COMPUTERISATION OF MAIL DESPATCH IN COURIER SERVICES

(A CASE STUDY OF FEDEX RED STAR EXPRESS)

BY

ALHASSAN NDABA
PGD/MCS/98/795

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE;

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SEPTEMBER, 2000.

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A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF POST GRADUATE DIPLOMA IN COMPUTER SCIENCE,

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SEPTEMBER, 2000.

CERTIFICATION

This is to certify that the project titled Computerisation of Mail Despatch in Courier Services (A case study of Fedex Red Star Express) was carried out by ALHASSAN NDABA PGD/MSC/795/98 of the Department of Mathematics and Computer Science, Federal University of Technology, Minna, Niger State.

_____ _____

BADMOS R. O. DATE

(PROJECT SUPERVISOR)

_____ _____

DR. S. A. REJU DATE

(HEAD OF DEPARTMENT)

_____ _____

EXTERNAL EXAMINER DATE

DEDICATION

This project is dedicated to my Daughter Hajia Fati Mohammed and the entire members of my family.

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to Almighty Allah for his guidance and protection.

My sincere gratitude and appreciation also goes to my able Supervisor PRINCE R. O. BADMOS for his useful advises and guidance during the course of writing this project.

I am equally grateful to the Head of Department Dr. S.A. Reju and other lecturers for the knowledge imparted to me without any reservations.

Special thanks to Mr. Suleiman Agboola colleagues and friends for their support and understanding.

May the Almighty Allah remain blessed.

ABSTRACT

A proper study of the existing system mail despatch in courier services (which largely manual processing of data) in Fedex Red Star Express reveals that the system is unreliable, uneconomical and grossly inadequate.

Based on these findings therefore, an alternative system that would be more suitable and be able to produce timely results was conceived.

The system proposed in this project work introduces the use of computer for the purpose of processing mail despatch. The proposed system facilitates the creation of mail despatch database that allows a user to record new set of data, update existing data, process data contained in the database, produce mail despatch (report), and generally manage data contained in the database. In order to achieve these, Dbase IV Programming Language was used to develop the required software.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Courier is a messenger or someone who specialises in carrying news, time sensitive documents or important papers from one point to another. For corporate entities that engage in moving such documents {reffered to as shipments within the industry} the name applied to them is either courier companies or express delivery companies. The latter name is usually applied to under score the speed which normally characterises the delivery operations of such companies. No matter the designation, the companies do it for a fee and outside the normal postal services. In Nigeria, with names have found acceptability among users of such services {Shipers} and it is generally recognised that they offer services of similar nature that withstanding whether they have courier or 'Express' attached to their names. It is in this high that one can appreciate that Fedex Red Star Express and/or Am world couriers are engaged in the same business of moving time sensitive documents from one point to another.

Courier/Express delivery companies impose on themselves the obligation to personally deliver documents {Shipments} to the addressee who is required to endorse a delivery slip as evidence of delivery usually within time limits for different locations.

Courier business is typically an adaptation of air transportation married with road transportation and it involves an amalgam of interrelated activities of agents, airlines shipping companies etc nationwide and world wide.

1.2 THE NIGERIAN MARKET SCENE

Use of courier services gained ground in Nigeria particularly in the last couple of years. It is estimated that about two thirds of current users of courier companies picked up the habit during the period. It has also been confirmed that over two thirds of corporate entities in Nigeria today patronise courier companies in addition to about one third of top private individuals professionals who have also imbibed the culture of sending time sensitive documents by means other than the regular post office.

The implication of these developments is that there is a growing awareness and recognition of the place and relevance of the courier companies in Lubricating the engine of commercial via speed in communication. This is a healthy trend for the industry and it shows that the potentials are indeed great.

1.3 **PRODUCTS AND SERVICES.**

(A) **PRODUCTS:**

(1) **DOMESTIC SHIPMENT (DM):** The domestic shipments refer to mails, parcels, etc sent by one personal company to the other within Nigeria e.g mails from Lagos to Minna. This class of mails constitute the bulk of Fedex Red Star Express Shipments.

Domestic Shipments can be either nationwide (from one state to another) or Intraarea (from one town to another within the same state) or intra-city (from one part of the city e.g Minna to another part).

(2) **INTERNATIONAL DOCUMENTS(DX):** International document (DX) refer to mails/shipments originating from Nigeria but going to other countries. It is available to all countries of the world and proof of delivery (POD) is available.

(3) **INTERNATIONAL DOCUMENTS SPECIAL (DXS):**

International documents special (DXS) refer to mails shipments originating from Nigeria but going to SELECTED destinations world wide where the service is available. It is offered at 50% of the regular international documents (DX) rate. It offers the same speed and efficiency as DX but proof of delivery (POD) is not available for this service. It is a cheaper alternative to the international documents (DX)

service. Shipments in this category must not weigh more than one kilogramme.

(4) **INTERNATIONAL PARCELS(PX):**

International parcels(PX) refers to declarable shipments or parcels that are non-documents originating from Nigeria and consigned to a recipient in another country. They could be photographs product samples, industrial/medical samples, etc.

(5) **SUPEX:**

Supex stands for Super Express and it is a variant of the electronic mails transfer system. With this product, mails or messages are electronically transferred from one point to the other within Nigeria and hand delivered at the destination usually within a couple of hours. It is a new product within our range of products.

1.4 **SERVICE:**

(1) **SPECIAL PICKUP SERVICE:**

under this service our regular couriers and other front-time staff call at clients's offices one or more times daily to pickup mails to catch scheduled flights to various destinations. Customers are also encouraged under this service to call any of our representatives or offices whenever they require special pickups.

Bodies and/or individuals, Fedex Red Star Express can locate purchase, transport and deliver stock of expensive parts not readily available in the country and other goods to such clients with ease.

1.5 THE ATTRACTION FOR CLIENTS:

(1) The desire for speed in terms of delivery;

(2) The relative safety of documents when compared to the post office;

(3) The proven reliability of courier services when compared with the postal system of the country;

(4) The attraction of being able to confirm that delivery has been effected through the POD (Proof of delivery) system

(5) The opportunity it affords for tracing shipments from origin station in the case of delay or non-delivery;

(6) The knowledge that one could hold courier companies liable (to an extent) incase of non delivery;

(7) The personal touch that comes with courier services.

From the perception of existing clients an ideal courier company is generally regarded as one which offers prompt; reliable, safe and efficient services and willing to bend to accommodate the needs of its customers.

1.6 AIM AND OBJECTIVES OF THE STUDY.

This project work is aimed at computerising the mail despatch

system in courier services with emphasis on Fedex Red Star Express.

Hence the project is limited to the computerisation of the process of mail despatch in Fedex Red Star Express only.

This implies that the project major concern is developing a software that will facilitate the construction of a database that would be useful for the preparation of mail despatch in Fedex Red Star Express. The software developed would permit a user to record new sets of data as well as organise, select, summarise, extract and generally manage the data contained in the database.

Hence the objectives of this project are as follows:-

(i) To identify the various problems associated with the present system of manual processing of mail despatch.

(ii) To specify the analysis and design requirement for the computerisation of the current system; and

(iii) To develop a software that will be used for database management.

1.7 SIGNIFICANCE OF THE STUDY:

It is intended that this project will be relevant and useful not only to Fedex Red Star Express but also to other Courier Services i.e DHL, UPS etc.

If the outcome of this project is eventually adopted and implemented by this company there will be great reduction in paper work and duplication of tasks, as well as general improvement in the process of mail despatch. Also the problem of storage and retrieval of mails despatch to various destinations would be greatly reduced.

1.8 SCOPE OF THE STUDY:

This project work is restricted to the computerisation of mail despatch in Fedex Red Star Express. Specifically, it is concerned with, the conventional mails only i.e ordinary mails be it domestic shipments (DM); International Shipments/documents (DX); International Shipments/documents Special (DXS) and International parcels (PX).

1.9 DEFINITION OF TERMS

At this juncture, it is pertinent to define some words and phrases used in this project work. Among such words are the following:

COMPUTER: Computer is an electronic device which accepts and processes data by following a set of instructions (program) to produce an accurate and efficient result (information).

