

COMPUTERISED MANAGEMENT INFORMATION SYSTEM

A CASE STUDY OF TRUST GROUP LTD.

BY

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PGD/MCS/97/277

**IN PARTIAL FULFILMENT OF THE
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APPROVAL SHEET

This project work had been read and approved by the undersigned. As meeting the requirement of the department of Mathematics and Computer Science. Federal University of Technology, Minna.

PRINCE BADMUS R.O

DATE

DR.S.A REJU

DATE

EXTERNAL EXAMINER

DATE

DEDICATION

To the Almighty God, my wife, my children and other well wishers for their moral support during the programme.

ACKNOWLEDGEMENT

I give thanks to God Almighty for His infinite guidance , without which I would not be able to complete this program .I adore you oh Lord.

I wish to place on record my sincere appreciation to Mr. R.O. Badmus who doubles as my supervisor and course co-ordinator for his unrelenting fatherly advise and moral support. I pray that God will continue to increase your wisdom . (Amen)

I also want to appreciate the assistance of Head of department , and all the lecturers in Maths and Computer department whose names are too numerous to mention . I thank you all and God bless you (Amen)

ABSTRACT

If information were not vital to the existence of an organisation , there would be no need for automated method to produce and store relevant information .

It is out of necessity that the information and data processing techniques now in use were developed in order to produce the required information as economically and quickly as possible.

Computer contribution to organisation growth are found in the record keeping aspects of the operations. For example , small organisation such as Trust Group concerned about growth and consequently quality service to customers must ensure close monitoring of supplies and goods supplied.

This project is aimed at maintaining efficient records about each supplier and getting necessary information about each supplier as quickly as possible.

The program will be written in Dbase iv.

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CHAPTER ONE

GENERAL PREAMBLE

1.1 INTRODUCTION

Information constitutes a major tool in any management decision process. It is therefore very important that the collation and storage of such information should be given adequate attention. The importance of computers in this regard cannot be over emphasized.

Computer can be defined as a machine that accepts data, process the data, stores and releases the result of such processing in a prescribed format as information as and when required. For example, we use information to calculate, communicate and make (management) decisions, while computer is used to create manage and manipulate information faster and easier than any other previous system devised.

Processing of information by the computer involves three activities:

- Input: This is the process of feeding data into the computer input devices include keyboard, mouse, joystick, touch tone.
- Processing: This act of turning the data into information. The action extend on the data is called processing. Processing actions

are sorting, recording, calculating, classifying and summarising data.

- Output: The outcome of the data processed is output. That is, the information which the data has been turned into is called output. Output is obtained through output devices such as printer, monitor plotters, desktop film recorders etc. It is the output opened through these devices that is used to make decisions that are referred to as management information.

1.2 ^{NOTE} TRUST GROUP LIMITED IN PERSPECTIVE

Trust Group Limited is a service oriented company in the business of providing in-door and out-door catering services. It is wholly privately owned and has been rated as the best in Minna in the business of catering services.

In order to remain in the fore front in the industry couple with the growth in patronage gave rise to the need to introduce computer in all aspects of record keeping to ensure that all relevant data is properly gathered, processed, stored and made available when the need arises.

Information is the vital need of every organization and there is need to ensure that information is not state in order to increase the confidence of the decision maker.

1.3 Aims And Objectives Of The Project :

Specifically, the objectives of the study are

1. To simplify the record keeping of Trust Group through the use of computer.
- 2 To study and analyse the activities of personnel department.
- 3 To identify the problems associated with the existing system.
- 4 To produce a computer assisted system in order to:
 - Manage employee records efficiently and accurately,
 - Produce needed information in a faster and easier way.
 - Produce an up-to-date information about each employee
 - Reduce boredom, tiredness and fatigue caused by routine work.

EXTENT AND LIMITATIONS

The project centres more on the records of both personnel and the items of the Group . There are other sections of the Group , but the focus is more on record keeping aspect which is the vital organ of any organisation .

