

COMPUTERIZATION OF PERSONNEL RECORDS

(A Case Study of Central Bank of Nigeria)

BY

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PGD/MCS/073/93/94

PRESENTED TO

**THE DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE,
SCHOOL OF SCIENCE AND SCIENCE EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE.**

MARCH, 1998.

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A PROJECT PRESENTED TO THE DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE, SCHOOL OF SCIENCE AND SCIENCE EDUCATION,
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, IN PARTIAL
FULFILLMENT OF THE AWARD OF THE POST GRADUATE DIPLOMA IN
COMPUTER SCIENCE.

MARCH, 1998

CERTIFICATION

Having read through this project carried out by Mr. IBRAMA ADA FRANCIS, it is our opinion that it is up to the standard for the award of Postgraduate Diploma in Computer Science.

PROF K.R. ADEBOYE
HEAD OF DEPARTMENT

DATE

PRINCE R.O. BADAMOSI
SUPERVISOR

DATE

EXTERNAL EXAMINER

DATE

DEDICATION

This Project is dedicated to my wife Justina for her love and understanding, and to the children whose jokes and YABIS kept the hope alive throughout the duration of the course.

ACKNOWLEDGEMENT

My special thanks go to my Supervisor, PRINCE R.O. BADAMOSI for his untiring efforts, guidance, invaluable critique and well guided supervision during the course of the project.

To the Head of department, Prof. K.R. Adeboye, I am indeed grateful for your patience, concern and thorough teaching during the course of this program. I benefitted immensely from your wide experience. To the other lecturers, DR: AIYESIMI, KOLA RAHEEM, M. DOGARA, DR. REJU, MR EZEAKO, MR W.A. ADEWALE and others in the department. I say thank you all for your support.

Least I forget, I wish to extend my sincere appreciation to my organisation- THE CENTRAL BANK OF NIGERIA (CBN), and to the entire Management team of Minna Branch, I owe you a special thanks. To my family, nothing could be much to say for your support, love and understanding. My colleagues in the part-time group, I wish to put on record your special concern and understanding. Life is a stage, and the popular adage which says “we meet to part and part no more “ is an apt invocation. Our meeting has been very educative and worth the effort. To you all, I say may the lord bless us all.

ABSTRACT

This project focuses on the computerization of personnel records of the Central Bank of Nigeria. Its main thrust is to compare the manual system with the computerized system of staff records in a large organisation like CBN.

With the new approach of computerization, significant advantage will be provided over the manual system in use. Also, it would be adequate in collecting, storing, analyzing and dissemination of information of prospective serving, dismissed and retired employees at a much faster speed and with a high degree of accuracy, reliability, integrity and security.

This project tends to design a more viable and reliable computerized system through which the organisation will be able to achieve a good personnel record which is important for management decisions.

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CHAPTER ONE

INTRODUCTION

A computer is an electronic device, operating under the control of instructions stored in its memory which can accept and store data, perform arithmetic and logical operations on that data without human intervention and produce output from the processing. There are three (3) types of computer viz..-Analog and Digital computers, Hybrid computers and Special Purpose and General Purpose computers.

The Analog computers perform calculation by manipulating continuous physical variables that are representations of the quantities being subjected to computation. Digital computers represent data as numbers or separate units. A digital computer operates on discrete quantities within a finite number system, that is, it accurately represents data using as many positions and numbers as necessary.

The Hybrid computer combines the best features of analog and digital computers. They have the speed of analog computers and the accuracy of digital computers. Also the digital serves as controller and provides logical operations while the analog serves as a solver of differential equations.

General purpose and special purpose computers are versatile, they process business data as readily as they process complex mathematical formulae. They also store large amount of data and the programs necessary to process them. While the special purpose is basically designed to handle specific problems and are not applied to other computerized activities.

Its indeed difficult to think of any human endeavour that has not been affected by this “monster” called computer. The main advantages of computer include :-

- a. Versatility
- b. Reliability
- c. Speed of accuracy
- d. Large volume of work performed easily, and
- e. Efficiency

Personnel record is an organized and systematic technique for storing vital information and data about individual employee from the day he joins the organization to the day he/she resigns or retires. Indeed, information contained in each personnel record depends on the establishment. However, each staff record should reflect certain relevant information on the staff as he/she moves up or otherwise within the establishment

The present system in use by the Bank to generate useful and vital staff information is not computerized. The present system is rather very cumbersome where file jackets are used to store the much needed staff data which is written on prepared paper/ form. The system is rather very tedious and slow. It carries other problems which could make the required information and data generated, rather unreliable. Such problems include :

- (A) Lack of confidentiality on staff matters. Since files are moved manually from one office to the other and in most cases left on the table for long, staff confidentiality is lost and exposed to ridicule.
- (B) Labor intensive -Due to the manual approach in place, most personnel will be required to handle and maintain the system.
- (C) Corruption of vital information.
- (D) Duplication- information or data required by personnel department on staff management might often times be duplicated.

From the above problems, therefore, there is no gain saying the urgent need for computerized personnel information system for the bank.

OBJECTIVE OF THE STUDY

This project is initiated to accomplish the following objectives:

- (A) To introduce the concept of the management information system (MIS) to the personnel/ administration function of the bank.
- (B) To ensure accurate collection and entry; analyze, presentation and dissemination of personnel record/information within the bank.
- © To facilitate fast, efficient and reliable processing of service record of both serving, dismissed and reired personnel and safeguarding such records.
- (D) To take advantage of the enormous versatile and readily available computer facilities of the bank.
- (E) To realise the need for replacement of the current manual processing methods with a computer.
- (F) To satisfy the basic personnel information requirement of bank management staff in its decision making processes with respect to Manpower and Human resources planning and development.

The program when designed will be able to capture, create, arrange, sort, rearrange, edit update, compare and contrast output, summarize and graphically display various personnel record according to the banks management and or specified users requirements and need.

SCOPE OF THE STUDY

Several personnel information management packages are available. Such packages have facilities to hold data about employee such as: Names, Employee number, Date of first appointment, Rank, salary level, Marital Status, Sex, Date of birth, Place of birth, Date of appointment, Promotion Date, Registration /Dismissed Date etc.

Indeed, a good personnel record should have detailed employee records which can be used to generate various information as may be required by the organization. The project will focus more on the Personnel Department which is the bedrock of the establishment.

CHAPTER TWO

MANAGEMENT INFORMATION SYSTEM

The purpose of the Management Information System (MIS) is to provide decision - making and attention directly information to the management.

The rapid development of computer technology in relation to management has made organization to resolve in using computer to improve the quality of work, thus computer is not only being used as a recorder, and store data, but also as an aid to operational decision.