SYSTEM: A system can be defined as a set of interacting elements (physical or non-physical) responding to inputs to produce output.

COMPUTER SYSTEM: A computer system is made up of the user, hardware and software which has a goal of solving problems for the user.

DATA: These are basic facts about the activities of an organisation or new facts that are fed into the computer for processing.

INFORMATION: This implies data that have been processed into a form suitable for human comprehension.

FILE: A file is a collection of meaningful information.

SHIPMENT: A shipment is a mail, parcel document sent by one person/company to the other within and outside the country.

MODULAR PROGRAMMING: This entails designing a database management program around several small and functional program modules (Modular programs) or sub-programs.

DATABASE MANAGEMENT SYSTEM (DBMS): It is a software that construct; expand and maintain data in a database.

DATABASE: It is regarded as any collection of useful information organised in a systematic and consistent manner.

CHAPTER TWO

ORGANISATIONAL STRUCTURE OF THE COMPANY

This chapter contains a description of mail despatch system in Fedex Red Star Express, courier service. Similarly, the mail process too as well as the operation of the existing system are discussed in this chapter.

2.1 Fedex Red Star Express is an organisation which specialises in carrying news, time sensitive documents or important papers from one point to another. For corporate organisations that engage in moving such documents (referred to as shipments within the industry); the name applied to them is either courier companies or express delivery companies.

Fedex Red Star Express is a dynamic, responsive and innovative courier company in Nigeria by; Evolving and marketing a range of products and services specially designed to meet the diverse needs of customers.

However; the organisation is also responsible for ensuring that their operations reflect a commitment to quality and are profitable at all times through prudent management.

2.2 STRUCTURAL/ ORGANISATIONAL OF THE COMPANY:-

Fedex Red Star Express consist of six departments;

(1) Legal and human resources

(2) Commercial / Customer service

(3) Financial department

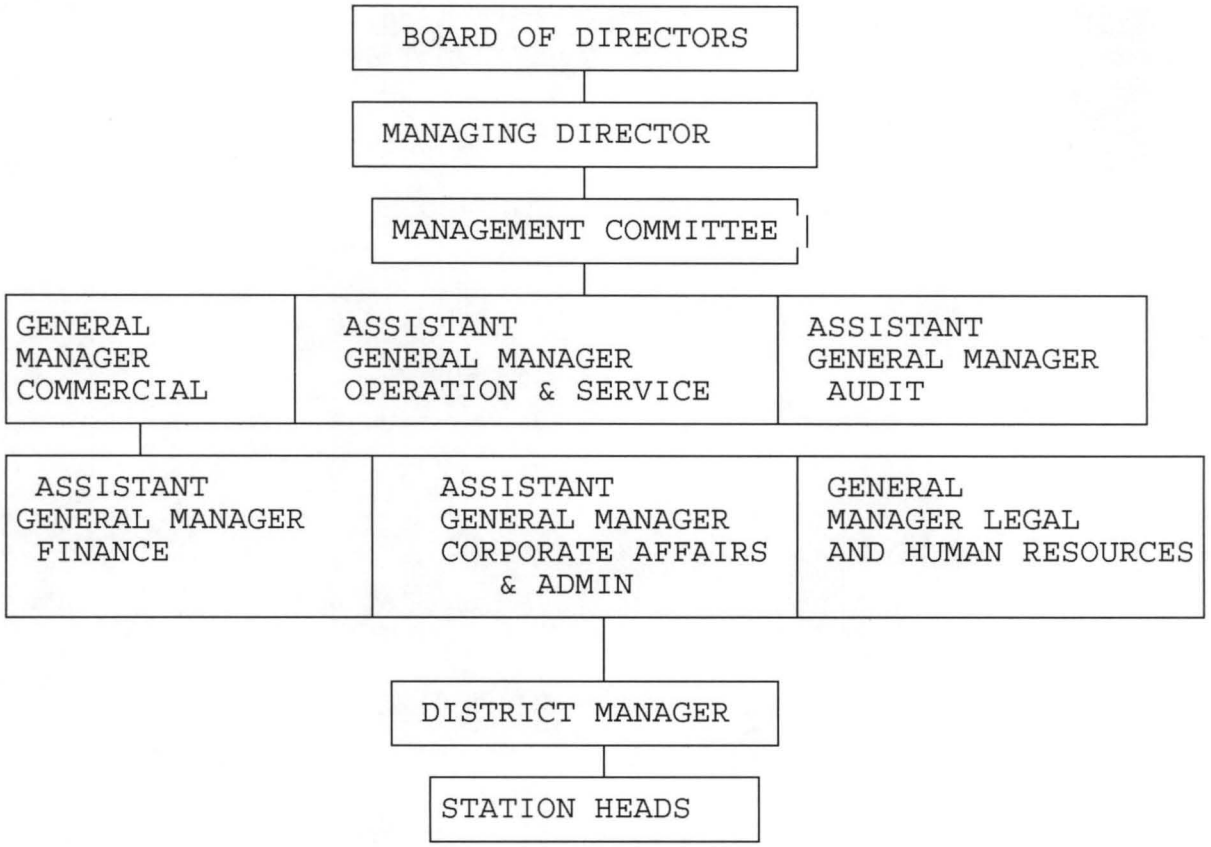
(4) Corporate affairs and Administration

(5) Operation and services department.

The department heads is headed by the (MD) Managing Director who reports the whole activities of the company to the Board of Directors.

Each of the department has departmental head. The departmental heads report directly to the managing director.

2.3 THE ORGANISATIONAL CHART OF THE COMPANY.



2.3 (1) BOARD OF DIRECTORS:

These are the people who manage the affairs of the company with the help of the managing directors whose duty is to give a feed back on the progress made while charting a clear course for the organisation.

2.3 (2) MANAGING DIRECTOR:

He monitors the growth of the business as well as motivates the entire work force to achieve the set targets on a regular basis, the managing director gives the board of directors a feedback on the progress made in the company.

2.3 **(3) GENERAL MANAGER LEGAL AND HUMAN RESOURCES.**

It is the duty of this officer to Liaise with and support all personnel within the company in all activities of a personal and official nature; and to ensure general staff motivation she is to provide legal advice and action, produce and or review business agreement, avoid or reduce litigation and embark on career development for staff through training and career pathing.

2.3 **(4) GENERAL MANAGER, (COMMERCIAL)**

It is the duty of this officers to co-ordinate the activities associated with the development and expansion of the business, carry out a productivity monitor of the different commercial units, ensure the achievement of sales and other targets, and liaise with other departments to achieve greater delight for all customers.

2.3 **(5) ASSISTANT GENERAL MANAGER:**

FINANCE; AGM Finance's work is to provide management with accurate and timely financial information for decision making. He generates records analysis and reports financial activities, which include tax planning and administration.

In addition, he prepares the budget, installs budgetary controls and sources for finance for capital project.

2.3 **(6) ASSISTANT GENERAL MANAGER, CORPORATE AFFAIRS AND ADMINISTRATION.**

The duty of AGM corporate Affairs and Administration is to co-ordinate all advertising public relations, and other marketing support activities of the company in order to ensure the uplifting of the corporate image of the organisation. He is to conduct market research into new product development, co-ordinate the procurement and distribution of working materials and stationery and the maintenance and repairs of company premises, equipment and vehicles.

2.3 **(7) ASSISTANT GENERAL MANAGER AUDIT AND SYSTEMS.**

The AGM Audit is responsible for ensuring strict compliance with approval operating procedures designed to guarantee consistent quality services to customers. He is also to safeguard company assets investigate alleged cases of fraud, and ensure that computer equipment are up and running at all times.

In addition, he is to ensure that all functional units in the organisation are measured interms of their quality services to internal and external customers in order to achieve and retain quality certification.

