems are run concurrently, though it is expensive.

(ii) **Direct Change Over:-** this type of change over is one which the new system replaces the old system in one move. This method is potentially the least expensive but most risky.

(iii) **Pilot Change Over:-** In this method the changing over is carried out piece by piece. This method reduces the risks in the direct change over of the whole system.

All the methods mentioned above are good for system change over but for the proposed (New) system, the parallel method is recommended, as it suites the background of the conversion where file conversion and file set up can be performed at the same time with adherence within the change over. The storage, retrieval activities of data information are not affected in any way.

CHAPTER FOUR

SOFTWARE DESIGN AND IMPLEMENTATION

4.1 INTRODUCTION

The design, development and implementation of a functional system require a high level of dedication and effort. However, the resultant benefit to be derived from the system supercedes the effort utilized considerably.

A good program is one that is efficient, user friendly, reliable, easily maintained, portable, cost effective, well documented and so on.

4.1.1 PROGRAM DEVELOPMENT

(i) **SPECIFICATION:-** The specification should contain details of what the program is expected to do and how to achieve this goal. At this stage, one also determines the required input data as well as the output information.

(ii) **DESIGN:-** This stage defines an outline of how to solve the problem. This outline is usually in the form of an algorithm. An algorithm is a step by step method of solving a problem, and it can be implemented in many ways such as flow charts, pseudo codes, N-S diagram and simple English.

(iii) **CODING:-** From the algorithm obtained at the design stage one can process to transform the outline into a form understandable by the computer, this involves coding the algorithm in a suitable computer language.

(iv) **TESTING:-**After completing the coding, the program is given a desk check or dry run. This involves inventing simple test data and manually going through the program to ascertain the result before typing into the computer.

(v) **IMPLEMENTATION:-**Program Implementation implies making a program fully operational. Once it is ascertained that the program has been tested and found working to specification. This simply means that the program is applied to solve problem outlined in the specification.

The program can be complied into an executable form and then installation diskette will be used to install the new program into the computer.

(vi) **DOCUMENTATION:-** Program documentation is the description of what a program does, how the task is achieved and how to use the program to solve problem say "Store Management" for the purpose o this study.

However, by the time the proposed system has been tested and ensures that it could work as required and as carefully selected tested data were used, in comparison with results obtained from the previous run and were found to be the same, it is then concluded that the new system is working accordingly.

4.2 PROGRAMMING LANGUAGE

The Programming Language employed in developing the system here is Visual Basic, VB. Microsoft Visual Basic is the fastest and easiest way to create applications for Microsoft windows. Whether you are an experienced professional or brand new to Windows Programming, Visual Basic provides you with a complete set of tools to simplify rapid application development.

The "Visual" refers to the method used to create the Graphical User Interface (GUI). Rather than writing numerous lines of code to describe the appearance and location of interface elements, you simply add rebuilt objects into place on screen. If you have ever used a drawing program such as paint, you already have most of the skills necessary to create an effective user interface.

The "Basic" part refers to the BASIC (Beginners All-Purpose Symbolic Instruction Code) Language, a language used by more programmers than any other language in the history of computing. Visual Basic has evolved from the original BASIC language and now contains several hundred statements, functions, and keywords, many of which relate directly to the Windows GUI. Beginners can create useful applications by learning just a few of the keywords, yet the power of the language allows professionals to accomplish anything that can be accomplished using any other Windows Programming Language.

The Visual Basic Scripting Edition (VB Script) is a widely used scripting language and a subset of the Visual Basic Language. The investment you make in learning Visual Basic will carry over to these other areas.

Whether your goal is to create a small utility for yourself or your work group, a large enterprise wide system, or even distributed applications spanning the globe via the internet, Visual Basic has the tools you need.

* Data access features allow you to create databases, front-end applications, and scalable server-side components for most popular databases formats, including Microsoft SQL server and other enterprise level databases.
* Active X™ technologies allow you to use the functionality provided by other applications, such as Microsoft Word Processor, Microsoft Excel Spread Sheet, and other Windows applications.
* Internet capabilities make it easy to provide access to documents and applications across the internet.

Moreover, Visual Basic learning Edition allows programmers to easily create powerful applications for Microsoft Windows NT.

The professional edition provides computer professional with a full-featured set of tools for developing solutions to others.

The enterprise edition allows professionals to create robust distributed application, in a term setting.

Visual Basic provides the tools that you'll need to get the job done right.

Visual Basic is bidirectional (also know as "BIDI"). Bidirectional refers to the product ability to manipulate and display text for both left or right and right-to-left languages. For example, displaying a sentence containing words written in both English and Arabic requires bidirectional capability.

Microsoft Visual Basic includes standard features to create and run windows applications with full bidirectional language functionality.

4.3 PROGRAM ANALYSIS

4.3.1 INPUT DESIGN

The following quantity of safety materials were distributed to staff of National Iron Ore Mining Company, NIOMCO and they are recorded as follows:-

S/No	Items Description	Quantity in Stock/Supplies	Quantity Issued	Stock Balance
1.	Safety boots	491	473	18
2.	Rain Coats	410	330	80
3.	Rain boots	410	330	80
4.	Helmet	752	12	740
5.	Respirator	970	70	900
6.	Hand gloves (S)	90	20	70
7.	Hand gloves (L)	920	170	750
8.	Rubber Hand gloves	510	70	440
9	Tyre (Dunlop)	200	100	100

The items above show the quantity in stocks or supplied, quantity issued and the stock balance or inventory record.

4.3.2 INPUT OF DATA

In data input process, screen based image of a form is used, scale drawings and templates are useful at this design and layout stage of planning.

4.3.3 OUTPUT DESIGN

The format of the data is very important because, it directly affects the input format, the processing procedure, and the various requirements of the subsystem. The output design comes in the form of screen output or hard copy in form of print out. Hard copy report of the Store Management System (Distribution System) becomes very important for documenting information and Management procedure.

While the Video display (soft copy) are used for quick information such as the number of items available at every point in time. These reports are timely to user. Some other things to be considered in the design of output information is processing speed required by the users.