However , limitations include lack of sufficient time to carry out full project report of the Group . Also finance is another limitation . Coupled with this is lack of reference materials in the organisation.

CHAPTER TWO

LITERATURE REVIEW

2.1 MEANING OF MANAGEMENT INFORMATION SYSTEM

Simply put, this is a system by which information useful to management is managed. By definition, there are as many definition of MIS as there are authors on MIS.

Management information system is an organised collection of procedures, people database, and devices used to provide routine information to managers and other decision makers. The focus, usually, is on operational efficiency.

Management Information System is not completely tied to computer. That is, management Information System exists without computers but since the use of computers assist in entire process of information management, it has to be determined as to what extent it is to be computerised.

2.2 CHARACTERISTICS OF MANAGEMENT INFORMATION SYSTEM

The characteristics of Management Information System are as follows viz.

1. DISTRIBUTED DATA PROCESSING:

The majority of organisation that implement MIS have a geographical network of offices, manufacturing plants, divisions etc some of these locations are operated in a completely independent way and therefore may not be a part of the integrated MIS. In Most cases, the remote sites do have a connection with each other and with the parent operation. In order to create an effective MIS with geographical boundaries, some form of distributed data processing is important. This means that two or more information sub-systems in different locations act in a co-operative manner.

2. FLEXIBILITY AND EASE OF USE:

It is very important for a system developer to build a system that is flexible to accept changes in the information needs of an organisation. This is so, because it is not possible to correctly access future information needs of an organisation irrespective of careful analysis of future management information needs. A system developer should incorporate features that makes a system readily accessible to a wide range of users and uses.

3. MANAGEMENT ORIENTED:

Since the whole idea of MIS is making information available for management, it is therefore important for any MIS to be management oriented. That is, the development of a system should start from an

appraisal of Management needs and overall organisation objectives. In fact, this is the most significant of all the characteristic of management information system.

4. MANAGEMENT DIRECTED:

MIS is management oriented. Consequently, it is important for management to participate in the daily activities in the system development efforts. The manager or any high level representative of the department to ensure that the implemented system meets the specification of the system that was designed. It is the responsibility of management to set system specifications and play a major role in the subsequent trade off decision that occur in system development.

5. DATE BASE:

Gathering of all data relevant in the MIS should be seen as the first step in the system design. Data Base binds the functional system together. Each system requires access to a master file of data covering all aspects of the organisation. If all relevant data is stored effectively and with common "Sage in mind, one master file can provide the data needed by any of the functional system.

6. INFORMATION PROCESSING INTEGRATING:

There must be an integrating mechanism among the individuals applications within the information system. This is to allow for consistency and compatibility. Redundant development of separate applications when a single application could serve more than one need will be prevented. All bottlenecks associated with a user waiting to perform analysis using data from two different applications are prevented.

7. NEED FOR COMMON DATA FLOW:

Because of the integration concept of management information system, there is an opportunity to avoid duplication and redundancy in data gathering, storage and dissemination system designers are aware that a few key source documents, account for much of the information flow and affect many functional areas.

As economical and logical as this concept may sound, it is very important to view it in very practical terms with reference to a particular organisation in mind. This is because, it may be more workable for an organisation to allow for a little duplication.

Generally, however, at the design stage of any system, efforts should be made to prevent overlapping of development system, provide for adoptability, reduce cost, ensure a uniform sequence of development.,

provide standard for communication, allow for integration and provide for a positive strategy for the development of management information system.

2.3
2.4

THE NEED FOR COMPUTER APPLICATION

A computer is a machine which accept data in a prescribed form, follows instructions in order to process the data, and produce the result of the processing in a specified format as information or as signals to control automatically some further machine or process. Computer are used in finding solutions to a wide range of problems, such as assisting in the design of roads and bridges, planning menu for hotel guests, and also carry out some other specific tasks.