COMPUTER ROLE IN PERSONNEL RECORD

Computer plays an important role in personnel record, the place of computing in achieving personnel administrative roles can not be over emphasised. Indeed, administrative process can be enriched in many ways because of the scale and range of information provided by computer data bank.

Personnel record can be prepared and stored within the computer in the form of programs which are carefully structured to provide specific information. This eases the burden on the management by allowing more time to concentrate on other administrative function. For instance, computer program can be used to generate leave and duty rosters, to monitor job schedule, to build up and maintain comprehensive personnel records in order to provide a corporate staff profile, and to accumulate information or assist the manpower planning and staff training development.

ORGANIZATION STRUCTURE(CBN Minna Branch)

The Branch Controller is at the helm of affairs in the branch set up of Central Bank of Nigeria (Minna inclusive). He is the Chief Executive as it were, and the representative of the Governor of Central Bank of Nigeria in the State. All important policy and administrative decision are taken by him with the help of staff executives who though, may not be experts, are nevertheless competent and reliable in their respective fields. The Branch Controller is therefore directly responsible for the attainment of the (Branch) organisational goal, but answerable to the authority that appointed him, i.e headquarters.

Although the flow of authority is from top downwards, experts or specialists can, and do advise each other or subordinates from different department, and have some control over their subordinate irrespective of their departments.

It is worthwhile to note that the Branch Controller as an Assistant Director, is an executive staff of the Bank. Three Senior Managers ably support the Branch Controller in his day - to - day activity. These are, in order of seniority, the Assistant Branch Controller, Senior Manager Banking and Senior Manager Currency. The Assistant Branch Controller is next in hierarchy to the Branch Controller, he is a management staff and has limited authority to make some approvals as an A Signatory. He also stands in for Branch Controller any time the controller is not at work. He is directly responsible to the Controller. The other two Senior Managers either oversee big offices like Banking or a group of offices like Currency, Treasury and Currency Processing. These are also 'A Signatories and can therefore make some approvals based on their limits of authority. They are members of the Branch Management, and report to the Assistant Branch Controller.

Managers on the other hand are 'B' Signatories. They head offices such as Banking, Currency, Currency Processing, Accounts, Establishment, Agric.. Credit and Maintenance. They have lower limits of authority than the Senior Managers whom they report to, except Maintenance Superintendent who report directly to the Branch Controller (See diagram). They form part of the management team of the Branch. Assistant Managers although are 'B' Signatories are under the Managers. They also belong to the management team, and have yet lower limit of authority than the substantive Managers. They assist the managers to run the office.

Next in line of seniority is the grade of Senior Supervisor. This is the entry point for University graduates or HND holders or equivalents. The Senior Supervisor marks the beginning of Senior Staff cadre. His duty is to authenticate the work of Supervisors or Senior Clerks as they case may be. Although they Senior Supervisors have limit of authority to approve on paper, in practice this authority is rarely exercised. They are answerable to the Assistant managers.

The Supervisors or equivalent marks the apogee of the junior staff cadre. As the name implies his duty is mostly supervisory. He also performs clerical duties as the exigency of the office permits. The bulk of the clerical work in each office is carried out by senior clerks and clerks who bring up the rear in the clerical cadre. Senior clerks report to the supervisor whereas clerks are under the senior clerks. At the rung of the organisational structure are the Maintenance Mate, Messengers, Cleaners, Gardners, Labourers and Day/Night Guards who perform those duties from which they derive their names.

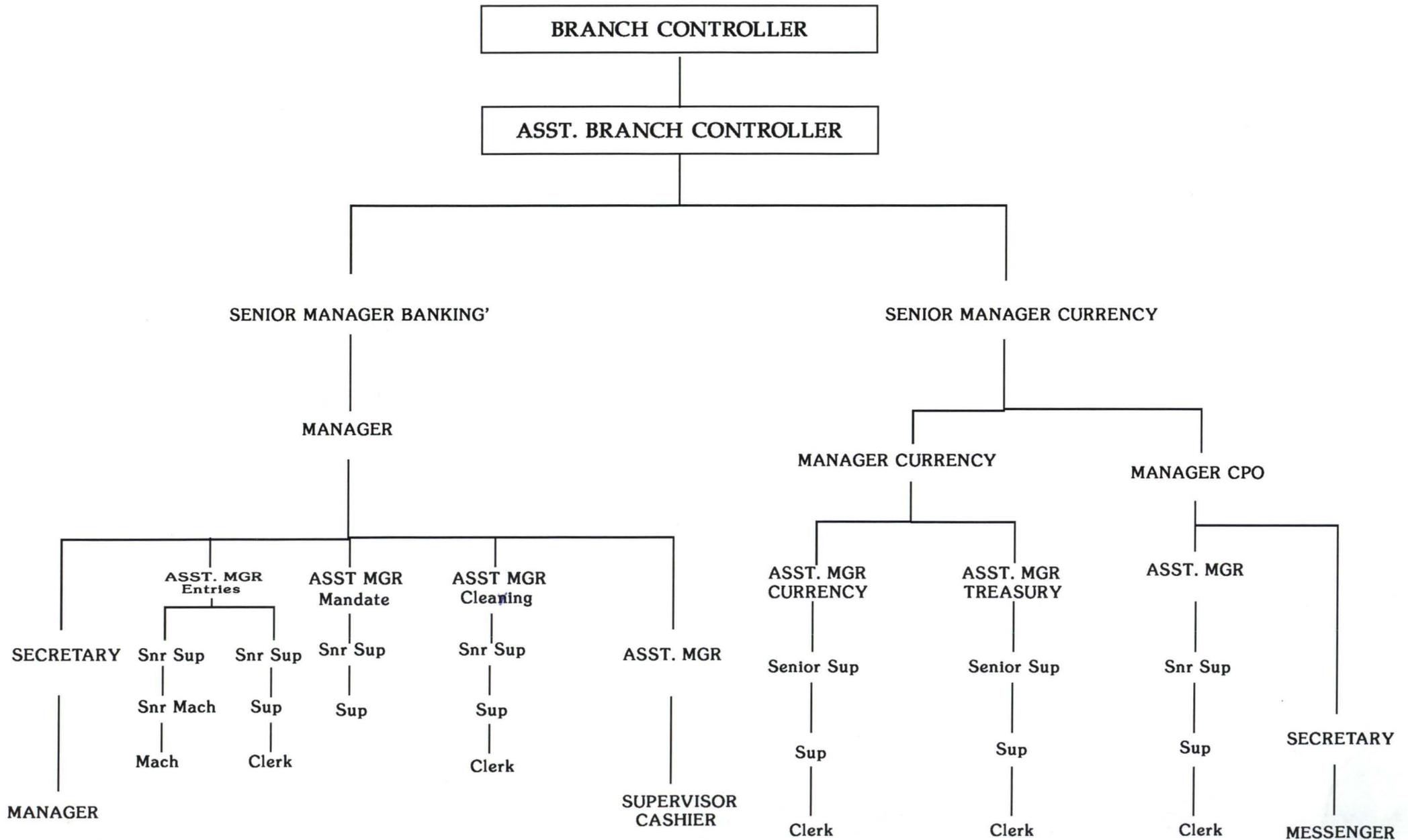
It is interesting to note that Maintenance and Security Offices because of their perculiar functions are directly under the Branch Controller (See diagram). But whereas the Maintenance office is headed by Maintenance Superintendent (Manager equivalent) an Assistant Manager is at the head of affairs in Security office.