2.3 **(8) ASSISTANT GENERAL MANAGER OPERATION AND SERVICES.**

AGM OPERATIONS and services do maintain, administer and lead

the department to provide superior delivery services to both internal and external customers. This he will do by implementing company policies on operations, customer services and security liaise with the (GM) general manager legal and Human resources to tackle cases of service failure and the commercial department to achieve guaranteed service at all times. He maintains satisfactory operational relationship with Fedex, establishes and evolves strategies for improving service nationwide. He ensures that a healthy relationship is maintained at all times with the Nigerian police and Other security units at the airports:-

2.3 **(9) DISTRICT MANAGERS:** The district managers duty is to supervises his entire district interms of marketing and credit collections from Accounts customers. And all the stations within his territory gives their reports and complains to him which he has to look into before he pass to the Head office for any immediate action by the company's highest authority.

2.3 **(10) STATION HEADS:** Station heads supervises their stations, market for the company, collect credits for the company from the Accounts customers as well as given information of their customers attitudes towards their services, since they are closer to the customers than those in the higher positions of the company.

2.4 **MAILING PROCESS:** This start right from when a stamp is positioned in the right hand side of the envelope for posting. The Nigerian Postal Services rendered different types of mail services among them are (a) ordinary letters, registered letters; (EMS) expidate mail service mainly for over seas and speed post or Express letters.

Operation and services goes on this process; that is mails dropped in the box for posting were letter cleared to the facing table where they will be sorted out according to the positioning of the stamp i.e ordinary mails that carry stamp at the back of the envelope.

Those stamped upright hand are taken to one side and those that are wrongly placed stamped i.e stamped at the left hand side are taken to the other side. After the mails have been sorted then it move for stamping machine if the mails are many otherwise manual application can be / done. As soon as this is executed the mails will more to sorting line table where the mails will be in each of the hales for onward transfer to the Bag fitting have the names of each state capital written on them for easy identification and these names of states capitals are written in alphabetical order. The mail move finally from the Bag fitting to the van for despatch. The move of convergence of mails are motor vehicle, flight, motorbike, ship, boat for water side areas.

The registered letters are documents send by receipt and delivered by receipt because they are restricted items.

These mails are registered for security reasons from the origin station so that if not delivered its where about can be traced easily.

The ordinary mails are dropped in the owner's box at the post office or house box as soon as it get to the destination. While the EMS service are delivered hand to hand to the consignee.

2.5 THE DESPATCH PROCESS OF MAIL IN FEDEX RED STAR EXPRESS.

The despatch process of mail start at the point of accepting mails by any of our staff i.e (FSR) field service representative.

The shipment must be accepted and treated as laid-down in established procedures; i.e shipment must be inspected at the point of pickup or acceptance and to ensure that the following conditions are satisfied,

- the contents are acceptable for transport;
- proper packaging is done for shipment containing fragile items;
- cheque shipments the following particulars are recorded;

cheque Bank, cheque number, Amount on the cheque, shipper's name; Airway bill number and manifest number; phone number, date, time of consignee and consignor.

- "Handle with care" instruction is written on fragile shipments then weighted and documented before its shipped. Documentation of particulars does not end at the point of (AWB) Airway bill only but has to extended to the (DSS) Daily Sales Sheet. All shipments made a day must be in the Daily Sales Sheet of that day to take record of vital information about the shipper/ sender i.e name and the destination of the mail. All shipments must carry AWB's and
accounting copy AWBs must be sent to the data department.

AWB (Airway bill) is a document showing all the relevant information of the shipment example name, signature, addresses, phone numbers, date, time of both the sender and the receiver.

The operational and services procedures has to be strictly followed at the process of mail despatch in order to achieve success; that bags should be recover from airport on flight arrival immediately; that the record if bag recovered at the airport such as airline; flight number of bass / time received and consignment date in a register maintained for that purpose will be noted; that the bass should be brought to the office and de-bag in the presence of at least one other staff; that

agreed physical shipments with entries on the manifest and sign the manifest starting; date and time of compilation of the exercise were maintained; that all cheque shipments during de-bagging for further work should be isolated from others. As soon as these are observed the FSR field service representatives commence delivery run within 30 minutes of arrival of bag.

The standard for delivery time is set in the organisation. That is the standard for delivery within one hour should be 60% and within two hours 100%.

To ease the despatch the mails should state capitals and major cities and shipments / mail must be delivered within 24 hours. All problem shipments must be on delivery sheets everyday until delivery. The undelivered shipments must be returned to customer service after (2) two days.

The misruled shipments are reported to AGM operations and such shipments must be forwarded to correct destination immediately.

The proof of delivery is normally send to the origin station of the mail as an evidence to show that the mail has been delivered.

The (AWB) Air way bill becomes (POD) proof of delivery after the mail has been delivered. This PODs must be sent to customer services by the next available flight. The international mails are inspected at the point of bagging up. This is very important to ensure compliance with international regulations governing transportation of courier materials. Adequate procedures are in place to make sure all shipments are carefully handled while in transit; protectively stored, package and preserved (if necessary) and delivered on time and intact.

Where packaging must be done before shipment is accepted, thorough inspection must be carried out to make sure it meets acceptable standards.

International delivery; All international materials / mails must be on separate delivery sheet different from that of domestic. PODs of international mail delivered must be faxed to (LOS) Lagos immediately after delivery.

If you can not fax, phone customer services. If for any reason, you can't get through, make sure the POD is in your bag that will follow first flight to (LOS) Lagos. POD return to LOS is not negotiable.

The international shipments must be on international delivery sheet every day until delivered. shipments on hold must be on the delivery together with the appropriate exception code stating reasons for holding the shipments.

Any shipment on hold after three 3 days must be returned to

customer service in los.

In international delivery the name of the person who signed for the document must be written in capital letters. Also the address must be written in full. The consignor signed the delivery sheet of international mail by write the month first when writing the date of receiving the mail, followed by the day of the month e.g 12/23/94 (month, day and year sequence.

2.6 BENEFIT OF COMPUTERISATION

-The computarisation in this organisation could be able to give some benefit such as making every Account to be very unique in the sense that no two Accounts could have the same name or number, no matter their location.

- The help of computer could be able to improve the response time from finance department in terms of billing the various Accounts and management information will now be produced on a timely basis.
- with the computer system the control of Quality records could be maintained. Procedures for identification, collection, indexing, accessing, filing, storage, maintenance, and disposition of quality records will be in place. Such records are stored and retrievable from files, filing cabinets, diskettes, hard disk etc.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.0 INTRODUCTION:

In this chapter, system analysis and design is discussed. The chapter focuses on the identification and definitions of problems of the present system, feasibility and investigation.

3.1 SYSTEM ANALYSIS AND DESIGN

System analysis is defined as the methods of determining how best to use computer with other resources to perform tasks which meet the information needs of an organisation. System analysis was initially developed as a specialised branch of organisation and method (o & M) which is a general approach to solving procedural problem.

Organiation and method on the other hand can be defined as the systematic analysis of selected procedural problems in order to produce alternatives which will be more suitable technically and economically.

From the foregoing definitions, one can then liken system analysis and design to a problem solving process which is concerned with analysing work methods and procedures in order to simplify work and work flow.

The process of system analysis consists of a series of steps which are refereed to as system life. The system life cycle are as follows:

i. Problem definition
ii. Feasibility Study
iii. Investigation and fact finding
iv. Analysis
v. System Design

For the purpose of this project work, the design stage will be concerned with the full description of the new system, system requirements and system specification. Specifically the design of the new system will be divided into the following components (a) Output specification, (b) Input Specification, (c) Files, and (d) procedures.

3.2 PROBLEM IDENTIFICATION AND DEFINITION

In order to carry out the mail despatch effectively other departments have to be well involved, apart from the operation department who make sure that efficient package disputation, secured work environment and responsive customer service is done. Hoverer the involvement of finance department is company remains profitable by providing guaranteed uninterrupted operation and optimum working capital management. unfortunately, the tools and techniques for mail despatch can

not be used without a reliable database and information management system. Regrettably hoverer, the most glaring problem facing the mail despatch process as a who in every part of the country is the inadequacy of reliable data and poor management information system. problems associated with the present system of mail despatch especially in fedex red star express are identified and discussed below.

(i) **POOR DATABASE AND INFORMATION MANAGEMENT SYSTEM.**

Because of poor data processing, and storage methods, officer in operation are heavily involved in paper work which consequently makes mail despatch in efficient. Data processing and storage which is largely manual have become increasingly in adequate to aid officers in the operation their respective tasks as well as policy makers in their decision making process.