Information provided by the computer are used, for example, to calculate, communicate and make decisions and computer becomes very relevant as it creates, manipulates and manage information faster and easier than any system previously devised.

From the foregoing, therefore, the importance of computers in our society cannot be over emphasised. Even since humans began to count and do simple arithmetic, they had to make the process easier and faster by the use of machines.

When a computer is working, one or more activities are performed. The activities involved in data processing by the computer are input, processing and output.

In organisation , such information assist management in deciding about production , which market it can sell its products , what strategy to adopt in marketing and also in deciding on personnel matters .

CHAPTER THREE

3.0 SYSTEMS ANALYSIS AND DESIGN

3.1 INTRODUCTION:

The systems analysis and design stage focuses on analysing the existing system in order to aid the designing of the proposed new system> This analysis is considered necessary because the design of the new system is dependent on the information gathered at the analysis stage.

As a result of the foregoing, this chapter will dwell on the description of the existing system and its associated problems as well as the logical and physical designs of the proposed system. The logical design will be considered in terms of the output format, the input format, the choice of language to be used and the description of the database files needed by the system. The physical design will specify the sources programs for the achievement of the set objectives.

3.2 FEASIBILITY STUDY:

The objective of this project is to design a system that will enable the personnel department of Trust Group Limited to manage the information of its employee.

The fact finding techniques used in this work were observation of work, collection of manual and interviewing. During the interview, series of questions were asked and appropriate responses were received from the people that have the necessary information about the operations of the personal department. Procedures of works were also observed to gather the necessary information about the existing system.

3.3 ANALYSIS OF THE EXISITNG SYSTEM

The existing system is manual, where files are treated and kept in a cabinet which can be retrieved manually when the need arises. The moment a new employee is engaged into the Trust Group Limited, a personal ledger card is given to such a person to fill. The personnel ledger card requests for all the information that are necessary about such as person.

The personnel ledger form contains information about the following:

- ❖ Personnel data i.e. Name, address, sex, age etc.
- ❖ Marital status i.e. single/married/widow, name of wife., number of children, their names and dates of birth,.
- ❖ Educational qualification
- ❖ Previous Employment
- ❖ Official data, this take care of the day one resumes duty, the level such a person is placed, post or rank and department where he/she will work.

The personal ledger card is referred to a documentation in Trust Group Limited. The documentation is then kept in a cabinet from where they are retrieved for various uses.

Whenever a file is to be retrieved, it is looked for in the cabinets or shelves and this is done by indexing them either by names alphabetically or departmentally.

3.4 PROBLEMS OF EXISTING SYSTEM

The use of the existing system is associated with some problems that render it inefficient and unreliable. Such problems are:

- ~~1.~~ Retrieving of information is slow under the manual system. Longer time is spent in locating a particular and even a particular information in a file.
2. Since retrieval is slow, temporary files may be opened pending the time the original file is found. This causes duplication of records since the information in the temporary file is already kept in the original file.
3. Due to poor and inadequate storage facilities, files can easily be misplaced and or damaged.
4. There is no security of information stored in a file.
5. There is no confidentiality since people have easy access to information kept in the files.
6. Since various files are kept in various department there is the problem of limited space.

3.5 TESTING PROJECT FEASIBILITY

The feasibility carried out was limited to

- a. Economic feasibility
- b. Operational feasibility and
- c. Technical feasibility.

A ECONOMIC FEASIBILITY:

Management tends to give priority to economic feasibility than any other. The test for financial feasibility was carried out to assess cost of implementing the proposed project vis-à-vis the benefit deniable from the proposed system.

B OPERATIONL FEASIBILITY

This relates to the applicability of the proposed system to the operations of the organisation.

The proposed system is favoured by management, whereas other members of staff do not agree and would raise some criticisms. New skills are required. Existing staff are to be trained or new staff hired. Planned job changes must be carefully handled so that those affected are seen to gain in a way that they feel is acceptable.