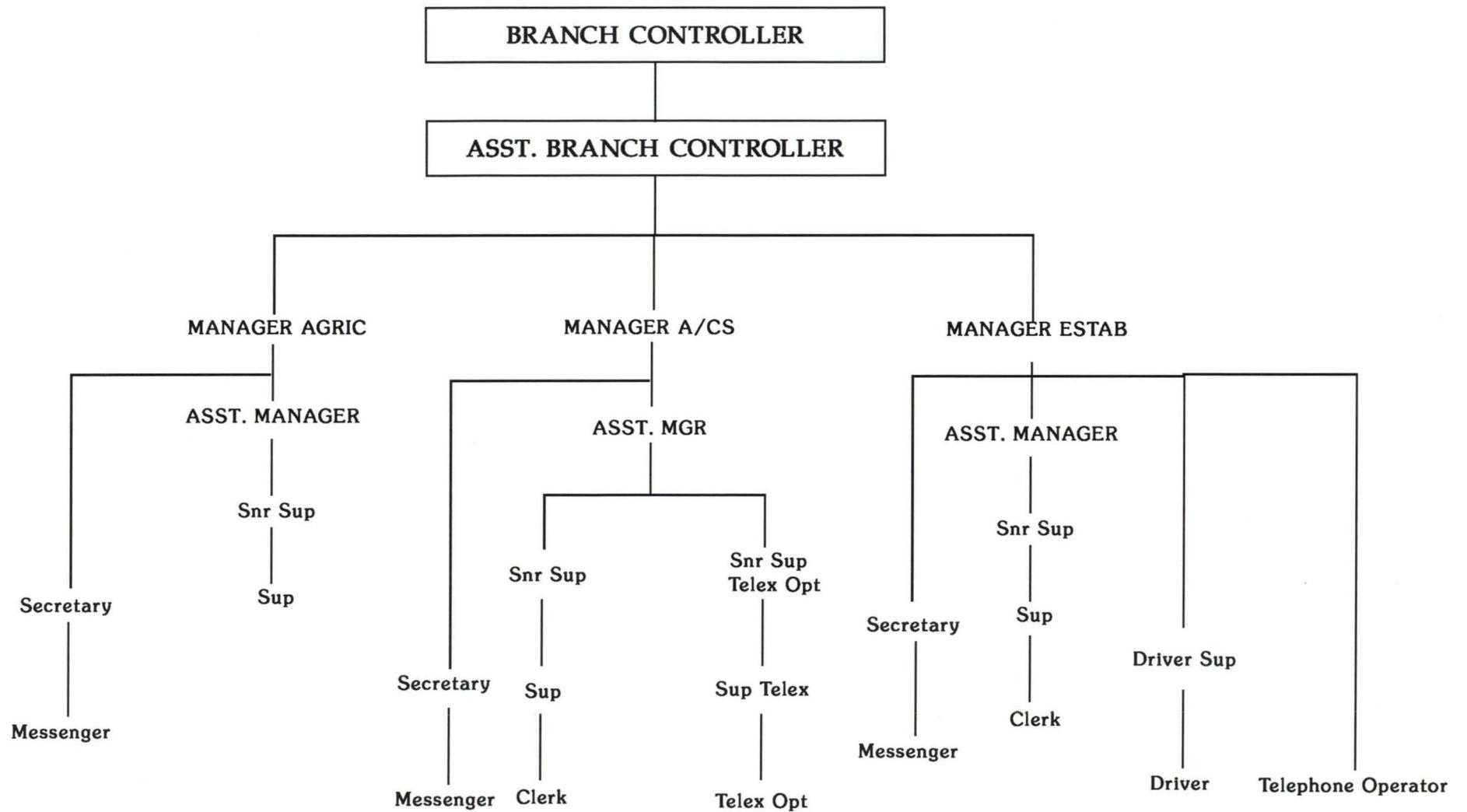
Recruitment into Central Bank employment follows the same procedure as obtains in the Federal Civil Service. For menial grades such as Messenger, Cleaners, Labourers, etc, a First School Leaving Certificate will do. But support services like drivers must also submit certificate of proficiency. Clerks/Senior Clerks must have at least 4 Ordinary Level passes at credit level, two of which must be English Language and Mathematics. Whereas University graduates or HND holders or equivalent are recruited as Senior Supervisors, Assistant Managers, Managers, etc. depending of course, on year of graduation, length of Service/cognate experience and, or any additional qualification.

The promotion exercise in CBN is handled entirely by the Head Office after the Branches and Departments have contributed their indices. Factors used include years on a grade plus a good performance appraisal for at least 5 years for senior staff and 4 years for junior staff, additional educational qualification such as AIB, ICAN, Bsc or BA obtained through part time programme, or via study leave with or without pay, etc. For instance, a messenger who obtains 4 or 5 credits at 'O' Level will be up graded to clerk. Similarly a Supervisor or Senior Clerk who obtains a degree or HND or AIB is automatically upgraded to Senior Supervisor. In like manner, a Senior Supervisor, Assistant Manager or Manager who obtains any relevant additional qualification may be considered ahead of his contemporaries. Please note that as from the post of Senior Manager through to Director, upliftment is by appointment which must receive the blessing of the Presidency. Factors considered include among others, Federal character, Security risk and such like variables are brought to bear.