The output is designed to be clear, concise and easy to use. The screen output is slightly different from print chart output, due to limited screen space.

4.3.4 USER DOCUMENTATION

This shows a stepwise guide to enable any user of this program to run it successfully. For a successful run of the program for this study, the user should use the procedure described below:

(a) Switch on the Computer

(b) Insert the diskette (a 3 ½ floppy disk)\

(c) Double click on "My Computer" on the desk top

(d) Double click on Drive A:\

(e) Double click on the ICON Name, Store Management, to run the program.

4.4 PROGRAM FILES

The system proposed in this study has the following program files:-

4.4.1 ITEM DESCRIPTION FILE

This is a reference file which keeps the details and status of item available in the store. It gives the item's names. Information about various items are stored in this file. In the program, the input data are Safety boots, Rain Coats, Rain boots, Helmet, Respirator, Hand gloves, Rubber Hand gloves and Dunlop Tyre.

4.4.2 QUANTITY IN STOCK/SUPPLIED FILE

This is the file where items supplied newly to the stores or items in the store are first coded and inventory automatically updated by adding the new items to the old stock in the file.

The file contains the details of items/materials received or supplied to the company.

4.4.3 QUANTITY ISSUE FILE

This is a database file that contain the details of items/materials issue out to staff or users department. The items that are issue out from the store to staff or to Mines or Engineering department are entered into issue file.

4.4.4 STOCK BALANCE/INVENTORY FILE

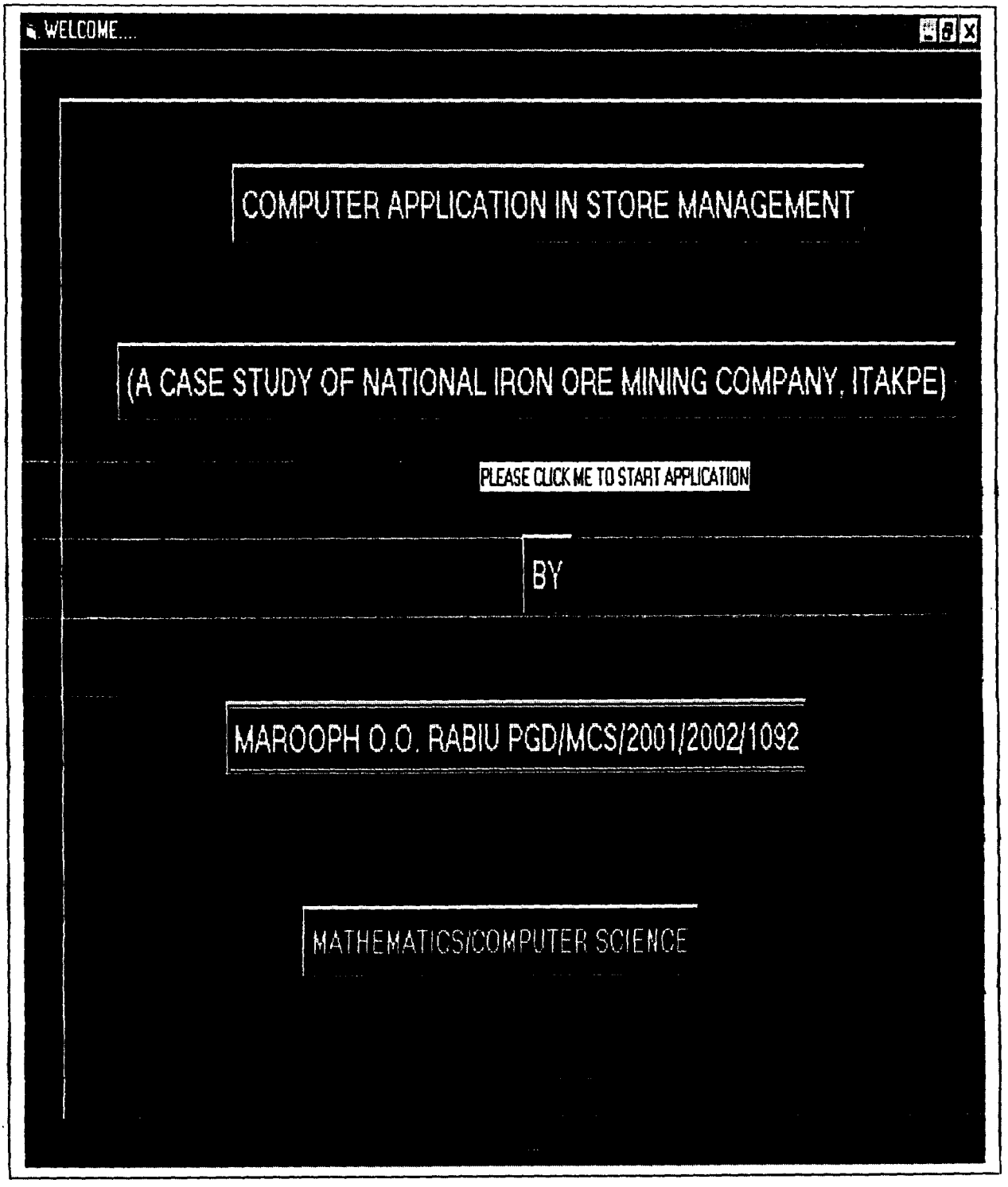
This file keeps all records of the stock balances. In all cases, system will locate the identical item codes in the inventory file and subtract the issue items from it and automatically update the balance.