C. TECHNICAL FEASIBILITY:

This clarifies if the proposed system can be done with the current⁴ equipment, existing software and available personnel. A change from manual to the new electronic system requires a computer to be installed and the qualified personnel to man the system.

3.6 COST AND BENEFIT ANALYSIS:

Execution of any project involves running of some costs. Usually, the benefits accruable from such a project are compared with the cost to determine whether it is worthwhile.

To computerise any organisation, a huge capital outlay is required. Various costs are involved. The cost incurred in the course of study, the purchase of the hardware and the amount spent on training the staff are regarded as the initial take-off cost.

a. COST

1. SYSTEM DEVELOPMENT

System Analysis (For three weeks)	15,000 – 5,00 per week
Software installation	25,00
2 PC with monitor	250,000
Printer (5L Laserset)	55,000
UPS (Uninterrupted Power Supply)	35,000

Paper/stationaries	30,000	
Miscellaneous	<u>20,000</u>	
TOTAL		=N=430,00

2. Operating Sys	50,000	
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3. Training of Staff	25,000	=N=75,000
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Grand Total		N 505,000
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b. **BENEFITS OF THE NEW SYSTEM**

- ❖ Problems of lack of storage space or insufficient space associate with the existing system is eliminated.
- ❖ Efficiency in data processing is enhance .
- ❖ Both data duplication and redandancy are eliminated.
- ❖ It enhance accuracy of data and information.
- ❖ It prevents both accidental and delibrate destruction.

Des[pite the huge cost expected to be incurred, the benefits that would be derived (as stated above) are greater in the long run.

3.7 COMPARISON BETWEEN THE NEW AND THE EXISTING SYSTEMS

a. **ECONOMY:**

A little sum of money is required for stationaries and hardware in the proposed system while the existing system wastes a lot of money in terms of stationeries.

B **EFFICIENCY**

The proposed system is highly efficient while the query of a computer is processed in a second, the existing system spends hours to process query.

C **SECURITY:**

With the use of password, unauthorized users do not have access to information in the computer and this assist in securing the information. On the other hand, information is usually lost movement of files and also by unauthorized user having access to files.

D. **RELIABILITY:**

The proposed system is more reliable in that it gives error signals and corrections is allowed immediately.

d. **DUPLICATION**

The proposed system avoids data duplication which has been very common with the existing system.

3.8 INPUT SPECIFICATION

For computer to process data, data needs to be entered into the system.

The input specification states the source and type of data that needs to be supplied into a system. This is important because if the

information supplied into the system is correct, it usually follows that the result of the processing would also be right. This is in consonance with the popular saying in computer parlance "Garbage In Garbage Out" (GIGO). It is in line with this that the input of the proposed system is designed to produce a cost effective method aimed at achieving the highest level of accuracy and ensuring that the input is acceptable and easily understandable to the user.

For the proposed system, the data required include, name of staff, data of birth, marital status, home address, qualifications, next of kin, data of appointment, department, etc. All these are designed as input form in the proposed system. The computer will accept and store these information for each employee in a database for easy access, retrieval and analysis.

3.9 OUTPUT SPECIFICATION

Output refers to the result and information that are generated by a system. The output from a computer system requires primarily to communicate the result of processing to users or other system or more importantly, to provide a permanent (hard) copy of this result for

consultation. The design process of the output begins by the identification of the output system must produce. It is as a result of this that in designing the putput for the proposed system, the needs of the users were fully considered.

CHAPTER FOUR

4.0 SOFTWARE/PROGRAM DEVELOPMENT/INFORMATION

4.1 INTRODUCTION

This chapter contains choice of language, the implementation of the solution to the manual system and the guide on how the new system can be effectively used.