CENTRAL BANK OF NIGERIA, MINNA BRANCH

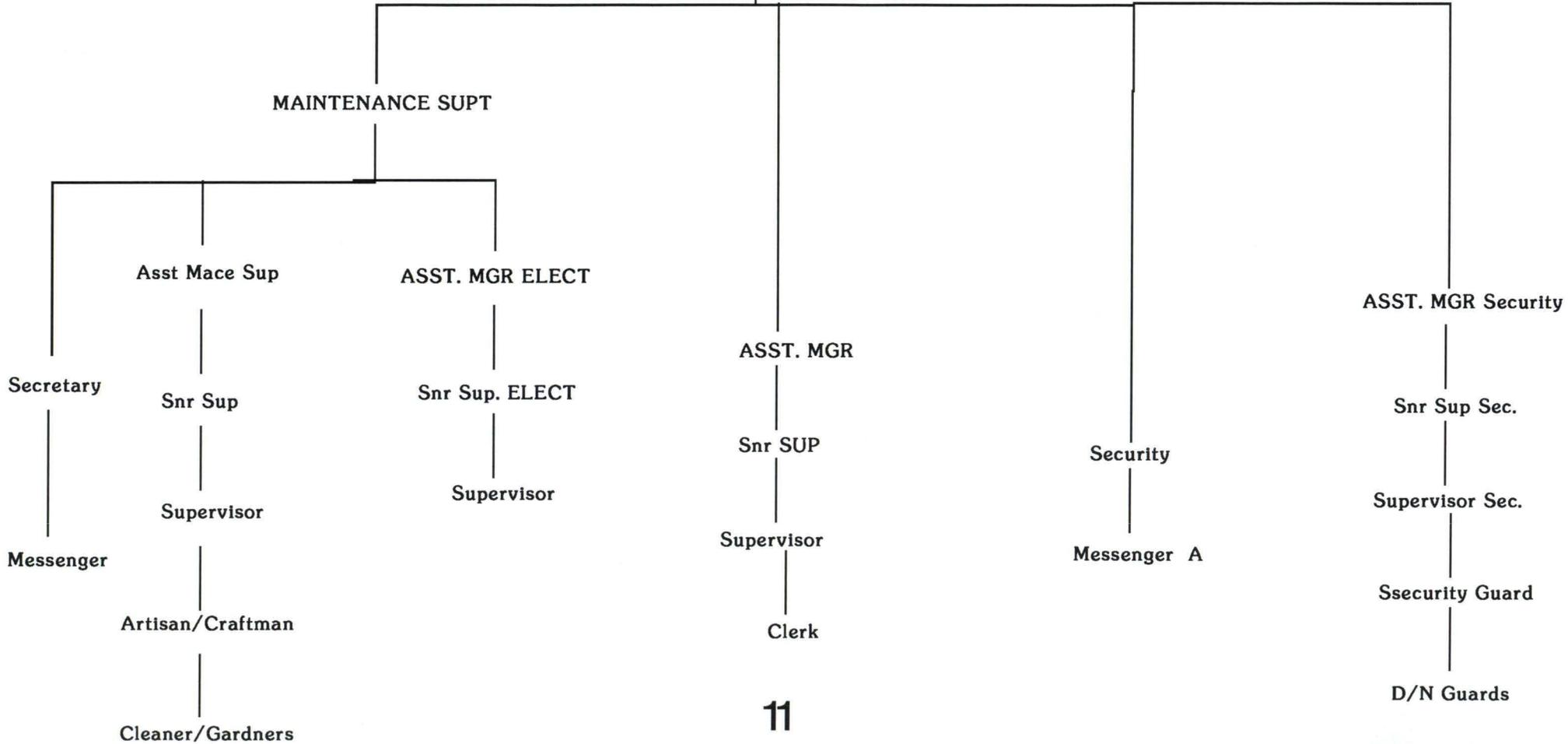
ORGANISATIONAL STRUCTURE





BRANCH CONTROLLER

ASST. BRANCH CONTROLLER



FUNCTIONS OF PERSONNEL DEPARTMENT

1. The department is responsible for internal development of the staff. It carries out this important function through the training of all new entrants to the bank, Training Officers encouraging further educational development through attendance to seminars, workshops or evening classes or correspondence to better their stands.
2. The department handles disciplinary problems.
3. It keeps records of the information coming in and those going out.
4. The department provides welfare services to staff of the bank. This involves long service awards, pension, gratuity and also granting loans, legal aid and keeping health records and visiting the sick.
5. Collecting and processing papers for appointment and promotions. This involves recruitment and selection of employees, procedures for transfer, promotion, dismissal and retirement.

For a good computer personnel information record, the following should be an integral part of the records kept.

1. Personnel records - This relates to identification data, current and historical salary and allowances data, and various employees attributes such as grade level and key dates.
2. Training Records - Data relating to each employee's qualification, skill and experience. The system would also hold details of internal and external courses both within and outside the country.
3. Absence - This should allow for the recording of various absenteeism e.g sick leave,

annual leave, study leave, leave of absence where applicable.

4. Pension records - The system should maintain all details of service entitlement of employees, contribution by both the employee and the organisation to the pension scheme, details of dependants.
5. Recruitment - Details of all vacancies and applicants should be held by the system. This should show the status of each vacancy and of each applicant and should perform as much as possible the administrative process.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

INTRODUCTION

The overall emphasis of system analysis is to examine the system in-depth in order to analyse past strengths and weaknesses, determine the information needs and the best method by which they can be achieved.

At this juncture, the problem identification was carried out and a project feasibility study was conducted.

From the analysis, the following will be highlighted :

1. The type of administrative work done by each staff of the organistaion
2. The Managerial/ administrative work load
3. Any duplication of function, if it exists.

THE CURRENT SYSTEM

The current system of personnel management is manually processed. The current manual processing of staff record is greatly redundant, slow and tedious, boring and cumbersome because it involves repetitive and voluminous paper procedures.

PROBLEMS ASSOCIATED WITH THE PRESENT MANUAL SYSTEM

In furtherance of the objective of the study and in an attempt to analyze the existing system, observation and interviews were used as a means of fact-finding technique on staff of the personnel department. It was gathered that the manual system is associated with a number of problems. Such problems include :

- (a). Inadequate up-dating, up-grading facilities.
- (b). Slow processing and information retrieval
- (c). Inadequate data classification capabilities
- (d). Cumbersome file system - rather very inadequate.
- (e). Easy duplication of records and human error factor.

Based on the above mentioned problems associated with the present manual system in use by the bank, it became apparent to ascertain that a computerised means of personnel records can meet the expected operational goals required.

REQUIREMENT SPECIFICATION

The new computerised system should achieve the following :

1. Security - The data on the new system should only be accessible to those who have authority of access to it. This is necessary in that the possibility of non-personnel staff gaining access to the files can be used to stop unauthorised access to staff records.

2. Speed - It is expected that this new system will be faster in speed since the former system is manually operated.
3. Report Generation - Any computerised personnel management system has the essential feature of the availability of good report generator. If a special report is required, the approach will be to specify and write a special program to produce the necessary information.
4. Growth/Flexibility - It is anticipated that the new system should cope with the growth of the staff strength of the bank. This is necessary since there have been records of increase in the staff over the past years. It should be able to add new data fields and modify the existing ones.
5. Storage/Accuracy - The new system will correct the errors and mistakes of the former system by producing accurate records on demand from its storage system. It is expected that the storage device will cope with the growth of the staff strength in the bank.

