

COMPUTERISATION OF ADVERTISEMENT SCHEDULE  
A CASE STUDY OF ASO RADIO 93.5 FM ABUJA

BY

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PGD/MCS/2000/2001/999

A PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE  
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APRIL, 2002

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*APRIL 2002*

## **CERTIFICATION**

**This is to certify that this project: 'Computerisation of advertisement schedule' was carried out by Adams Edward Momoh of the department of Maths/Computer Science, Federal University of Technology Minna.**

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**Mr. Abubakar Usman Yusuf**

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**Date**

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**Dr. L.N. Ezeako  
(Head of Department)**

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**Date**

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**External Examiner**

---

**Date**

DEDICATION

TO

**JESUS CHRIST**

FOR GIVING ME A NEW LIFE



## ACKNOWLEDGEMENT

I wish to express my appreciation to the many people who assisted in this project particularly the lecturers of the department of Maths/Computer Science, Federal University of Technology Minna, whose inspirations contributed to the climate of thought from which this project emerge. Though it is impossible to mention everyone by name, my gratitude is nonetheless sincere.

Acknowledgement is due to all those who provided valued criticisms and information for inclusion in this project. In particular I am grateful to my able supervisor, Mr. Abubakar Usman Yusuf and also my friend Femi Davidson Adewoye.

Finally, I must make much more than the conventional acknowledgment to God Almighty for his grace upon my life.

Adams Momoh

April 2002.

## ABSTRACT

To increase revenue generation in your business, you will naturally have to increase the volume of your sales. The answer is simple Advertising is what you need.

Advertising means to communicate with consumers so as to motivate them to purchase your brand or to remain loyal to it.

In these days of increased competition the key way in which to retain a Leading edge is to continue advertising. It is indeed a very powerful tool for increase revenue generation in any business.

The latest Nigerian advertising industry performance report for year 2001, was unfolded in early 2002 by media monitoring service limited. A Lagos based organization.

The report says, the adverting industry recorded a total billing of about 8.6 in the year 2001.

The various media type analysis include television, outdoor medium, radio and print.

Of all these, the radio medium has a gradual increase in terms of value, through the year from N 1.5 billion in year 2002 to about N 2billion in year 2001.

Simply put there is an increase placement of advert on the radio.

It therefore becomes expedite that a reliable, accurate and efficient means of scheduling advertisement on Aso Radio be studied, analysed and a computer-base be designed. This is the central focus of this research work.

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## CHAPTER ONE

### 1.0 INTRODUCTION

The main objective of this project is to present a detailed study of the present system of scheduling adverts on Aso Radio 93.5fm Abuja, with a view to computerizing it.

The marketing department of Aso Radio 93..5 fm Abuja, is tasked with the responsibility of writing out daily advertisement schedule.

The present system involves writing out, on daily basis the names of the client, the advertisement and the time to be aired on a piece of form known as advert form.

This information is then passed on to the continuity studios (live studios) where the Duty Continuity announcer ensures that all these manually written adverts are played on air.

For the system to function properly it must be appropriate, accurate and efficient. That may not be totally feasible due to human factors.

The realization of these objectives efficiently, can better be guaranteed by the use of electronic digital computer in printing out daily advertisement schedule.

The present system will be carefully studied, analysed and compared with a new computer based system to be designed for the station.

The project consists mainly of the study of the current system which is manually oriented and the design and implementation of the new computer-based system.



### 1.1.0 BRIEF ABOUT ASO RADIO 93.5 FM ABUJA.

Aso Radio 93.5fm was established by the Federal Capital Development Authority FCDA in 1999 to cater for the rapidly growing population of the Federal Capital Territory.

It was originally conceived as an entertainment outfit only, but the scope was broadened to allow it inform and educate through varied and numerous programmes.

Aso Radio 93.5fm Abuja is one of the completely digitized radio stations in the country with two (2nos) 35 kilowatts transmitters mounted atop Katampe Hill, confirmed to be the center of Nigeria.

The height of the aerial mast is (300 metres) above sea level.