4.2 CHOICE OF LANGUAGE

Dbase Iv is the advanced version of dbase that provides a full relational database environment to users. The choice of this language is due to the fact that dabse Iv has a great deal of power to handle database information on its own. Through the control centre, the user can design databases, manipulates and edit records and files, generates reports, perform data as a query, design labels and browse database.

4.3 FEATURES OF THE LANGUAGE CHOSEN

Features of Database IV are as follows:

1. It is user-friendly.
2. It makes programming easier
3. Programs and procedures can also be complied and saved as object codes for faster execution.
4. It is highly flexible in file handling and manipulation

- 5 It also highly supports modular programming

4.4 SOSFTWARE DEVELOPMENT

Software can be defined as a program that directs and controls the activities of a computer. It serves as intermediary between the computer hardware and the computer users. This accounts for why it is believe that software enables the users to fully exploit the designed system to work on a computer is due to the requirement and ability of he software.

The proposed system requires the installation of dbase IV. This is to allow for modification. This is possible because the system is developed using dbase IV

4.5 TESTING IMPLEMENTATION

System testing is the stage of implementation which is aimed at ensuring that the system works accurately and efficiently before life operation of the system commences.

At this stage, the logical and the physical design should be thoroughly and continually examined on paper to ensure that they will work when implemented. Therefore the system testing implementation should be a confirmation that the system is correct and an opportunity to show the user that the system works.

The proposed system is fully tested to confirm its reliability. Specifically, a user acceptance testing was performed. This type of testing involves the users of the system in testing to confirm that the system is doing what it is designed to do.

4.6 CHANGE-OVER PROCEDURE/SYSTEM COVERSION

The system conversion is a very important activity which is sometimes underestimated. It is usually an expensive stage. In the course of this project, on the job training is provided for the clerks that would be operating the new system. Since Trust Group is using manual system of operation, the computer process used in the new system is BATCH processing where a clerk transcribed all the data to a special input document designed for ease of data entry. Then with the aid of a keyboard, the data is transcribed to the system data file. The transcribed data is thoroughly verified before comparing the data in the old document with the data in the computer data file and if there is any difference, this signifies a mistake and appropriate modification is made.

4.7 CHANGE-OVER

This is the change from the old to the new system. It takes place when other implementation activities have been completed and the parties involved have been satisfied with the results of the new system. The change-over may be achieved in a number of ways. The most common methods are:

Direct method,

Parallel,

Pilot running method

Stage change-over.

The change-over method that is used in this project is parallel running. This means current data would be processed by both old and new system to cross check the results. It tends to be difficult, expensive and sometimes impracticable since the user staff would be carrying out different clerical operations for two systems for one, but this could be outweighed since the results of the two systems would be compared, thereby promoting the confidence of the management.

4.8 STARTING THE SYSTEM

At the dot prompt of the dbaseIV, the user will type:
DO Person (I.e The name of the security program) and press "Enter Key". The security screen will be displayed on the monitor prompting for user name and password. If correct username and password are not supplied, the system will display the message "Access Denied" and will give the person opportunity of two more trials. After the third trial, a warning message "leave the system" is displayed accompanied by a beeping sound. The system will then go back to the dot prompt. If on the other hand, the username and the password are correctly given to the system, a logo ebo. is displayed together with the full name (Trust Group) underneath. This pauses for five seconds to acquaint the user with the description of the system. At the end of the five seconds, the introductory message is cleared from the screen and the main menu comes up as shown below:

4.9 MENU STRUCTURE:

File maintenance	Query	Report	Exit	Quit
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Fig. 1: Logical Structure of the main menu.

The menu prompt is produced within a frame. The user highlights choice by right and left arrow (-><-) keys and activates the choice by pressing the ENTER KEY. At the bottom of the menu frame, there is appropriate message that describes the task that is being performed by any of the choices the user selected.