(ii) **UNRELIABILITY OF DATA:**

Lack of uniformity between Operational data obtained from the operation with those obtained from other units make the process of mail despatch in the organisation very comber some. A lot of time and resources are this wasted in trying to verify the authenticity of data.

(iii) **INADEQUATE DATA SECURITY:**

With the present system, security of operation guaranteed. unauthorised persons can have easy access to confidential

information as they sure mostly stored in file jackets; which are kept on shelves or in cabinets.

(V) **PERSONNEL:**

Presently, there is inadequate number of officers with requisite skills on mail despatch. Like wise the number and quality of computer personnel is not adequate.

(Vii) **TIMELINESS:**

The present system is almost entirely manual which often time causes unnecessary delays in the processing of mail despatch.

3.3 **FEASIBILITY STUDY:**

The basic objective of the feasibility study is to carry out a preliminary investigation on the identified problems and seek for possible alternative solutions with the aim of selecting the best alternative option. The feasibility study has the advantage of bringing out the strengths and weaknesses of the existing system with the use of the principles of procedure.

The principles are enumerated below:

a. **PURPOSE**

i. Speedy retrieval of records;

ii. Protection of records /data from unauthorised users;

iii. Reduction or elimination of data redundancy;

iv. Limited storage space.

Regrettably, the current system does not conform with the above listed purposes.

b. **ECONOMIC:**

To say the present system is not economical will be stating the obvious. The number of personnel required to carry out manual manipulation of data is enormous. similarly the high cost of procuring cage quantity of stationeries and storage facilities (files) cabinets and shelves) required has rendered the current system economical.

c. **WORK FLOW:**

The workflow as is obtained with the present system is poor. Whenever there are changes at the various stages of mail despatch preparation or review, the whole job has to be started afresh. similarly, data on actual mail despatch performance will have to be sort from operation department and other department whenever there is need to evaluate mail despatch performance. These do not only cause unnecessary delays in processing mail despatch documents but also result in waste of stationary.

d. **RELIABILITY:**

The existing system is not reliable as confirmed by the experience of the researcher and the feasibility study carried out. There have been cases where unpublished mail despatch documents get to unauthorised users without the knowledge of the department's authority. Investigation have also shown that unscrupulous personnel who have access to mail despatch documents at the various stages of mail despatch preparation exercise give out or sell these documents to hawkers.

e. **FLEXIBILITY:**

The present system does not permit the modification of document without resulting to performing the whole task all over again. Hence, the current system is not flexible.

f. **TIMELINESS:**

As a result of the manual processing mail despatch documents and the practice of doing a job all over again in order to modify records, alot of line is wasted as workers normally work over-time in order to accomplish the task of producing mail despatch documents.

3.4 TESTING PROJECT FEASIBILITY:

In order to ascertain the feasibility of this project the following tests were under taken;

a. Operation at feasibility

b. Technical feasibility, and

c. Economical feasibility.

a. **OPERATIONAL FEASIBILITY:** Operational feasibility to do with work ability of the proposed new system of mail despatch preparation and result of the investigation carried out for the purpose of this project work indicated that the operation department has over the years been searching for a better method of preparing mail despatch. As in dictated earlier in this project, the operation department already has few sets of computers and over the years budgetary allocations have always been made for the purchase of more computers Thus, the operation department in this company has greet interest in computerising its activities as a way of enhancing the efficiency, effectiveness and productivity of its staff.

b. **TECHNICAL FEASIBILITY:** Technical feasibility is concerned with finding out whether or not the proposed now system can work using the existing equipment, soft ware technology and personnel. from the result of the feasibility study carried out, it was found that current equipment and existing software technology available in the market are sufficient to cover the new proposed system. There is hoverer the need to train existing enable them handle and manage the equipment properly.

c. **ECONOMIC FEASIBILITY:** Although the initial cost of equipment seems to be high, the cost for financial feasibility hoverer, indicates that the long term gains derivable from the proposed new system justifies the cost. The new system would reduce a lot of cost and wastage of stationary.

3.5 OBJECTIVES GUIDING THE INVESTIGATION:

The objective of the investigation are enumerated below;

(i) To carry out a detailed and comprehensive study so as to under stand the present system, and

(ii) To identify the basic information requirements of the mail despatch preparation and review.

To this end therefore, the following were considered,

a. The range of data type,

b. The volume of data that are to be considered and exceptional conditions and

c. Problems associated with the present process of mail despatch preparation and review.

3.6 THE CURRENT SYSTEM:

At this juncture it is pertinent to discuss the steps involved in the preparation review of mail despatch in order to establish the strength and weaknesses of the existing system. the steps involved are enumerated below.

(i) **DATA COLLECTION:** The data required for the preparation of mail despatch are normally collected from individual shipper/sender of the mail for the purpose of mail despatch the operation department also collects data on actual mail despatch performance from commercial/customer service department (which is responsible for releasing detail description of the shipper/sender.

(ii) **PREPARATION OF MAIL FOR DESPATCH :** Data collected from screen their mail by the pickup staff i.e FSR field service representative, CSR, counter service representative or any of fedex red star staff that does the mail pick up. It is at this stage that we will be able to know whether the mail can be accepted for despatch the information that emanate from the screening exercise are synthesized by the department, customer service after which they are presented to the operation department for documentation against future use i.e incase the mail is his routed or lost completely.

3.7 REQUIREMENT SPECIFICATION:

The basic aim of an analysis to come up with requirement specification for a system. To this end, a description of what the system should be designed and implemented is given. The new system proposed in this project work is expected to be able to prepare and produce mail despatch documents; and store data required for the periodic review of actual mail despatch

performance with great accuracy and reliability. In view of the above expectations, the requirement specification for the new system are stated below;

A. **HARDWARE:**

(i) IBM Compatible pc

(ii) Main memory: 1.4MB

(iii) Disk Drive: One floppy disk drive for 3½ inch diskette

(iv) Display - Monochrome/Colour

(v) Printer - Laser Jet Printer

(vi) Stabilizer: 250V

(vii) UPS: 500V

B. **SOFTWARE**

(i) Disk Operating System (DOS): Ms DOS 6.0

(ii) DBMS package: Dbase IV

(iii) Window 98.

3.8 COST AND BENEFITS ANALYSIS OF THE NEW SYSTEM

3.8.1 COST ANALYSIS OF THE NEW SYSTEM

The initial cost of the new system may seem to be high, however, the system have a lot of both short term and long term cost benefits. The cost analysis is divided into two parts, namely:

(i) Development Cost; and

(ii) Operating Cost

A. **DEVELOPMENT COST:**

This implies the cost of system analysis and design, software development and implementation as well as cost of computers, printers, stabilizers, UPS and installation.

The breakdown of development cost is given below:

1.	System analysis and design /Analysis for 2 months	- 80,000.00
2.	Software Development and Implementation	- 120,000.00
3.	Two PC Computers	- 300,000.00
4.	Two printers (Laser Jets)	- 100,000.00
5.	Two Stabilizers (250V)	- 20,000.00
6.	One UPS	- 25,000.00
7.	Installation	- 30,000.00
8.	Training of four staff for six weeks at ₦2,000.00 per week	- 48,000.00
	SUB-TOTAL	=₦723,000.00

B. **OPERATING COST**

This has to do with the running cost of the new system. Thus it is concerned with the cost of stationeries, labour, equipment maintenance and miscellaneous expenses. The breakdown of the operating cost is given-below:

1.	Supply of materials foe one year	₦40,000.00
2.	Labour cost (two operators at N2,500 per month for one year)	₦60,000.00
3.	Equipment maintenance	₦15,000.00
4.	Miscellaneous Expenses	₦60,000.00
	SUB-TOTAL	₦175,000.00
	GRAND TOTAL =	₦898,000.00

3.8.2 **BENEFITS ANALYSIS OF THE NEW SYSTEM:**

Although acquiring new computer systems for any organisation is capital incentive, there are however numerous long doing so. The benefits includes;

i. Reduction in data processing cost;

ii. Reduction in data storage space'

iii. More accurate and reliable data;

iv. Security of data;

v. Easy retrieval of data;

vi. Speedy processing of data

vii. Flexibility in terms of manipulating data.