4.5 PROGRAM MAINTENANCE

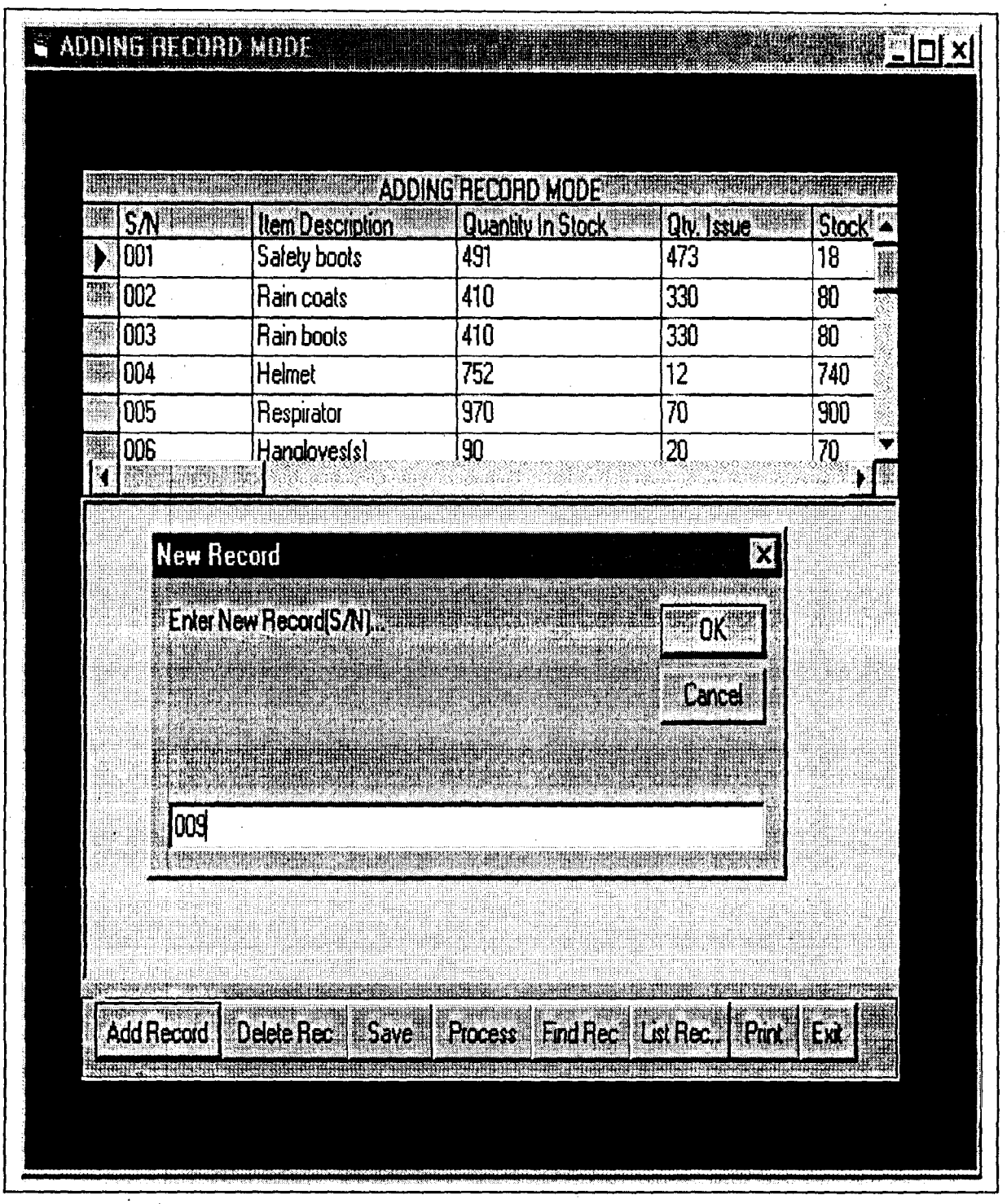
A system requires constant maintenance for it to be functional at all times. Failure to keep the system operational and effective can lead to inefficiency and many other problems.

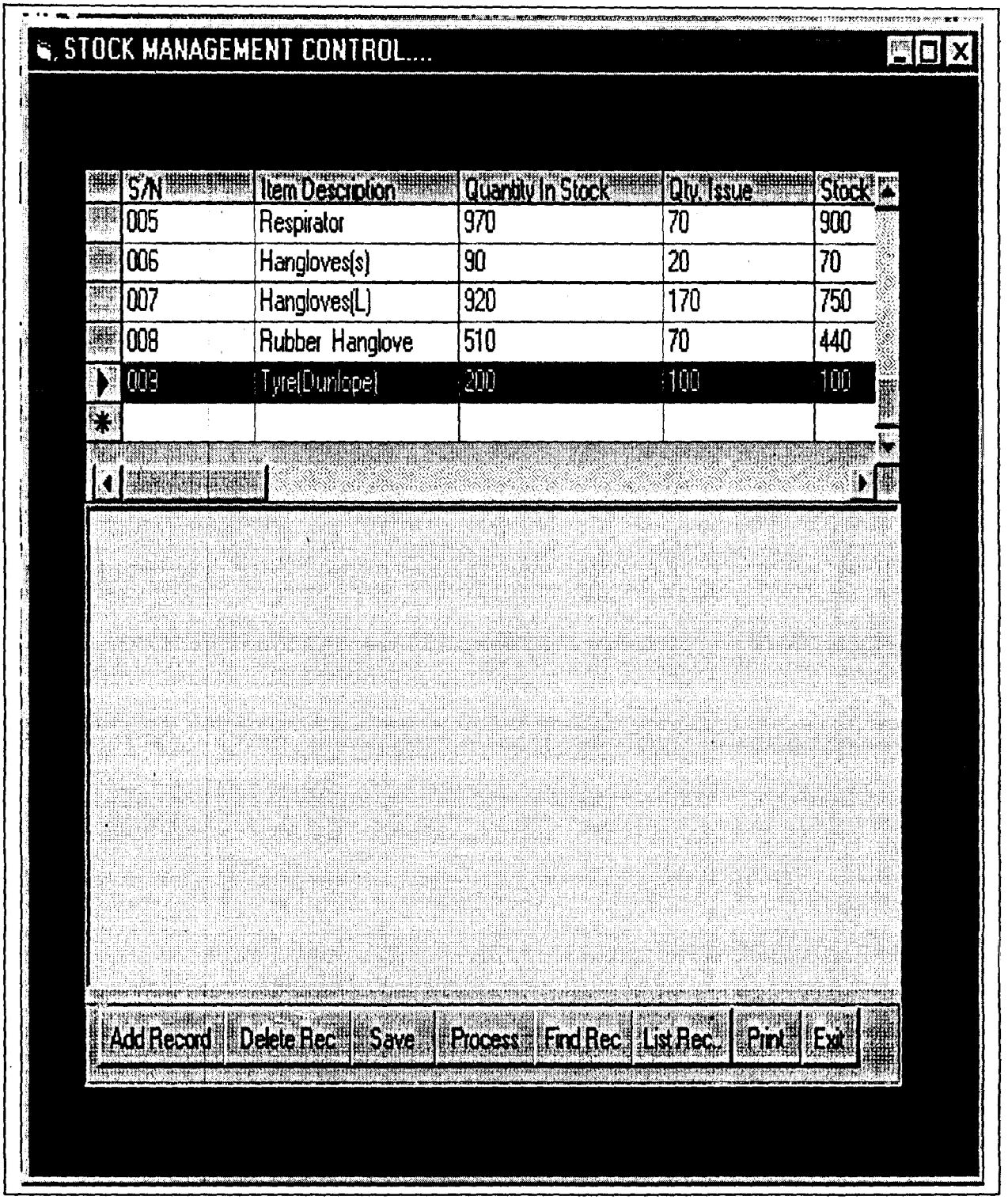
- The program should be kept virus free
- Back up copies should be made and kept secured.