FILE MAINTENANCE

The new system is designed modularly. That is, the program is broken down into modules. It is menu driven. It has a main menu which leads to every other sub-menu. These modules produce the menu prompt within a frame. The user highlights choices by right and left (-><-) arrow keys and activates the choice by pressing ENTRY KEY. There are also pull up and pull down sub-menu connected to the main module.

There are five procedures by which the desired output is produced.

They are:

- ❖ Appending the Record
- ❖ Editing of Record
- ❖ Deleting of Record
- ❖ Processing of Query, and
- ❖ Viewing of Record.

a. **APPENDING OF THE RECORD:**

This is a process that allows the user to create, input a new information into an existing information. It also allows issuing of query to master and penalty data base file.

B **EDITING OF RECORD:**

This is the process by which a document is revised or corrected.

C. **DELETING OF RECORD**

This allows for the removal of records that are no longer required by the organisation.

E **PROCESSING OF QUERY**

This is where a particular record queried is treated and there is appropriate updating in master and penalty database files.

E **VIEWING OF RECORD**

Whenever this procedure is aimed out, it is assumed that the user has a good acquaintance with the data that has been entered. It provides the most effective way to look at the records in both master and penalty database files by displaying the important parts of each file seven (7) records at a time.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

A computerised procedure cannot be put in place without going through some stages of its development. The analysis of these procedure wee examined and the result was considered in the design of the proposed system.

The installation of a computerised operation is being undertaken because of the expected benefits. Most organisations that are computerised enjoy all these benefit. Added to this, is the fact the world is in the computer age and any organisation that wants to be relevant in the future needs to be computerised.

It is necessary to state that an organisation does not only require to be computerised, it also demands an efficient operation of the computerised procedures and this is expected to be pursued with necessary vigour. This is necessary so that the expected benefits of a computerised system will be fully maximised.

This study has produced a package that:

- ❖ *Increases efficiency* especially timely provision of info ation to management for faster decision making.
- ❖ *Reduces the expenses* such as cost of stationery.

This is possible because the new system eliminates duplication of operations associated with the manual system and consequently reduces cost of stationery.

Finally, it is believed that the proposed system will improve on the operations of the organisation and their day to day activities of the organisation would be greatly enhanced based on the benefits accruable to a computerised system.

5.1 CONCLUSION

The success of computerised operations depends on the maturity, honesty and dedication of the various staff involved. With no errors, and absence of negative motive towards fraudulent act, accuracy can be achieved. The personnel department is an important section of an organisation to get vital information promptly for decision making by management. If Trust Group computerised personnel department, problems of ghost workers would be prevented, delayed retirement and promotion would also be minimised. The problems of over payment of salaries and wages by the accounts department would be solved and money so saved would be useful in other areas.

Finally, Trust Group, should be watchfull in the feeding of data into the system, because corect data leads to correct output and vice versa. That is what is referred to as Garbage In Garbage out (GIGO).

5.2. RECOMMENDATION

1. Trust Group should computerise other operations so as to fully take advantage of the benefits of comuterised operations.
2. Existing staff should be trained through seminars and symposia to enlighten them about the use of computer. This will make them committed as it will erase the negative believe that computerised operations lead to loss of jobs.
- 3 there should be back-up to eliminate the problems associated with system failure.

REFERENCES

1. BADAMOSI R.O (1997) SYSTEM ANALYSIS AND DESIGNS ,
FEDERAL UNIVERSITY OF TECHNOLOGY MINNA
(LECTURE NOTES)
2. JOREME K(1987) INTRODUCING INFORMATION SYSTEM .
PRENTIC HALL OF INDIA PRIVATE LIMITED. NEW
DELHI.
3. KOLA R. (1997) DATABASE MANAGEMENT SYSTEM .
MANAGING DATABASE USING DBASE IV (LECTURE
NOTES)
4. LAWRENCE S.O (1976) INTRODUCTION TO BUSSINES DATA
PROCESSING (SECOND EDITION) BY MCGRAW - HILL BOOK
COMPANY , LAGOS.
5. LAWRENCE S.O (1986) COMPUTERS AND INFORMATION
SYSTEM - IN INTRODUCTION (THIRD EDITION) BY
MCGRAW - HILL BOOK COMPANY ,LAGOS.