3.9 INPUT AND OUTPUT SPECIFICATION

3.9.1 OUTPUT SPECIFICATION:

The kind of output required from a system to a great extent determines the type of input for the system. Hence, it is relevant to consider what is required from the system before determing how to produce it. In order to determine the out put requirements, it is necessary to consider the form, types, volummes and frequency of reports and documents.

As earlier indicated, the main concern of this work is the preparation of mail despatch and the periodic review of actual mail despatch performance. For this reason, there is need to produce hard copies if mail despatch on annual basis and actual mail despatch performance documents on annual basis.

For the purpose of this project some reports files would be created for the preparation of mail despatch.

3.9.2 INPUT SPECIFICATION

The type of input required is greatly influenced by the need of output. Hence, in determining the input for this project work, the following were taken into consideration:

a. Data collection media;

b. Type of input media;

c: Type if input documents; and

d: Design of input layout.

Having considered the factors enumerated above, all the reports files for preparation of mail despatch serve as input files.

CHAPTER FOUR

SOFTWARE DEVELOPMENT AND IMPLEMENTATION

4.0 INTRODUCTION

This chapter deals with programming and implementation. Specifically the choice of programming language used, data structure, operation manual and description of the functions of each of the modular programs that are written for the purpose of this project are all contained in this chapter. The chapter also touches on change - over produce and maintenance.

4.1 THE CHOICE OF SOFTWARE PACKAGE AND PROGRAMMING LANGUAGE:

For the purpose of this project, dBase IV which is one of the most efficient version of database management system (DBMS) is chosen as the affliction software. This choice was informed by the fact that it provides a full relational database environment to users. With Dbase IV it is possible to design databases, manipulate and edit records and files, generate reports, perform database queries, design labels and browse databases. In addition to file maintenance program which allows the DBMS to maintain the data in a database by adding new records, deleting unwanted records and amending records, it also provide an interface with user programs.

This implies that used are at liberty to write and run their own application programs. In this case, the programming

language will be Dbase IV programming language.

With Dbase IV, up to 255 fields can be specified per record and a database can be related to more than two other databases.

Furthermore, programs and procedures can be complied and saved as object codes for faster execution. The DBMS (Dbase IV) also provides facilities for different types of processing. It can process a complete file (serially or sequentially); process required records (Selectively, sequentially or randomly) and retrieve individual records.

Dbase IV also has the function of providing security for the data in the database. The main aspects of this are:-

a) Protecting data against unauthorised access;
b) Safeguarding data against corruption; and
c) Providing recovery and restart facilities after a hardware or software failure.

The dBase iv environment provides a large number of built in functions which includes mathematical functions and sting manipulation functions. The programming language includes commands to perform conditional branchings, looping, calculations, sort records, format input screen, output reports and many others.

DBaseiv is considered more suitable for this project work because of its relatives (some of which were mentioned above) and the needs of this study.

4.3 SOFTWARE REQUIREMENT AND ITS FEATURES:

The soft ware required for the project work can be grouped into two categories namely:

(a) Generalised application packages; and

(b) User application programs.

Application package is a set or group of programs and their associated documentations designed and used for solving a specific problem or application.

A generation application package therefore is a package that provides a complete general set of facilities which are of use in dealing with similar types of tasks which arise in a wide range of different application problems. Thus a generalised application package is one that is designed for general use in dealing with similar types of task without having a particular user in mind.

The generalised application packages considered for this project work are:

(a) Database management system (DBMS) package, Dbase Iv; and

(b) Word Processing package world perfect 6.0.

The user application programs on the other hand are programs specifically written by the user with aim of providing all the facilities required for a particular class of application problem such as payroll of an organisation.

4.4 SOFT WARE DEVELOPMENT AND TESTING

The emphasis is on data structure of the database files, simple flow chart of the modular programs, the operational manual and program testing.

4.4(1) DATA STRUCTURE:

Input and output information will both be kept in files. One of the basic requirements for creating a file is the data structure. In database management systems, data structure is the arrangement of data in to fields such as field name, field type, (i.e Character, Numeric, Logical and Data), width and decimal.

Below are file created and their corresponding data structures:

PROGRAMMING AND PROGRAM:

Programming can be defined as the art of writing programs. Similarly, programs are series or sequence of instructions that can be executed by a computer. Programs enable the computer to accomplish a given task.

Table Structure (DRECORD.DBF)

NAME	TYPE	WIDTH	DECIMAL	INDEX
DDATE	Date	8	0	None
SNAME	Character	20	0	None
SACCNO	Character	10	0	None
MORIGIN	Character	12	0	None
SADDRESS	Character	50	0	None
MSTATE	Character	12	0	None
SPHONE	Character	10	0	None
SFAX	Character	10	0	None
PACKTRACK	Character	8	0	None
PACKTYPE	Character	8	0	None
PIECES	Numeric	2	0	None
WEIGHT	Character	6	0	None
DEST	Character	12	0	None
RECNAME	Character	20	0	None
READDRESS	Character	50	0	None
CONTENTS	Character	15	0	None
MANIFEST	Character	10	0	None
CHARGE	Numeric	10	2	None
DXPIECES	Numeric	1	0	None
PXPIECES	Numeric	1	0	None
DMPIECES	Numeric	1	0	None
DXWEIGHT	Character	6	0	None
PXWEIGHT	Character	6	0	None
DMWEIGHT	Character	6	0	None
MONTH	Character	10	0	None

Table Structure (DSALE.DBF)

NAME	TYPE	WIDTH	DECIMAL	INDEX
DATE	Date	8	0	None
CUSTOMER	Character	20	0	None
BILLNUMBER	Character	8	0	None
DEST	Character	10	0	None
PIECES	Numeric	1	0	None
WEIGHT	Character	6	0	None
DX	Numeric	7	2	None
PX	Numeric	7	2	None
DM	Numeric	7	2	None
TCHARGE	Numeric	7	2	None
OCHARGE	Numeric	7	2	None
CCOLL	Numeric	7	2	None
ACCNO	Character	8	0	None
VAT	Numeric	6	2	None
TOTCHARGE	Numeric	8	2	None
DXPIECES	Numeric	1	0	None
PXPIECES	Numeric	1	0	None
DMPIECES	Numeric	1	0	None
DXWEIGHT	Character	6	0	None
PXWEIGHT	Character	6	0	None
DMWEIGHT	Character	6	0	None
MONTH	Character	13	0	None

Table Structure (MSALE.DBF)

NAME	TYPE	WIDTH	DECIMAL	INDEX
.ONTH	Character	14	0	None
DX	Numeric	10	2	None
PX	Numeric	10	2	None
)M	Numeric	10	2	None
FDXWEIGHT	Character	6	0	None
TPXWEIGHT	Character	6	0	None
FDMWEIGHT	Character	6	0	None
TCHARGE	Numeric	10	2	None
OCHARGE	Numeric	10	2	None
CCOLL	Numeric	10	2	None
TOTAL	Numeric	10	2	None

This section is basically concerned with outlining the operational procedure of the modular programs written for this project. The program codes can be referred to in the Appendix.

The diagram below shows a simple flow chart of the modular programs written in the process of software development for the project.