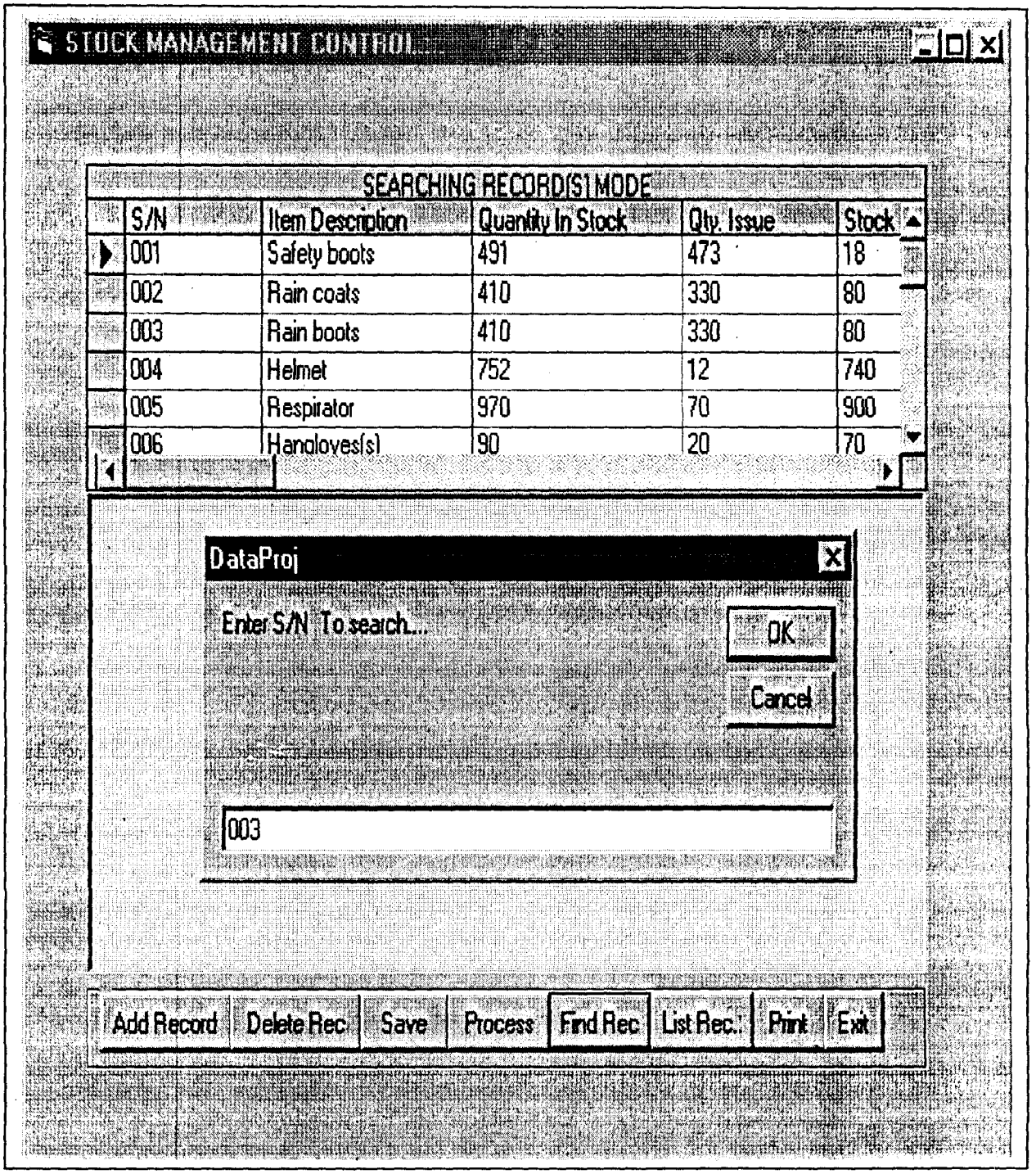
  Back up file is used to support the master file in event the master file lost or destroyed. This is necessary for data security control.
- The system and disk used should be properly handled.
- Modification should be made when the need arises.