TESTING THE PROJECT FEASIBILITY

For project feasibility, the following have to be undertaken :

- (a). Operational Feasibility - This relates or is concerned with the workability of the proposed information system when developed and installed.
- (b). Technical Feasibility - This test seeks to classify if the proposed project can be done with current equipment, existing software technology and available personnel.
- (c). Economical - The test for finance feasibility is undertaken to assess cost of implementing a proposed project vis - a- vis the benefits derived in implementing the project.

COST AND BENEFIT ANALYSIS OF THE NEW SYSTEM

The system will be capable of handling large document and will eliminate the large chunk of paper work.

1. **OPERATING COST**

Hardware New PCs'	-	325,000.00
Equipment Maintenance	-	25,000.00
Program Maintenance	-	30,000.00
Labour Cost (5 Operators)	-	15,000.00
Utilities	-	10,000.00
Miscellaneous Expenses	-	20,000.00

		425,000.00

2. **DEVELOPMENT COST**

System Analysis and design for 4 weeks (150 man hour) @ ₦4,000.00 per week	-	16,000.00
Software development/ Implementation for 3 weeks	-	12,000.00
Printer, Stabilizer and others	-	50,000.00
Personnel Training for 4 weeks @ ₦5,000.00 per week for staff	-	100,000.00
Installation	-	10,000.00

		188,000.00

GRAND TOTAL	-	₦613,000.00

INPUT SPECIFICATIONS

In designing a computerised personnel management system for the bank, the following input data will be used.

1. Staff Personnel File (SPF) _____
2. Full Name (Surname to be underlined) _____
3. Identity Card No. _____
4. Place of Birth. _____
5. Date of Birth. _____
6. Nationality. _____
7. State of Origin. _____
8. Local Government Area. _____
9. Marital Status. _____
10. Sex. _____
11. Department/Code. _____
12. Date of Appointment. _____
13. Date of last Promotion. _____
14. Qualification. _____
15. Grade Level. _____
16. Rank. _____

OUTPUT SPECIFICATION

In designing the new system the following output reports are required :

1. General Staff list
2. Department Staff List
3. Emolument Record
4. Suspension/Dismissal List
5. Leave Record
6. Training Record
7. Retirement Record

The appropriate medium to be used for our output is a Laserjet printer 5L for printing the hard copy required.

PROCEDURES

These are steps in the element of design which unite the whole processes and link everything together to produce the required result. For instance, a newly employed officer is issued with the personnel data form. The filled form is returned to personnel unit where the information therein serve as INPUT into the computer.

Any information needed can be retrieved and viewed or printed as the case may be .

Enquiries that can be made from the personnel records are :-

- a). Total number of personnel in the organisation
- b). Staff due for promotion to the next level
- c). Staff due for retirement
- d). Staff issues in general.

CHAPTER FOUR

SOFTWARE/PROGRAM DEVELOPMENT/ IMPLEMENTATION

INTRODUCTION

The emphasis of system design is to develop a new system that helps to achieve the goals and objectives of the organisation and overcome some of the inherent problems in the existing system.

Basically, the focus has been on the END-USERS i.e personnel department and others responsible for smooth running of the organisation.

CHOICE OF LANGUAGE

In developing this system Dbase IV was used. A Database Management System is a software that constructs, expands, and maintains the data contained in database. It also provides the interface between the user and the data in summary, extract, report on and manage data contained in a database.

FEATURES OF LANGUAGE CHOSEN

- (a). Data Integration - In a database, information from many files can be accessed, coordinated and operated upon as if it is a single file.
- (b). Data Redundancy is Eliminated - Data redundancy occurs in files processing system when the data cannot be arranged to suit all the application programs accessing these data. As a result, the same data appears in more than one file. This leads to wastage

of storage space and duplication of efforts during data entry.

- (c). Data Integrity can be maintained - Data redundancy usually leads to lack of integrity and a common consequence of this is inconsistent information. The implication of this is that the information generated by such a system cannot be trusted.
- (d). Data Independence can be achieved - Data independence is the insulation of application programs from the physical or logical storage of data. This objective seeks to allow for changes in the content and organisation of physical data without reprogramming of application.
- (e). Data are centrally controlled - In a database environment, data and operations on data are centrally controlled and this can lead to better management of data by enforcing standards for all the database users.

FILE SPECIFICATION

File Creation - Personnel Management department deals with personnel of different categories whose records must be processed for effective administration. Records of all the staff are grouped together in files, each file holding records of the same type.

The functions of a file in a data processing system depends on the role of its records within the operational environment and also on the possible inter-relationships of the file with any other file in the system. In developing this nature of system for a big organisation like the Central bank, a master file was created.

MASTER FILE - This is the file containing records vital to the running of the system. The information in personnel data form is used to create the MASTER file. The master file can be

updated and maintained from time to time thus ensuring that accuracy of the data in the file is achieved.

In this system the database file created is the master file called “**PERSONNEL DATABASE**”. The file contains the different field and width for data entry, process and output.

CHANGE - OVER PROCEDURE

This is the process of changing over from the old system to a new one. There are four basic methods of change over.

1. Parallel Method
2. Direct Method
3. Pilot System
4. Staged Method

The parallel method of change-over will be adopted for this work. Here, the new system will be run together with the old system to ensure that the new system is working perfectly well before phasing out the old system, though not without cost duplication.

Since the personnel unit is about to be computerised all its files must be converted into computer files. The personnel unit will need to seek the services of a computer outfit to assist in converting the manual data into data on the computer system.

STARTING THE SYSTEM

This is the process of loading the application program into the computer memory. Starting the system will require the user or operator to either run the program from drive A: or from the

computer harddisk. Since the program has been compiled to executable file, it then signifies that it can be run independent of the application package that is used in writing the the program.

However, to run the program from drive A:, the following format should be used :

1. Change to a directory name called **PROJECT** in drive A: as shown below

A:\CD PROJECT

2. Having typed the above, the A: prompt will appear like this

A:\PROJECT>

3. Type the only executable file name (**PROJECT**) which will allow you to run the program as shown below

A:\PROJECT>PROJECT (Press **ENTER KEY** to execute)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The various problems enumerated in the course of this work include, lack of up-to-date information on staff, inability to delete information on staff who might have resigned or been dismissed from the services of the bank. However, with the computerisation of the system, there will be tremendous improvement in the department, which will in effect bring further efficiency and quick response to staff matters.

The new system is capable of generating accurate reports within a short period. If a special report is required e.g leave, staff on training, the approach is to specify the report and the necessary information will be printed.

The new system is very flexible in the sense that additional data can be added from time to time to modify the existing one.

RECOMMENDATION

The advantages of computerised personnel records cannot be overemphasised as this leads to improvement in efficiency and enhance effectiveness. It also has advantages of minimizing cost for the organisation and improving the decision making process.