4.4 (3) OPERATIONAL MANUAL

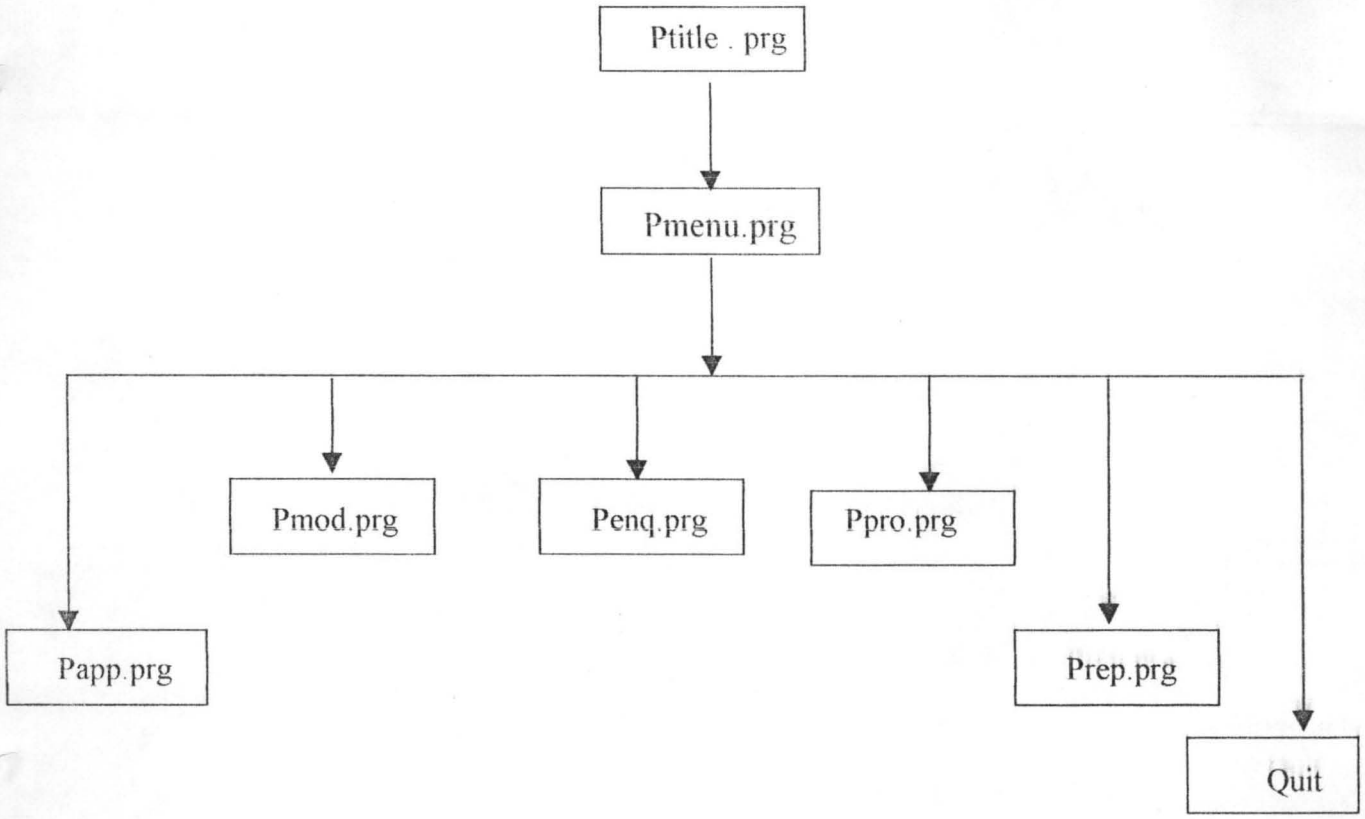
The programming process is only complete when the program has been written, tested and certified to be working perfectly. programs become operational after they have been thoroughly tested and completely document.

As earlier indicated, Dbase IV is the software that is used for this project. All programs contained in this project are written in Dbase programming language.

Step1. The system should be booted from the hard disk. Once the system has been successfully booted, the user is taken to c prompt and C:\> is displayed on the screen.

Step 2 At C:\ the user simply type CD\DBASE. Here the user will be led to dbase IV control panel.

A FLOW CHART OF THE MODULAR PROGRAMS



MODULAR PROGRAM

The functions of the modular program.

Below are the functions of the modular program that make up the soft ware

(1) The main Title program (P Title. PRG) this program enhances the displacement of project title on the screen. It also run the menu program

(2) The menu program (P menu PRG). This modular program enhances the displacement of the main menu on the screen. The main menu are Data Entering: Modify, Record, Enquiry, Processing, Report and Quite

Can perform any of the above tasks simply by processing the key of the letter on the code of the task.

DATA ENTERING PROGRAM (. PRG)

This enables the user to add new data to any of the files being used in this project.

MODIFY PROGRAM (P MOD. PRG)

This enables the user to modify the records in any of the files being used for this project work.

ENQUIRY PROGRAM

This enhances the viewing of any of the records from any of the files when there is need.

PROCESSING PROGRAM

This is the modular program that enhances the addition of the revenue obtained on monthly file, which is used to generate the monthly report.

REPORT PROGRAM;

This enhances the generation of the monthly report showing the revenue collected for each type of mail being sent from the mail origin station. It also produce the hand copy of the report.

Step 3 At this juncture, the user should press the RSC key on the keyboard and he will be taken to the dot prompt.

step 4: At this point the user will insert the floppy disk that contains the project programs into drive A of the computer system.
Thereafter, the user type SET DATA TO A: and press the ENTER key.

Step 5 Now the user simply type DO TITLE and press the ENTER key. THereafter, the main title of the program will appear on the screen. From this point onward, all the user needs to do is simply execute the instructions given on the screen.

4.5 CHANGE OVER PROCEDURE:-

There are four methods of changing over from old system to a new system. These methods are;

(1) Parallel running
(2) Direct change over
(3) Pilot running and
(4) Staged change over

PARALLEL RUNNING:- This implies running the old and new system concurrently using the same inputs. With this method of change over, the old system remains operational until the new system has been certified to be satisfactory. This method allows for

the comparison of results of the old system with those of the new system.

Some of the features of the parallel method of change over are:

(a) The method is costly as a result of the duplication of tasks involved.

(b) There may be need to employ additional staff or for overtime working hours for the existing staff which may create unnecessary burden; and

(c) It is only practicable where the outputs from the old and new system can easily be reconciled and where the system are similar.

ii) Direct change over: This method implies the complete replacement of the old system with the new system. Some of its features are:

(a) If this new system does not conform with old, then a direct change over is inevitable.

(b) There must be complete confidence in the new systems reliability and accuracy before the direct change over method can be adopted.

iii) Pilot Running:- This method involves changing over part of the old system using either the direct or parallel change over method. This method is used by way of running part of the old system on the new system after results have been obtained from

the old system and comparing the new results with the old to ascertain the workability of the new system.

iv) Staged change over:- This method implies introducing the new system place by place. With this method, a complete part or logical section is committed to the new system with the remaining parts or section are processed by the old system. Once it has been confirmed that the selected part is operating satisfactorily the other parts can be transferred.

Having considered the four methods of change over procedures discussed above, and the financial implications of parallel change over as well as the nature our courier business, the direct change over method will be most suitable and appropriate among the four.

CHAPTER FIVE

5.0 INTRODUCTION

This chapter is concerned with summarising the objective of this project work and making recommendations for the sustianbility of the new system proposed.

5.1 CONCLUSION:

In this project work, the researcher made efforts to look at the extising express. This led to the identification of problems associated with the existing system of mail despatch with a view to designing an alternative system that would be much more economical and effective.

Based on the result of the feasibility study carried out, a new proposed system was designed, developed and tested. The new proposed system vividly reveals the advantages of using computer system for the purpose of mail despatch.

Some of the features provided by the new system are enumerated below:-

(1) Easy and quick means of entering, deleting accessing, retrieving and viewing of records.

(ii) Easy and fast means of processing data accurately.

(iii) Printing hand copies of periodic reports on mail despatch performance, and

(v) Reduction in filling and processing cost. The design and testing of the new system were carried out on IBM compatible computer, it is however hoped that the system will work on other brands of personal computer with similar computer architecture.

5.1 LIMITATION

This project work is restricted to the computerisation of the process of preparing mail despatch for the purpose of the constraints mentioned below:

(1) VOLUME OF DOCUMENT: The process of mail despatch involves a lot of work, notable among them are; the preparation of information about the customers. The implication of this is that, volumes of documents which are too voluminous for convenient manipulation are generated. Hence, the project is trimmed down to this dimension to facilitate:

(a) The preparation of the mail despatch process using information gathered from the sender or shipper only.