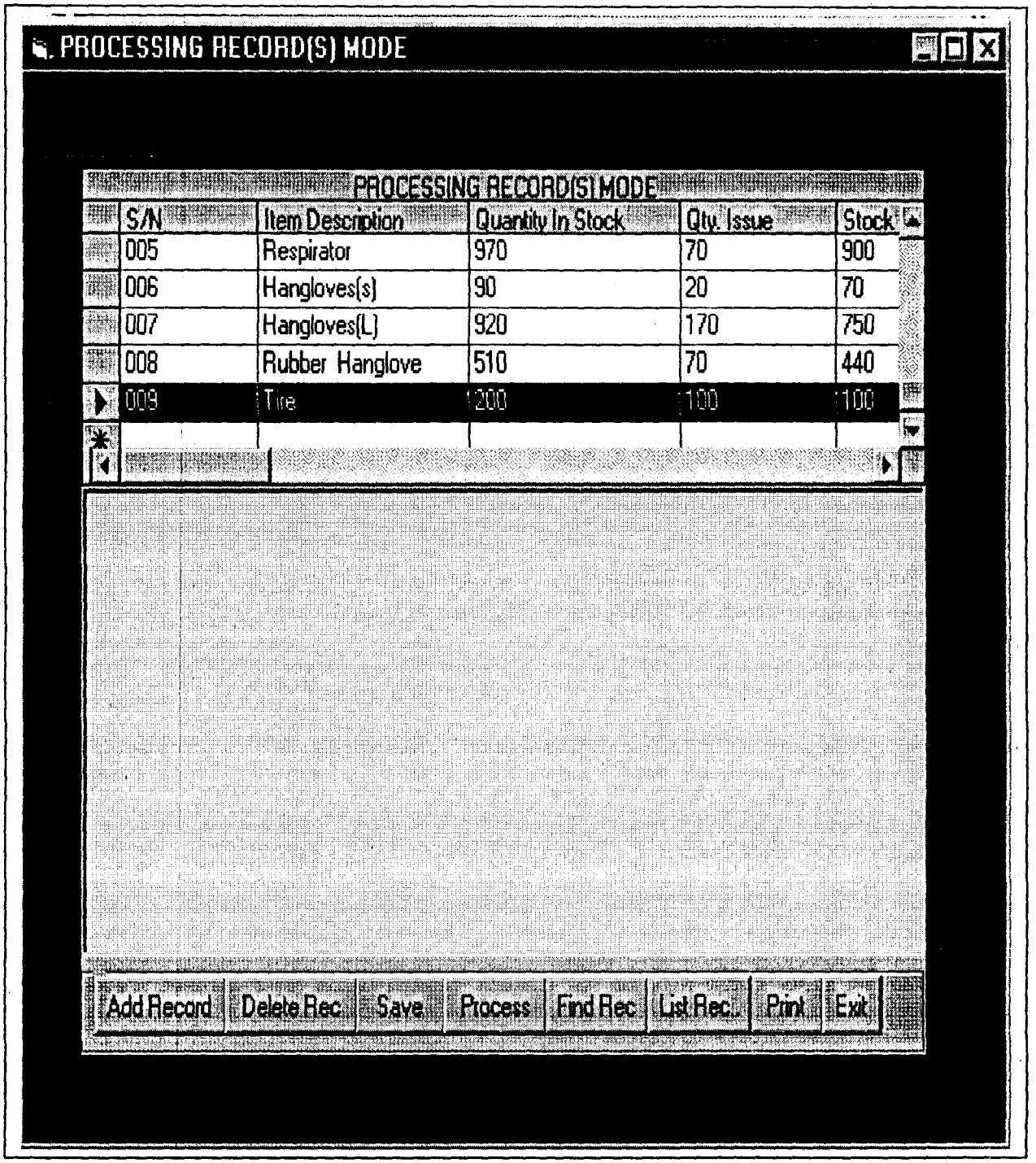

WELCOME....
COMPUTER APPLICATION IN STORE MANAGEMENT
(A CASE STUDY OF NATIONAL IRON ORE MINING COMPANY, ITAKPE)
PLEASE CLICK ME TO START APPLICATION
BY
MAROOPH O.O. RABIU PGD/MCS/2001/2002/1092
MATHEMATICS/COMPUTER SCIENCE