6. PETER B. (1987) INTRODUCING INFORMATION
TECHNOLOGY , THOMAS NELSON AND SONS LTD. , HONG
KONG.


```

LEAR
ET TALK OFF
ET STATUS OFF
  7, 10 TO 12, 40 PANEL COLOR G+
pass=space(3)
et color to r
  9, 15 SAY "Enter pass word" get pass
ead
f pass="ebo"
do perl
else
clear
SET COLOR TO W+
@ 3, 5 say "You must be an illegal user"
@ 5, 5 say "Contact Mr. Eboesomi William"
@ 7, 5 say " T H A N K S"
WAIT
QUIT
endif
return

```

PROCEDURE PER1

```

CLEAR
@ 3, 4 TO 22, 76 "Û" COLOR R
SET COLOR TO W
@ 5, 20 SAY "COMPUTERISED MANAGEMENT INFORMATION SYSTEM"
SET COLOR TO G+*
@ 7, 37 SAY "DEVELOPED BY:"
SET COLOR TO GB
@ 9, 35 SAY "MR. EBOESOMI WILLIAM"
SET COLOR TO r*
@ 12, 37 SAY "SUPERVISED BY==>:"
set color to W+
@ 14, 45 say " PRINCE R. O. BADMUS"
more=space(1)
SET COLOR TO GR+
@ 17, 10 SAY "Press N to continue....." get more;
  valid more $ "Nn" error "press N or n to continue..."
read
if more="N" .or. more="n"
clear
  do perl2
endif

```

return

```
PROCEDURE PER2
SET TALK OFF
SET STATUS OFF
SET CENTURY ON
CLEAR
USE PERSON.DBF
DO WHILE .T.
APPEND BLANK
@ 1, 1 TO 24, 78 PANEL COLOR GR+
SET COLOR TO R+*/W
@ 3, 25 SAY "PERSONAL DATA FILE"
SET COLOR TO B
@ 5, 3 SAY "NAME" GET NAME
@ 5, 40 SAY "ADDRESS" GET ADDRESS
@ 7, 3 SAY "SEX" GET SEX
@ 7, 40 SAY "AGE" GET AGE
@ 9, 3 SAY "STATUS" GET STATUS
@ 9, 40 SAY "EDU_QUALIFICATION" GET EDUC
@ 11, 3 SAY "PREVIOUS SALARY" GET SALARY1
@ 11, 40 SAY "PRESENT SALARY" GET SALARY2
@ 13, 3 SAY "DATE OF EMPLOYMENT" GET DOE
@ 13, 40 SAY "DESIGNATION" GET DESIGNAT
@ 15, 3 SAY "LGA" GET LGA
@ 15, 40 SAY "STATE" GET STATE
@ 17, 3 SAY "NATIONALITY" GET NATIONA
@ 17, 40 SAY "RELIGION" GET RELIGION
@ 19, 3 SAY "PERMANENT ADDRESS" GET ADD1
@ 19, 40 SAY "CONTACT ADDRESS" GET ADD2
@ 21, 3 SAY "REFREE" GET REFREE
@ 21, 40 SAY "RESUMPTION DATE" GET RDATE
READ
MORE=SPACE(1)
@ 23, 35 SAY "MORE RECORDS Y/N?" GET MORE;
    VALID MORE $ "YNny" ERROR "Press Y or N"
READ
IF MORE="Y"
LOOP
ELSE
CLEAR
@ 3, 5 SAY "I AM QUITTING"
@ 5, 5 SAY "BYE FOR NOW"
WAIT
clear
EXIT
```

ENDIF
ENDDO
RETURN