(ii) TIME: The researcher is a worker who has to have his time between performing his official duties and writing this

project. Considering the amount of time at the disposal of the researcher, it would not be an easy task to cover all aspects regarding mail despatch process. However, what is covered is enough for the purpose of mail despatch.

(iii) FINANCE: In view of the high cost of stationery and other related materials required for producing this project work the project has to be restricted to this scope to enable the researcher cope.

However, despite the scope of this project work, it would be found to be useful for the preparation of accurate and timely mail despatch system.

5.2 RECOMMENDATION

In view of the numerous advantages derivable from using computer system for the purpose of mail despatch preparation as against using the less accurate manual system the following recommendations are suggested.

(i) Feder Red Star Express should endeavour to adopt and implement the proposed new system, that is computerising the process of mail despatch in order to help the data processing unit of the organisation to be able to generate error-free invoices for its numerous clients.

These basic requirements aid the production of invoices in good time.

If invoices are produced and sent out on time, credit collection becomes a lot more easier and many other things will fall in place.

(ii) The computer system will be able to reduce the degree of confusion in one Account for the other; for instance - United Nations Development Programme 10500024 is not the same Account as United Nation Population Founds 10500030, Although both organizations exist within the same premises, they have different names and Account numbers. If these names and Account numbers are computerised properly and in full, we would make no mistakes in producing correct invoices and on time too.

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```
   *TITLE PROGRAM


Set talk off
Set status off
set scoreboard off
      DO WHILE .T.
         Set color to w/b+
      @ 2,10 to 21,60 double
      @ 3,28 say "PROJECT TITLE"
      @ 4,28 to 4,41 double
      @ 6,19 say "COMPUTERIZATION OF MAIL DESPATCH"
      @ 7,25 say "INCOURIER SERVICES"
      @ 8,29 say "A CASE STUDY OF"
      @ 9,24 say "FEDEX RED STAR EXPRESS"
      @ 11,34 say "BY"
      @ 13,30 say "ALHASSAN NDABA"
      @ 14,29 say "PGD/MCS/98/99/795"
      @ 16,30 say "SUPERVISED"
      @ 18,34 say "BY"
      @ 20,22 say "PRINCE ABDULRAZAQ BADMOS"
      Wait
      Clea
   Ch = space(1)
   @ 10,5 say "TO CONTINUE WITH THE MAIN PROGRAM (Y/N)"
   @ 10,60 get ch pict "@!"
   read
   If ch = "Y"
      Do pmenu
   Else
      Exit
   Endif
      ENDDO
   RETURN
```

Program Editor (PMENU.PRG)

```
*MENU PROGRAM


Set talk off
Set status off
Set scoreboard off
   DO WHILE .T.
      Clea
   Set color to w/n+
   @ 2,5 to 22,70 double
   @ 3,28 say "M A I N  M E N U"
   @ 4,28 to 4,50 double
   @ 6,30 say "CODE" + space (6) + "TASK"
   @ 7,30 to 7,44
   @ 9,32 say "A" + space(3) + "DATA ENTERING"
   @ 11,32 say "M" + space(3) + "MODIFY RECORD"
   @ 13,32 say "E" + space(3) + "ENQUIRY"
   @ 15,32 say "P" + space(3) + "PROCESSING"
   @ 17,32 say "R" + space(3) + "REPORT"
   @ 19,32 say "Q" + space(3) + "QUIT"
      Ch = space(1)
     @ 21,30 say "ENTER TASK CODE"
     @ 21,50 say Ch pict "@!"
     Read
        If Ch = "A"
              Do papp
           Endif
        If Ch = "M"
              Do pmod
           Endif
        If Ch = "E"
              Do Penq
           Endif
        If Ch = "P"
              Do Ppro
           Endif
        If Ch = "R"
             Do  Prep
        Endif
        If Ch = "Q"
           Exit
        Endif
     ENDDO
     RETURN
```

Program Editor (PAPP.PRG)

```
* DATA ENTERING PROGRAM


Set status off
Set scoreboard off
Set talk off
Store space(7) to file
@ 2,5 say "ENTER FILE NAME TO BE USED" get file
Read
Clea
   If file = "DRECORD"
      Use DRECORD
   Endif
      If file = "DSALE"
         Use DSALE
      Endif
DO WHILE .T.
Clea
   If file = "DRECORD"
@ 2,22 say "DATA ENTERING SCREEN FOR DAILY MAIL"
@ 3,22 to 3,57 double
   Append blank
@ 4,5 say "DATE" get ddate
@ 4,25 say "SENDER'S NAME/COMP." get sname
@ 6,5 say "SENDER'S ACC. NO." get saccno
@ 6,35 say"SENDER'S ADDRESS" get saddress
@ 8,5 say "MAIL ORIGIN" get morigin
@ 8,33 say "MAIL STATE OF ORIGIN" get mstate
@ 10,5 say "SENDER'S FAX" get sfax
@ 10,32 say "SENDER'S PHONE" get sphone
@ 12,5 say "PACK. TRACKING NO." get packtrack
@ 12,32 say "PACK. TYPE"get packtype
@ 14,5 say "DXPIECES" get dxpieces
@ 14,17 say "PXPIECES" get pxpieces
@ 14,29 say "DMPIECES" get dmpieces
@ 14,41 say "WEIGHT" get weight
@ 14,54 say "DESTINATION"get dest
@ 16,5 say "REC. NAME" get recname
@ 16,35 say "REC. ADDRESS"get readdress
@ 18,5 say "CONTENTS" get contents
@ 18,32 say "MANIFEST" get manifest
@ 20,5 say "TOTAL CHARGE" get charge
   Endif
      If file = "DSALE"
@ 2,22 say "DATA ENTERING SCREEN FOR DAILY SALE"
@ 3,22 to 3,55 double
 Append blank
@ 4,5 say "DATE" get date
@ 4,25 say "CUSTOMER"get customer
@ 6,5 say "BIL NO." get billnumber
@ 6,23 say "DESTINATION" get dest
@ 6,47 say "DX PIECES"get dxpieces
@ 6,61 say "PX PIECES"get pxpieces
@ 8,5 say "DM PIECES" get dmpieces
@ 8,18 say "DX WEIGHT" get dxpieces
@ 8,31 say "PX WEIGHT"get pxweight
```

Program Editor (PREP.PRG)

```
* REPORT PROGRAM


Set status off
Set scoreboard off
Set echo off
   File = space(6)
   month = space(14)
   *@ 2,5 say "ENTER FILE NAME" get file
   *@ 3,5 say "ENTER MONTH"
   clea
   *@ 3,58 get month
   *read
   Use msale.dbf
   *Set device to printer
   @ 3,9 say "REPORT ON SHIPMENT VOLUME AND REVENUE FOR THE OF"
   @ 3,58 get month
   read
   @ 4,9 to 4,70 double
   @ 6,25 say "ITEM" + space(3) + "VOLUME" + space(3) + "REVENUE (CAS
   @ 7,25 to 7,55
   @ 8,26 say "DM"
   *@ 8,33 say TDMWEIGHT
   @ 8,43 say DM
   @ 10,26 say "DX"
   *@ 10,33 say TDXWEIGHT
   @ 10,43 say DX
   @ 12,26 say "PX"
   *@ 12,33 say TPXWEIGHT
   @ 12,43 say PX
   @ 13,25 to 13,55
   @ 14,26 say "TOTAL REVENUE (CASH)"
   @ 15,25 to 15,55 double
   *Set device to screen
   wait
   RETURN
```

Program Editor (PMOD.PRG)

```
*MODIFY PROGRAM


 Set status off
 Set scoreboard off
 Set talk off
 Store space(7) to file
 Store space(9) to MSNAME
 @ 2,5 say "ENTER FILE NAME TO BE MODIFIED" get file
 Read
 clea
    If file = "DRECORD"
       Use DRECORD
    Endif
       *If file = "DSALE"
       *Use DSALE
       *Endif
 msname = space(20)
    DO WHILE .T.
         Clea
        *If file = "DRECORD"
   @ 2,5 say "ENTER SENDER'S NAME" get MSNAME
   Read
    Locate for SNAME = MSNAME
           If found()
    @ 4,22 say "DATA MODIFING SCREEN FOR DAILY MAIL"
    @ 5,22 to 5,55
    @ 7,5 say "RECIPIENT NAME" get recname
    @ 9,5 say "RECENT ADDRESS" get readdress
    read
    Else
    @ 15,3 say "RECORD NOT FOUND"
           Endif
       *Endif
    Ch = space(1)
    @ 20,3 say "ANY OTHER RECORD TO BE MODIFIED? (Y/N)"
    @ 20,50 get ch pict "@!"
    Read
       If ch = "Y"
       loop
       Endif
       If ch = "N"
       exit
       Endif
     ENDDO
     CLOSE DATABASE
     Clea
     RETURN
```