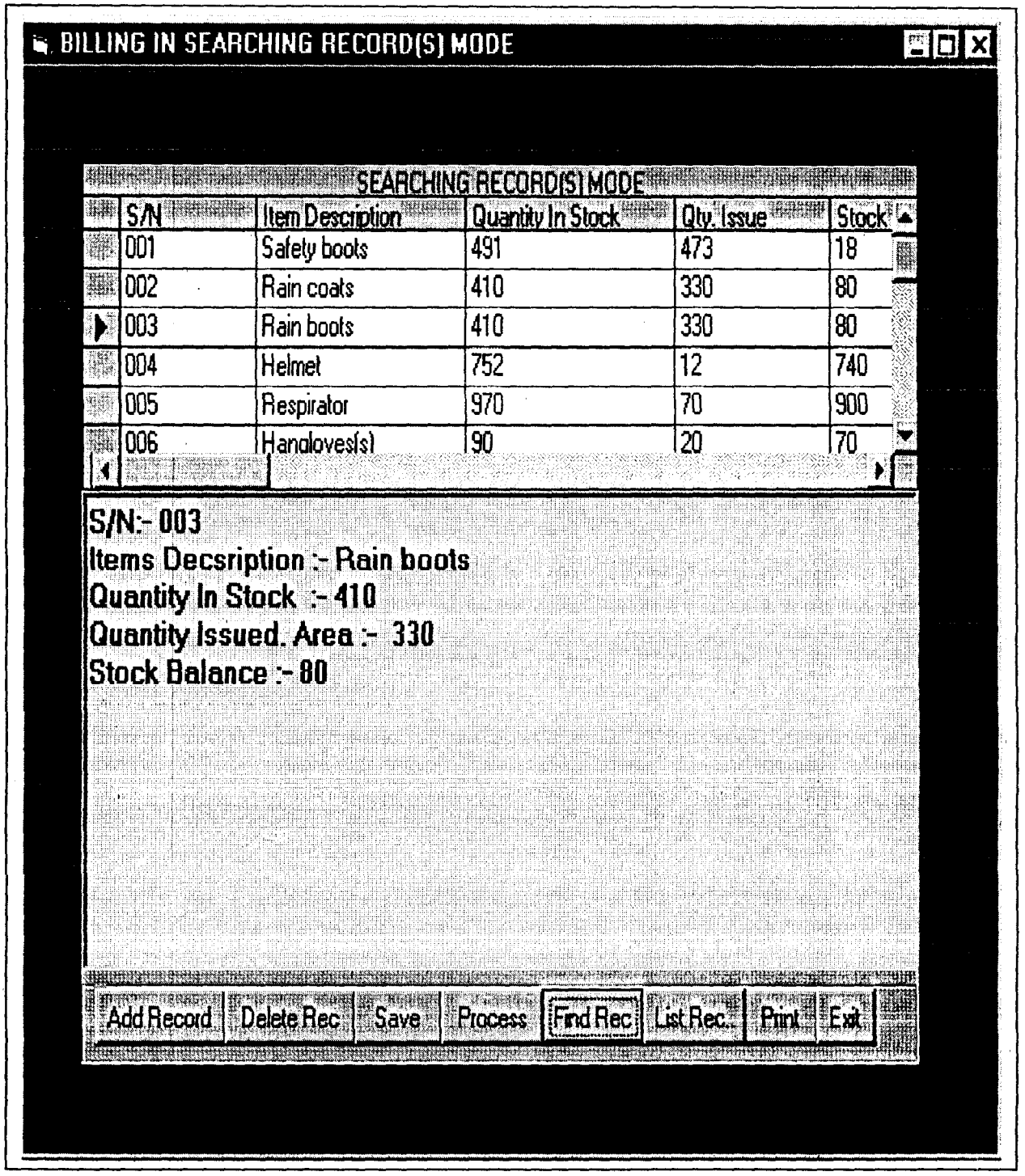

MENU
TEMPLATE FOR GENERAL TRANSACTION
QUIT THIS PROGRAM

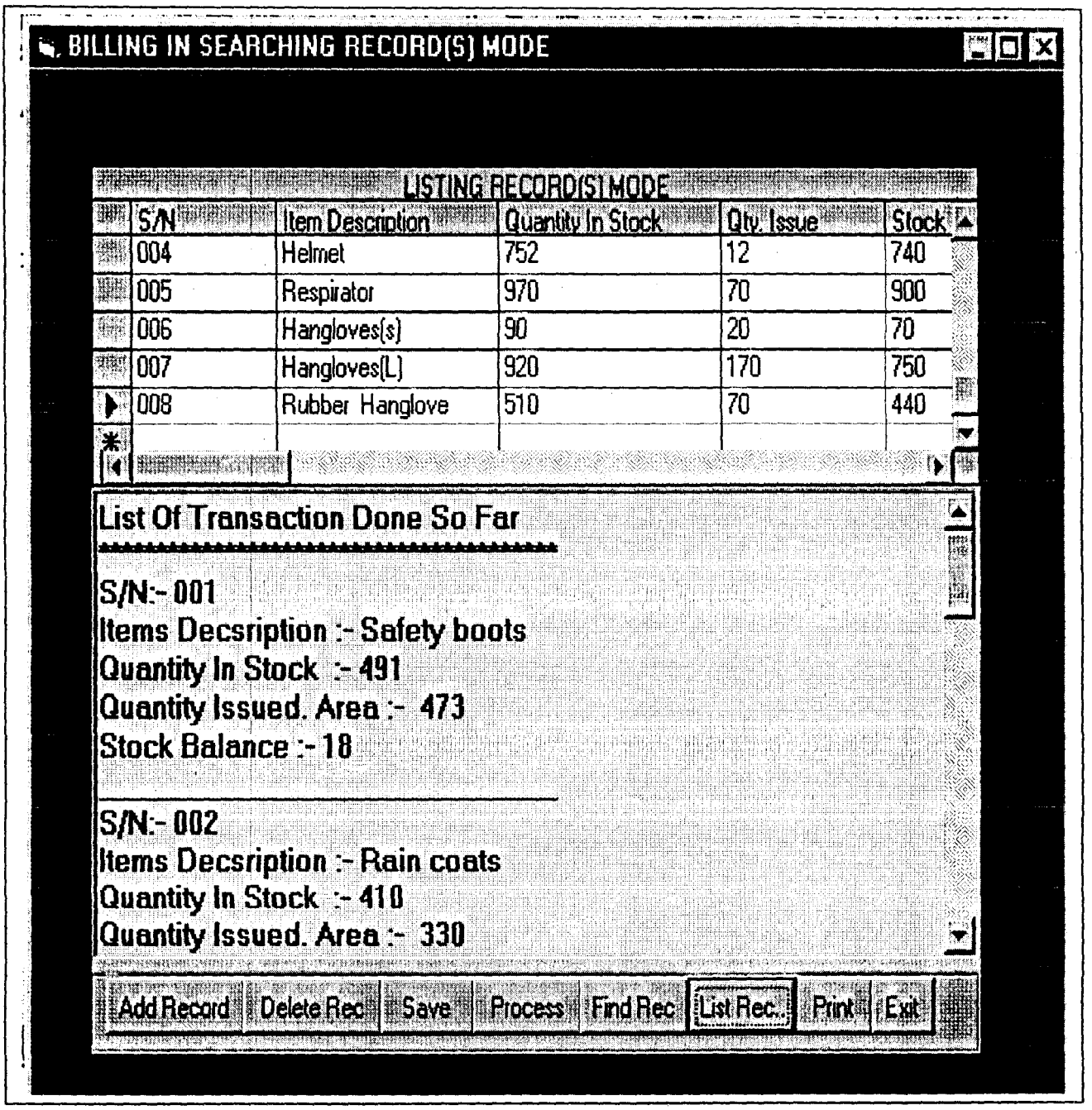

ADDING RECORD MODE
ADDING RECORD MODE
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
001
Safety boots
491
473
18
002
Rain coats
410
330
80
003
Rain boots
410
330
80
004
Helmet
752
12
740
005
Respirator
970
70
900
006
Handgloves(s)
90
20
70
New Record
Enter New Record[S/N]...
OK
Cancel
009
Add Record
Delete Rec
Save
Process
Find Rec
List Rec...
Print
Exit


STOCK MANAGEMENT CONTROL....
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
005
Respirator
970
70
900
006
Hangloves(s)
90
20
70
007
Hangloves(L)
920
170
750
008
Rubber Hanglove
510
70
440
009
Tyre(Dunlope)
200
100
100
Add Record
Delete Rec.
Save
Process
Find Rec
List Rec.
Print
Exit