It is indeed strongly recommended that this new approach (i.e computerised aspect) of gathering, storing of personnel records of the bank should be fully developed for use in replacement of the years old widely employed manual methods of chunks of paper work.

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APPENDIX

*-----
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***REG. No.** : PGD\MCS\073\93\94
***PROJECT TITLE** : COMPUTERIZATION OF PERSONNEL RECORDS
(A Case Study of CBN)
*-----

PRIVATE option

set talk off

set status off

set scoreboard off

set escape on

set confirm on

set date to british

STORE 0 TO OPTION

clear

@ 0,0 to 3,79 double

@ 0,22 say "CENTRAL BANK OF NIGERIA"

@ 1,24 say "PERSONNEL MANAGEMENT SYSTEM"

@ 4,0 TO 12,79

@ 4,30 SAY "MAIN MENU"

DO WHILE .T.

@ 8,25 say "[1] SYSTEM CODES "

@ 9,25 say "[2] UPDATE RECORD "

@10,25 say "[3] REPORT PROCESSING"

@11,25 say "[4] QUIT "

@ 15,24 SAY "NAVIGATE TO SELECT AN OPTION" get OPTION

read

DO CASE

CASE OPTION =1

DO CODES

CASE OPTION =2

DO CRTREC

CASE OPTION =3

DO GENRPT

CASE OPTION =4

CLEAR

CLOSE ALL

EXIT

OTHERWISE

LOOP

ENDCASE

SET COLOR TO

CLEAR

RETURN

ENDDO

* MAIN PROGRAM TERMINATION

*----- Procedure Codes.prg -----

clear

CLEAR GETS

@ 0,0 to 3,79 double

@ 0,22 say "CENTRAL BANK OF NIGERIA"

@ 1,24 say "PERSONNEL MANAGEMENT SYSTEM"

@ 4,0 TO 18,79

@ 4,30 SAY "SYSTEM CODES MENU"

DO WHILE .T.

@ 8,25 SAY "[1] RANK CODES "

@ 9,25 SAY "[2] DEPARTMENT CODES "

@10,25 SAY "[3] BANK CODES "

@11,25 SAY "[4] CERTIFICATE CODES"

@12,25 SAY "[5] LEVEL CODES "

@13,25 SAY "[6] EXIT "

STORE 0 TO OPT

@17,15 SAY "SELECT AN OPTION"GET OPT

READ

DO CASE

CASE OPT =1

DO RANK

CASE OPT =2

DO DEPTCD

CASE OPT =3

DO BANK

CASE OPT =4

DO QUALC

CASE OPT =5

DO LEVELCD

CASE OPT =6

CLEAR

RETURN

OTHERWISE

LOOP

ENDCASE

ENDDO

SET COLO TO B/W

CLEAR

RETURN

* SUB-PROGRAM CODES TERMINATION

----- procedure crtrec.prg -----

```
@ 4,0 TO 21,79
@ 12,2 TO 12,78 DOUBLE
@ 17,2 TO 17,78 DOUBLE
@ 6,2 SAY "STAFF NO:"
@ 6,21 SAY "SURNAME:"
@ 7,2 SAY "OTHER NAMES:"
@ 7,54 SAY "MARITAL STATUS [S/M]:"
@ 8,2 SAY "NO. OF ISSUE:  SEX [M/F]:  STATE OF ORIGIN:"
@ 9,2 SAY "CONTACT ADDRESS:"
@10,2 SAY "QUALIFICATION:"
@10,38 SAY "DEPARTMENT:"
@11,2 SAY "DATE EMPLOYED:"
@11,26 SAY "OFFICIAL POST:"
@11,62 SAY "OLD GRADE LEVEL:"
@13,2 SAY "BASIC SALARY:"
@13,36 SAY "PROMOTED [Y/N]:  PROMOTION DATE:"
@14,2 SAY "HOUSING ALLOWANCE ::"
@14,36 SAY "NEW GRADE LEVEL:"
@15,2 SAY "TRANSPORT ALLOWANCE:"
@15,36 SAY "ON LOAN [Y/N]:"
@16,2 SAY "LEAVE ALLOWANCE:"
@16,36 SAY "LOAN TYPE:"
@18,2 SAY "LOAN RATE:"
@18,31 SAY "OUTSTANDING LOAN AMOUNT:"
@19,2 SAY "LEAVE DATE:"
@19,26 SAY "TO"
@19,40 SAY "PENSION AMOUNT ::"
@20,2 SAY "BANK NAME:"
@20,40 SAY "ACCOUNT NUMBER:"
SAVE SCREEN TO CRTSCR
SELECT 1
IF .NOT. FILE("PMASTER.IDX")
  USE PMASTER
  INDEX ON STAFFNO TO PMASTER
ELSE
  USE PMASTER INDEX PMASTER
ENDIF
SELECT 2
IF .NOT. FILE("LEVELCD.IDX")
  USE LEVELCD
  INDEX ON LCODE TO LEVELCD
ELSE
  USE LEVELCD INDEX LEVELCD
```

```

ENDIF
SELECT 3
IF .NOT. FILE("DEPTCD.IDX")
  USE DEPTCD
  INDEX ON DPCODE TO DEPTCD
ELSE
  USE DEPTCD INDEX DEPTCD
ENDIF
SELECT 4
IF .NOT. FILE("RANKED.IDX")
  USE RANKED
  INDEX ON RCODE TO RANKED
ELSE
  USE RANKED INDEX RANKED
ENDIF
SELECT 5
IF .NOT. FILE("EDSTATUS.IDX")
  USE EDSTATUS
  INDEX ON EDCODE TO EDSTATUS
ELSE
  USE EDSTATUS INDEX EDSTATUS
ENDIF
SELECT 6
IF .NOT. FILE("BANKCD.IDX")
  USE BANKCD
  INDEX ON BCODE TO BANKCD
ELSE
  USE BANKCD INDEX BANKCD
ENDIF
IF ISCOLOR()
  SET COLOR TO W+/GB,GR+/N+
ENDIF
STORE SPACE(9) TO MSTAFFNO
DO WHILE .T.
  RESTORE SCREEN FROM CRTSCR
  DO CRTVAR
  STORE '' TO ANSD, IDLT
  NEWREC=.T.
  @22,10 SAY SPACE(60)
  @ 6,11 GET MSTAFFNO
  READ
  IF MSTAFFNO = SPACE(9)
    ??CHR(7)
    ANSD = 'Y'
    @22,10 SAY 'QUIT PROCEDURE.....? [Y/N]' GET ANSD
  