```
*ENQUIRY PROGRAM


 Set status off
 Set echo off
 Set scoreboard off
    MSNAME = SPACE(20)
    MRECNAME = SPACE(20)
    file = space(7)
 @ 2,5 say "ENTER FILE NAME" get file
 Read
 clea
 If file = "DRECORD"
 Use DRECORD
 Endif
    *If file = "DSALE"
    *Use DSALE
    *Endif
 DO WHILE .T.
 Clea
    *If file = "DRECORD"
    @ 2,5 say "ENTER SENDER'S NAME" get msname
    @ 4,5 say "ENTER RECIPENT NAME" get mrecname
    Read
    CLEA
    GO TOP
    Locate for sname = msname .OR. recname = mrecname
    If found ()
    @ 4,22 say "DATA VIEWING SCREEN FOR DAILY RECORD"
    @ 5,22 to 5,57 double
    @ 7,5 say "SENDER'S NAME" get sname
    @ 9,5 say "SENDER'S ADDRESS" get saddress
    @ 11,5 say "MAIL ORIGIN" get morigin
    @ 11,33 say "SENDER'S PHONE" get sphone
    @ 13,5 say "PACK. TRACKING NO." get packtype
    @ 13,25 say "DX PIECES" get dxpieces
    @ 13,55 say "PX PIECES" get pxpieces
    @ 15,5 say "DM PIECES" get dmpieces
    @ 15,32 say "DESTINATION" get dest
    @ 17,5 say "RECIPIENT NAME" get recname
    @ 19,5 say "RECIPIENT ADDRESS" get readdress
    @ 19,33 say "CONTENTS" get contents
    @ 19,60 say "CHARGE" get charge
    Read
    Else
    @ 7,5 say "RECORD NOT FOUND"
    Endif
    *Endif
    Ch = space(1)
    @ 21,5 say "ANY OTHER RECORD TO BE VIEWED (Y/N)"
    @ 21,45 get ch pict "@!"
    Read
    clea
          Do case
             case ch = "Y"
```

```
        loop
        case ch = "N"
        exit
     Endcase
ENDDO
CLOSE DATABASE
RETURN
```

```
@ 8,44 say "DM WEIGHT"get dmweight
@ 10,5 say "DX CHARGE" get dx
@ 10,24 say "PX CHARGE" get px
@ 10,38 say "DM CHARGE" get dm
@ 12,5 say "TERMINAL CHA." get tcharge
@ 12,28 say "OTHER CHA." get ocharge
@ 12,48 say "CREDIT COLL." get ccoll
@ 14,5 say " CUSTOMER AC. NO." get Accno
@ 16,5 say "VAT" get vat
@ 18,5 say "TOTAL CHARGE" get totcharge
      Endif
Ch = space(1)
@ 21,3 say "ANY OTHER DATA TO BE ENTERED (Y/N)"
@ 21,50 get ch pict "@!"
Read
      Do case
         case ch = "Y"
         loop
         Case ch = "N"
         Exit
      Endcase
ENDDO
Close database
clea
RETURN
```

PROJECT TITLE

COMPUTERIZATION OF MAIL DESPATCH
INCOURIER SERVICES
A CASE STUDY OF
PEDEX RED STAR EXPRESS

BY

ALHASSAN NDABA
PGD/MCS/98/99/795

SUPERVISED

BY

PRINCE ABDULRAZAQ BADMOS

Press any key to continue...

MAIN MENU

CODE	TASK
A	DATA ENTERING
M	MODIFY RECORD
E	ENQUIRY
P	PROCESSING
R	REPORT
Q	QUIT

ENTER TASK CODE

ecord = : 1

DATA VIEWING SCREEN FOR DAILY RECORD

SENDER'S NAME SHEHU IBRAHIM

SENDER'S ADDRESS 23 E Nassarawa Road, Minna

MAIL ORIGIN Minna SENDER'S PHONE 066-222498

PACK. TRACKING NO. DX PIECES 1 PX PIECES 0

DM PIECES 0 DESTINATION Ibadan

RECIPIENT NAME

RECIPIENT ADDRESS CONTENTS CHARGE 1000.00

DATA ENTERING SCREEN FOR DAILY MAIL

DATE : / / SENDER'S NAME/COMP.

SENDER'S ACC. NO. SENDER'S ADDRESS

MAIL ORIGIN MAIL STATE OF ORIGIN

SENDER'S FAX SENDER'S PHONE

PACK. TRACKING NO. PACK. TYPE

DXPIECES 0 PXPIECES 0 DMPIECES 0 WEIGHT DESTINATION

REC. NAME REC. ADDRESS

CONTENTS MANIFEST

TOTAL CHARGE 0.00

NY OTHER DATA TO BE ENTERED (Y/N)

Table Records (DRECORD.DBF)

DDATE	SNAME	SACCNO	MORIGIN	SADDRESS
06/09/00	SHEHU IBRAHIM	0020239	minna	23 E Nassarawa road, Minna
06/09/00	Miss Risikat Ola	0030239	Minna	Day Secondary School, Minna
06/09/00	SULEIMAN IBRAHIM	0010239	MINNA	EDUCATIONAL RESOURCE CENTRE, P.O. BOX 1009 MINNA
06/09/00	FATI MOHAMMED	2070001	MINNA	FEDEX RED STAR EXPRESS 1IBB ROAD MINNA
07/09/00	MOHAMMED ALHASSAN	2074561	MINNA	MINISTRY OF FINANCE MINNA NIGER STATE
08/09/00	HARUNA BAKO	2071154	ABUJA	FEDERAL MINISTRY OF WORKS AND HOUSING ABUJA
09/09/00	SALIM FATIMA	2010002	MINNA	MINISTRY OF ECONOMIC PLANNING MINNA NIGER STATE
10/09/00	RONKE SALAUDEEN	2021005	LAGOS	NO.1 ABORISHADE ROAD LAWANSON SURULERE LAGOS
11/09/00	SIDI MOHAMMED	1010005	ZARIA	NO.2 JOHN HORT ROAD ZARIA
12/09/00	RISIKAT BELLO	1055554	MINNA	NO.5 IBB ROAD MINNA NIGER STATE
13/09/00	DAVID STEPHEN	1012203	MINNA	NITECO BAY CLINIC ROAD TUNGA MINNA

Table Records (DSALE.DBF)

DATE	CUSTOMER	BILLNUMBER	DEST	PIECES	WEIGHT	DX	PX	DM	TC
06/09/00	SHEHU IBRAHIM	0010351	IBADAN			950.00	.	.	
06/09/00	MISS RISIKAT OLA	0035260	Lagos			0.00	1000.00	.	
06/09/00	SULEIMAN IBRAHIM	0025013	LAGOS			0.00	.	1000.00	
06/09/00	FATI MOHAMMED	0020136	LAGOS			0.00	.	1000.00	
07/09/00	MOHAMMED ALHASSAN	0031231	U.S.A			0.00	6500.00	.	
08/09/00	HARUNA BAKO	0690015	NEW YORK			5000.00	.	.	
09/09/00	SALIM FATIMA	0093001	AKURE			700.00	.	.	
10/09/00	RONKE SALAUDEEN	0051230	JAPAN			0.00	7500.00	.	
11/09/00	SIDI MOHAMMED	0032161	PHC			0.00	.	800.00	
12/09/00	RISIKAT BELLO	0095612	INDIA			0.00	9000.00	.	
13/09/00	DAVID STEPHEN	0020589	GHANA			.	.	2000.00	