STOCK MANAGEMENT CONTROL
SEARCHING RECORD(S) MODE
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
001
Safety boots
491
473
18
002
Rain coats
410
330
80
003
Rain boots
410
330
80
004
Helmet
752
12
740
005
Respirator
970
70
900
006
Handloves(s)
90
20
70
DataProj
Enter S/N To search...
OK
Cancel
003
Add Record
Delete Rec
Save
Process
Find Rec
List Rec..
Print
Exit


PROCESSING RECORD(S) MODE
PROCESSING RECORD(S) MODE
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
005
Respirator
970
70
900
006
Hangloves(s)
90
20
70
007
Hangloves(L)
920
170
750
008
Rubber Hanglove
510
70
440
009
Tire
200
100
100
Add Record
Delete Rec
Save
Process
Find Rec
List Rec.
Print
Exit


BILLING IN SEARCHING RECORD(S) MODE
SEARCHING RECORD(S) MODE
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
001
Safety boots
491
473
18
002
Rain coats
410
330
80
003
Rain boots
410
330
80
004
Helmet
752
12
740
005
Respirator
970
70
900
006
Handloves(s)
90
20
70
S/N:- 003
Items Decsription :- Rain boots
Quantity In Stock :- 410
Quantity Issued. Area :- 330
Stock Balance :- 80
Add Record
Delete Rec
Save
Process
Find Rec
List Rec..
Print
Exit


BILLING IN SEARCHING RECORD(S) MODE
LISTING RECORD(S) MODE
S/N
Item Description
Quantity In Stock
Qty. Issue
Stock
004
Helmet
752
12
740
005
Respirator
970
70
900
006
Hangloves(s)
90
20
70
007
Hangloves(L)
920
170
750
008
Rubber Hanglove
510
70
440
List Of Transaction Done So Far
S/N:- 001
Items Decsription :- Safety boots
Quantity In Stock :- 491
Quantity Issued. Area :- 473
Stock Balance :- 18
S/N:- 002
Items Decsription :- Rain coats
Quantity In Stock :- 410
Quantity Issued. Area :- 330
Add Record
Delete Rec
Save
Process
Find Rec
List Rec.
Print
Exit

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 LIMITATIONS

Although, this Software has been developed to handle general store problems, emphasis is placed on the safety materials distribution aspect of the store items, for the purpose of analysis and simplicity.

Another notable limitation or constraint encountered in the course of the study is the dearth of study materials.

5.2 CONCLUSION

Having examined the existing system in effect and proposed a computerized distribution system in the store, the usual shortcomings associated with the existing system (i.e. Insecurity of information, not feasible to changes, administrative problem, misplacement and loss of vital document papers among others have been minimized.

The store management of National Iron Ore Mining Company, NIOMCO, will be changed by the introduction of this system. The system is designed to provide the management with timely information and to ensure proper accountability in the store distribution system.

Computer approach to store management system should serve as a general guide for a profit and non-profit organizations. Each organization concerned, should tailor its own system to suit its own peculiar needs.

5.3 RECOMMENDATION

For proper execution of the new system, the following recommendations need to be adopted:-

(i) **TRAINING/MANPOWER:-**

Total Computerization of the whole activities at the store. All the departmental store staff should be trained to be computer literate and how the program functions. Training course on Computer Appreciation and Operation is envisaged.

(ii) **SECURITY:-**

There is need to install good security measure on access to computer and its usage. Unauthorized persons should not be allowed into the computer room. This is expected to safe guard the information contained in the system.

The management should provide adequate security for the equipment against such things like:-

(a) Fire

(b) Natural disaster

(c) Environmental problems

(d) Sabotage

(iii) There should be a strict adherence to the application software required and the hardware configuration.

All the items should be followed accurately without mis-spelling and code interchangeable, to enable the program know what record you are referring to.

(iv) **RESEARCH:-**

This can be conducted further by including other departments like Engineering, Planning and so on.

(v) **THE NEED FOR A COMPUTER LITERATE SOCIETY:-**

The computer system as already discussed in this project works, has the facilities of transferring and processing information at a very high and accurate speed, and that is why computer is needed in many aspects of our day to day activities.

Some aspects of the use of computers are as follows:

(i) **STOCK SYSTEM:-** Computers are now used to keep inventory of materials and equipments in the store.

(ii) **GOVERNMENT DEPARTMENT AND COMPANIES:-** For storing information about personnel, calculating their salaries etc.

(iii) **SCHOOL:-**For calculating and reporting grades of students, keeping students records accounts etc and inventory of school properties.

(iv) **OIL EXPLORATION:-**The monitoring of pipes, discovering of quantity and quality of oil (crude) etc.

(v) **AT HOMES (DOMESTIC USE):-** For games, typing as a calculator etc.

(vi) **FINANCE SECTOR:-** This sector comprises of banking, insurance, securities and stock management. The Automatic Teller Machines (ATMs) are the most visible of computerized banking system in Nigeria.

(vii) **WEATHER FORECASTING**

(viii) **HEALTH SECTOR:-** The computer has become a constant companion of both patients and medical personnel in most parts of the world. The patient accounting system, updates patients records to reflect laboratory test and administered drugs.

(ix) **OFFICE AUTOMATION:-** This refers to those computer based applications with office work, such as Fax-Machine which is now common in offices and business centers.

(x) **GEOLOGICAL SURVEYS:-** Computer can also be applied to geological survey.