```

```

    READ
    @22,10 SAY SPACE(60)
    IF UPPER(ANSD)='Y'
EXIT
    ELSE
LOOP
    ENDIF
ENDIF
SELECT 1
GO TOP
SEEK MSTAFFNO
IF FOUND()
    NEWREC = .F.
    DO CRTSTR
    DO CRTSAY
    ?CHR(7)
    @22,10 SAY 'RECORD EXIST, C - CHANGE, D - DELETE, I - IGNORE' GET ANSD
    READ
    @22,10 SAY SPACE(60)
    IF UPPER(ANSD)='D'
?CHR(7)
@22,10 SAY "SURE YOU WANT TO DELETE RECORD....? [Y/N]" GET IDLT
READ
@22,10 SAY SPACE(60)
IF UPPER(IDLT) <> 'Y'
    LOOP
ENDIF
SELECT 1
DELETE
@22,10 SAY "DO YOU WISH TO DELETE MORE RECORDS..? [Y/N]" GET IDLT
READ
@22,10 SAY SPACE(60)
IF UPPER(IDLT)<>'Y'
    ??CHR(7)
    @22,10 SAY "PLEASE WAIT..!!!"
    SELECT 1
    PACK
    READ
    ??CHR(7)+CHR(7)
    LOOP
ELSE
    LOOP
ENDIF
ENDIF
IF UPPER(ANSD) <> 'C'

```

```

LOOP
  ENDIF
ENDIF
DO CRTGET
ANSD='Y'
@22,10 SAY SPACE(69)
@22,10 SAY "ADD RECORD TO FILES.....?(Y/N)" GET ANSD
READ
@22,10 SAY SPACE(69)
IF UPPER(ANSD) <> 'Y'
  @22,10 SAY "RECORD NOT ADDED TO FILES...!"
  READ
  @22,10 SAY SPACE(69)
  LOOP
ENDIF
SELECT 1
IF NEWREC
  APPEND BLANK
  REPLACE STAFFNO WITH MSTAFFNO
ENDIF
DO CRTRPL
@22,10 SAY "RECORD ADDED TO FILES.....!"
READ
ENDDO
CLOSE DATABASES
CLEAR
RETURN

```

*

* PROCEDURE FOR CRTREC

```

PROCEDURE CRTVAR
*** INITIALIZE VARIABLE
MSTAFFNO=SPACE(9)
MNAME1=SPACE(20)
MNAME2=SPACE(40)
MMSTATUS=SPACE(1)
MISSUENO=00
MSEX=SPACE(1)
MSTATE=SPACE(15)
MADDRESS=SPACE(50)
MEDCODE=SPACE(3)
MDPCODE=SPACE(2)
MEPDATE=CTOD(" / / ")
MRCODE=SPACE(3)

```

```
MLCODE=SPACE(4)
MBASICAMT=0.00
MPROMOTED=.F.
MDTPROMOTE=CTOD(" / / ")
MHOUSING=0.00
MTFARE=0.00
MONLOAN=.F.
MLOANAMT=0.00
MLEAVEAMT=0.00
MLEAVEWK=0
MLOANTYP = SPACE(30)
MLOANRATE=0.00
MLOANCR =0.00
MLEAVEDT = CTOD(" / / ")
MPENAMT = 0.00
MBCODE = SPACE(3)
MBANKACCT=SPACE(10)
MEDLEVEL=SPACE(20)
MDEPTDESC=SPACE(20)
MPOSTHELD=SPACE(20)
MGRDLEVEL=SPACE(4)
MBANKNAME=SPACE(20)
RETURN
*
*
PROCEDURE CRTSTR
** COPY CURRENT VALUES
SELECT 1
MNAME1=NAME1
MNAME2=NAME2
MMSTATUS=MSTATUS
MISSUENO=ISSUENO
MSEX=SEX
MBASICAMT=BASICAMT
MSTATE=STATE
MADDRESS=ADDRESS
MEPDATE=EPDATE
MPROMOTED=PROMOTED
MDTPROMOTE=DTPROMOTE
MONLOAN=ONLOAN
MLOANAMT=LOANAMT
MLOANTYP = LOANTYP
MLOANRATE=LOANRATE
MLOANCR =LOANCR
MLEAVEDT = LEAVEDT
```

MLEAVEAMT=LEAVEAMT
MPENAMT = PENAMT
MBANKACCT = BANKACCT
MEDLEVEL=EDLEVEL
MDEPTDESC=DEPTDESC
MPOSTHELD=POSTHELD
MGRDLEVEL=GRDLEVEL
MBANKNAME=BANKNAME

SELECT 2
SEEK MGRDLEVEL
MBASICAMT=BASICAMT
MHOUSING=HOUSING
MTFARE=TFARE
MLEAVEAMT=LEAVEAMT
MLEAVEWK=LEAVEWK
RETURN

*
*

PROCEDURE CRTSAY
@ 6,32 SAY MNAME1
@ 7,13 SAY MNAME2
@ 7,75 SAY MMSTATUS
@ 8,15 SAY MIS

*----- procedure Genrpt -----

store 0 to OPTION3
CLEAR
@0,0 TO 3,79 DOUBLE
@0,22 SAY "CENTRAL BANK OF NIGERIA"
@1,24 SAY "PERSONNEL MANAGEMENT SYSTEM"
@4,0 TO 12,79
@4,30 SAY "REPORT PROCESSING MENU"
DO WHILE .T.
@ 8,25 say "[1] COMPANY STAFF "
@ 9,25 say "[2] DEPARTMENT STAFF "
@10,25 say "[3] LEAVE DUE LIST "
@11,25 say "[4] STAFF ON LEAVE "
@14,25 say "[5] EXIT "
@15,24 SAY "NAVIGATE TO SELECT OPTION" get option3
read
DO CASE
CASE OPTION3=1
DO CSTAFF
CASE OPTION3=2
DO DSTAFF

```
CASE OPTION3=3
  DO TOLEAVE
CASE OPTION3=4
  DO ONLEAVE
CASE OPTION3=5
  CLEAR
  RETURN
OTHERWISE
  LOOP
ENDCASE
ENDDO
CLOSE DATABASES
RETURN
*
```

```
*COMPANY STAFF PROCEDURE
```

```
PROCEDURE CSTAFF
PUBLIC NLINE, PAGE
STORE 0 TO NLINE, PAGE
SAVE SCREEN TO SCR
CLOSE DATABASES
CLEAR
SELECT 1
IF .not. FILE("PMASTER.IDX")
  USE PMASTER
  INDEX ON STAFFNO TO PMASTER
ELSE
  USE PMASTER INDEX PMASTER
ENDIF
@5,5 CLEAR TO 15,60
@7,15 SAY 'COMPANY STAFF LISTING TO THE PRINTER'
@9,15 SAY 'PLS. MAKE SURE YOUR PRINTER IS READY'
@11,10 SAY 'PRESS<ENTER> TO CONTINUE'
READ
SET DEVICE TO PRINT
SELECT 1
GO TOP
PAGE = 1
DO CSHEAD
DO WHILE .not. EOF()
  DO CSLINE
  SKIP
  IF NLINE>58
    PAGE=PAGE +1
```

```
DO CSHEAD
ENDIF
ENDDO
EJECT
SET DEVICE TO SCREEN
@24,3 SAY 'PRESS ANY KEY TO EXIT'
READ
CLOSE DATABASES
CLEAR
RESTORE SCREEN FROM SCR
RETURN
*
```

```
PROCEDURE CSHEAD
@1,115 SAY "PAGE NO:"
@1,122 SAY PAGE
@1,2 SAY "RUN DATE: "+LTRIM(DTOC(DATE()))
@1,45 SAY "CENTRAL BANK OF NIGERIA "
@3,42 SAY "LIST OF STAFF AS AT :"+LTRIM(DTOC(DATE()))
@4,103 SAY "DATE"
@5,6 SAY "STAFF NO."
@5,40 SAY "STAFF NAME"
@5,82 SAY "OFFICIAL POST"
@5,101 SAY "EMPLOYED"
@6,1 SAY REPLICATE("=",132)
NLINE=7
RETURN
```

```
PROCEDURE CSLINE
@NLINE,7 SAY STAFFNO
@NLINE,17 SAY NAME1
@NLINE,39 SAY NAME2
@NLINE,79 SAY POSTHELD
@NLINE,101 SAY EPDATE
NLINE=NLINE+1
RETURN
*
*
```

```
PROCEDURE DSTAFF
PUBLIC NLINE, PAGE, IDEPT,TREC
STORE 0 TO NLINE, PAGE
STORE 0 TO TREC
STORE SPACE(20) TO IDEPT
SAVE SCREEN TO SCR
```

```

CLOSE DATABASES
CLEAR
SELECT 1
IF .not. FILE("PMASTER.IDX")
  USE PMASTER
  INDEX ON STAFFNO TO PMASTER
ELSE
  USE PMASTER INDEX PMASTER
ENDIF
SELECT 2
IF .not. FILE("DEPTCD.IDX")
  USE DEPTCDR
  INDEX ON DPCODE TO DEPTCD
ELSE
  USE DEPTCD INDEX DEPTCD
ENDIF
@5,5 CLEAR TO 15,60
@7,15 SAY 'DEPARTMENTAL STAFF LISTING TO THE PRINTER'
@9,15 SAY 'PLS. MAKE SURE YOUR PRINTER IS READY'
@11,10 SAY 'PRESS<ENTER> TO CONTINUE'
READ
SET DEVICE TO PRINT
*SELECT 1
PAGE = 1
NLINE=7
TREC=1
DO WHILE .T.
  IF EOF()
    EXIT
  ENDIF
  GO TREC
  STORE DPDESC TO IDEPT
  DO DSHEAD
  IF NLINE>58
    PAGE=PAGE +1
    NLINE=7
  ENDIF
  SELECT PMASTER
  GO TOP
  DO WHILE DEPTDESC=IDEPT
    do while .not. EOF()
      DO DSLINE
      SKIP
      IF NLINE>58
        PAGE=PAGE+1

```

```
NLINE=7
DO DSHEAD
  ENDIF
  enddo
ENDDO
NLINE=NLINE+3
SELECT DEPTCD
SKIP
TREC=RECNO()
LOOP
ENDDO
EJECT
SET DEVICE TO SCREEN
@24,3 SAY 'PRESS ANY KEY TO EXIT'
READ
CLOSE DATABASES
CLEAR
RESTORE SCREEN FROM SCR
RETURN
*
```

```
PROCEDURE DSHEAD
@1,115 SAY "PAGE NO:"
@1,122 SAY PAGE
@1,2 SAY "RUN DATE: "+LTRIM(DTOC(DATE)))
@1,45 SAY "CENTRAL BANK OF NIGERIA "
@3,48 SAY "LIST OF STAFF BY DEPARTMENT"
@4,48 SAY "DEPARTMENT:"
@4,61 SAY IDEPT
@4,103 SAY "DATE"
@5,6 SAY "STAFF NO."
@5,40 SAY "STAFF NAME"
@5,82 SAY "OFFICIAL POST"
@5,101 SAY "EMPLOYED"
@6,1 SAY REPLICATE("=",132)
RETURN
```

```
PROCEDURE DSLINE
@NLINE,7 SAY STAFFNO
@NLINE,17 SAY NAME1
@NLINE,39 SAY NAME2
@NLINE,79 SAY POSTHELD
@NLINE,101 SAY EPDATE
NLINE=NLINE+1
RETURN
```

*
*

```
PROCEDURE TOLEAVE
PUBLIC NLINE, PAGE, INDT,FIDT
STORE 0 TO NLINE, PAGE
INDT=CTOD(" / / ")
FIDT=CTOD(" / / ")
SAVE SCREEN TO SCR
CLOSE DATABASES
CLEAR
SELECT 1
IF .not. FILE("PMASTER.IDX")
  USE PMASTER
  INDEX ON STAFFNO TO PMASTER
ELSE
  USE PMASTER INDEX PMASTER
ENDIF
@5,5 CLEAR TO 15,60
@6,5 SAY "INITIAL DATE:"
@6,19 GET INDT
@6,30 SAY "FINAL DATE:"
@6,42 GET FIDT
READ
@7,15 SAY 'LISTING STAFF DUE FOR LEAVE TO THE PRINTER'
@9,15 SAY 'PLS. MAKE SURE YOUR PRINTER IS READY'
@11,10 SAY 'PRESS<ENTER> TO CONTINUE'
READ
SET DEVICE TO PRINT
SELECT 1
GO TOP
PAGE = 1
DO TOHEAD
DO WHILE .NOT. EOF()
  IF (LEAVEDT >INDT) .AND. (LEAVEDT<FIDT)
    DO TOLINE
    SKIP
    IF NLINE > 58
      PAGE=PAGE+1
      DO TOHEAD
    ENDIF
  ELSE
    SKIP
  ENDIF
ENDDO
```

EJECT
SET DEVICE TO SCREEN
@24,3 SAY 'PRESS ANY KEY TO EXIT'
READ
CLOSE DATABASES
CLEAR
RESTORE SCREEN FROM SCR
RETURN
*

PROCEDURE TOHEAD
@1,115 SAY "PAGE NO:"
@1,122 SAY PAGE
@1,2 SAY "RUN DATE: "+LTRIM(DTOC(DATE)))
@1,45 SAY "CENTRAL BANK OF NIGERIA"
@3,48 SAY "LIST OF STAFF DEPARTMENT"