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APPENDIX

Adding new Record

```
Private Sub cmdAddNew_Click()
frmRest.Caption = "ADDING RECORD MODE"
frmRest.BackColor = vbBlue
 DataGrid1.Caption = "ADDING RECORD MODE"
    'frmDataEnv.Caption = "BILLING IN ADDING RECORD MODE"
    'frmDataEnv.BackColor = vbBlue

    StrInp = Trim(InputBox("Enter New Record(S/N)...", "New Record"))

    If StrInp = "" Or StrInp = Null Then
       MsgBox "You must input new S/N ", vbCritical + vbOKOnly, "Error in Input"
       Unload Me
       DataEnvironment1.rsPurch.Close
       Exit Sub
    Else
       DataEnvironment1.rsPurch.AddNew
       txtSn.Text = StrInp
    End If
End Sub
```

Deleting new Record

```
Private Sub cmdDel_Click()
 Dim Secrh As String
DataGrid1.Caption = "DELETTING RECORD(S) MODE"
frmRest.BackColor = vbRed
frmRest.Caption = "BILLING IN DELETING RECORD(S) MODE"
DataEnvironment1.rsPurch.MoveFirst

'

Secrh = InputBox("Enter Item S/N to Delete")
```

```
  For k = 1 To DataEnvironment1.rsPurch.RecordCount
     If Secrh = txtSn.Text Then
        DataEnvironment1.rsPurch.Delete
       ' DataEnvironment1.rsCommand3.MoveFirst
     Else

     End If
   DataEnvironment1.rsPurch.MoveNext
   If DataEnvironment1.rsPurch.EOF Then
     DataEnvironment1.rsPurch.MoveLast
   End If

  Next k

End Sub


Private Sub cmdExit_Click()
        Unload Me
        DataEnvironment1.rsPurch.Close
 End Sub
```

Find Record New Record

```
Private Sub cmdFind_Click()
   Dim Secrh As String, Qtr As Integer, Amout As Single
rt.Text = ""
DataGrid1.Caption = "SEARCHING RECORD(S) MODE"

   Secrh = InputBox("Enter S/N  To search....")

 DataEnvironment1.rsPurch.MoveFirst
     For k = 1 To DataEnvironment1.rsPurch.RecordCount
```

```
        If Secrh = txtSn.Text Then
        '
           rt.SelText = "S/N:- " & txtSn.Text & vbCrLf
           rt.SelText = "Items Decsription :- " & txtItems.Text & vbCrLf
           rt.SelText = "Quantity In Stock  :- " & Text1 & vbCrLf
           rt.SelText = "Quantity Issued. Area :-  " & txtQtyIss.Text & vbCrLf
           rt.SelText = "Stock Balance :- " & txtStckBal & vbCrLf
           frmRest.Caption = "BILLING IN SEARCHING RECORD(S) MODE"
           frmRest.BackColor = vbBlue
          rt.Visible = True

           Exit Sub

         End If
        DataEnvironment1.rsPurch.MoveNext
         If DataEnvironment1.rsPurch.EOF Then
            DataEnvironment1.rsPurch.MoveLast
         End If
      Next k
End Sub
```

Listing Record(s)

```
Private Sub cmdList_Click()
 DataGrid1.Caption = "LISTING RECORD(S) MODE"
 frmRest.Caption = "LISTING RECORD(S) MODE"
 DataEnvironment1.rsPurch.MoveFirst
        '
         rt.SelText = "List Of Transaction Done So Far" & vbCrLf
         rt.SelText = String(40, "*") & vbCrLf

      For k = 1 To DataEnvironment1.rsPurch.RecordCount
         '
```

```
        rt.SelText = "S/N:- " & txtSn.Text & vbCrLf
        rt.SelText = "Items Decsription :- " & txtItems.Text & vbCrLf
        rt.SelText = "Quantity In Stock  :- " & Text1 & vbCrLf
        rt.SelText = "Quantity Issued. Area :-  " & txtQtyIss.Text & vbCrLf
        rt.SelText = "Stock Balance :- " & txtStckBal & vbCrLf
        frmRest.Caption = "BILLING IN SEARCHING RECORD(S) MODE"
        frmRest.BackColor = vbBlue

      rt.SelText = String(30, "_") & vbCrLf

     DataEnvironment1.rsPurch.MoveNext
      If DataEnvironment1.rsPurch.EOF Then
        DataEnvironment1.rsPurch.MoveLast
      End If
   Next k
End Sub
```

Printing Record

```
Private Sub cmdPrint_Click()
  On Error Resume Next
  If frmRest Is Nothing Then Exit Sub
  frmRest.Caption = "PRINTING RECORD(S) MODE"
  DataGrid1.Caption = "PRINTING RECORD(S) MODE"
  '
  frmRest.Caption = "BILLING IN PRINTING RECORD(S) MODE"
  frmDataEnv.BackColor = vbWhite

  With CommonDialog1
    .DialogTitle = "Print"
    .CancelError = True
    .Flags = cdlPDReturnDC + cdlPDNoPageNums
    If rt.SelLength = 0 Then
```

```
        .Flags = .Flags + cdlPDAllPages
      Else
        .Flags = .Flags + cdlPDSelection
      End If
      .ShowPrinter
      If Err <> MSComDlg.cdlCancel Then
        rt.SelPrint .hDC
      End If
    End With
End Sub
```

Processing Record

```
Private Sub cmdProc_Click()
  Dim QtySt As Single
  Dim QtyISs As Single
  Dim Bal As Single
  '
  frmRest.Caption = "PROCESSING RECORD(S) MODE"
  DataGrid1.Caption = "PROCESSING RECORD(S) MODE"
  DataEnvironment1.rsPurch.MoveFirst
  For k = 1 To DataEnvironment1.rsPurch.RecordCount

  QtySt = Val(Text1.Text)
  QtyISs = Val(txtQtyIss.Text)
  Bal = QtySt - QtyISs
  If Bal < 0 Then
    MsgBox "You cant't issue more than what you have in stock", vbOKOnly +
vbInformation
    Exit Sub
  Else
    txtStckBal.Text = Bal
```

```
End If

DataEnvironment1.rsPurch.MoveNext
If DataEnvironment1.rsPurch.EOF Then
   DataEnvironment1.rsPurch.MoveLast
End If
Next k

End Sub
```

```
Private Sub cmdSave_Click()
  Unload Me
DataEnvironment1.rsPurch.Close

Load frmRest
frmRest.Show
End Sub
```

```
Private Sub Form_QueryUnload(Cancel As Integer, UnloadMode As Integer)
   Load frmMenu
   frmMenu.Show

End Sub
```