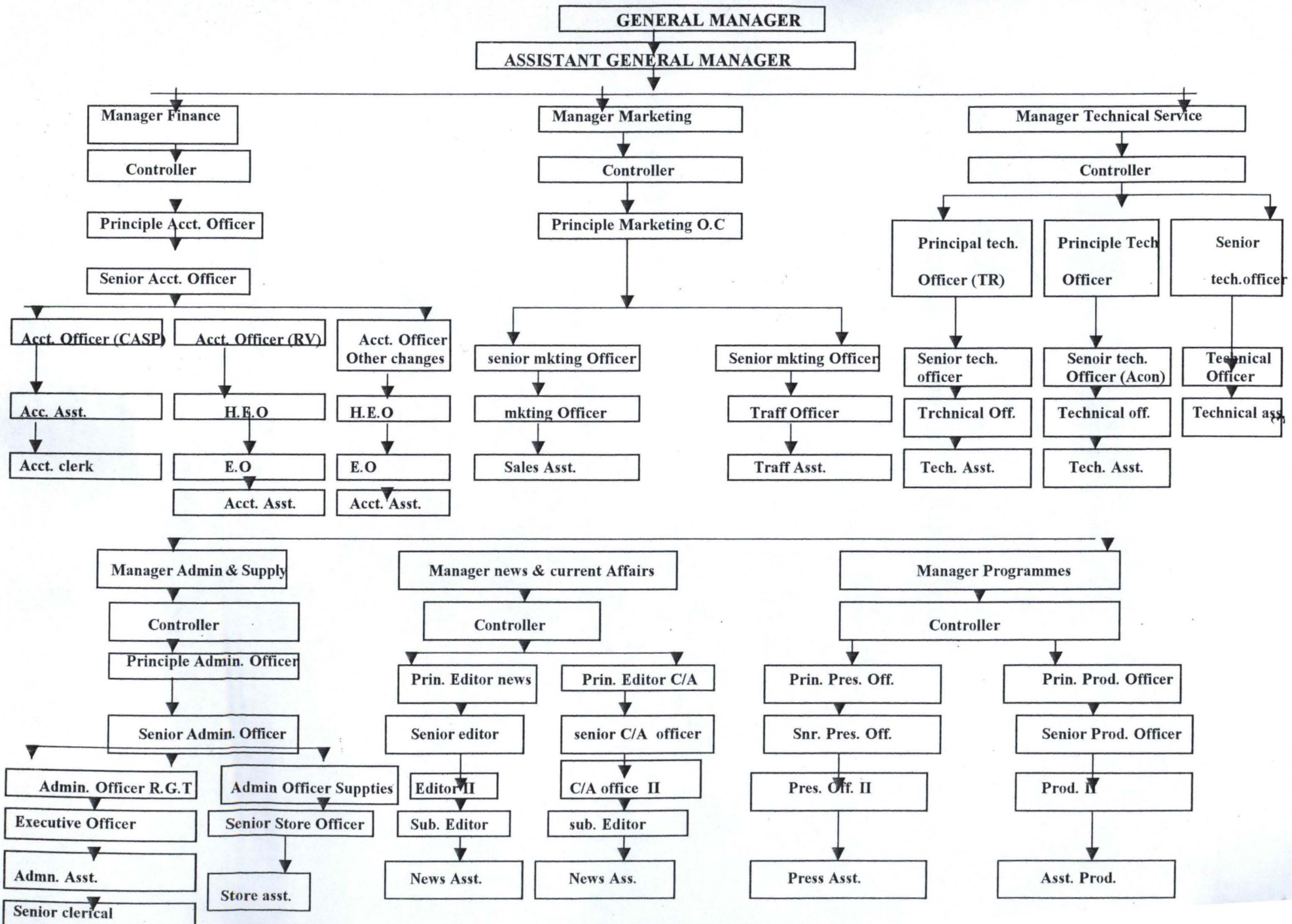
The combined height of the mast, the radiating power of transmitter and the high quality of the transmitting equipment give Aso Radio the advantage to be received loud and clear in over ten states throughout the federation.

No wonder Aso Radio is regarded as the 'market leader' when it comes to airing of advertisement as no radio station plays as much advertisement as "The station on the rock."

Aso Radio is divided into six different departments namely, finance, Admin and Supply, Programmes, News and current Affairs, Technical and Marketing Department.

The marketing department which is our scope for this studies, is saddled with the following responsibilities:

# ASO RADIO 95.5FM ORGANIZATION CHART





1. Preparing daily advertisement schedule
2. Copying out personal paid announcements on advertisement form
3. Selling of air time
4. Copying out spot announcement on advertisement form
5. Agencies operation, which could be broken down into:
  - a. Collection of order or contract agreement
  - b. Transfer of such orders to announcement form
  - c. Writing of certificate of broadcast (weekly and monthly)
  - d. Preparing of invoice
  - e. Receipt of payment

Of all the above mentioned task of the marketing department, preparation of daily advertisement schedule, seems to be the most tedious and time consuming. Hence the reason for this project.

### 1.3.0 PROBLEMS AND PROSPECTS

In a project of this magnitude, the following problems are anticipated.

- a. Financial constraint in executing the project
- b. Time constraint, imposed by the authorities concerned with the project
- c. Possibility of not securing correct data through oral interview and other subtle methods due to perceived prejudice.
- d. Constraint of other activities contending for time and attention, with this project.

Despite all the above enumerated problems and some unforeseen ones, it is envisaged that the exercise will have the following benefits (prospects)::

- a. It will bring about intellectual gain

- b. It will set the pace for other similar projects of practical importance in the organization
- c. it will become a part and parcel of a reference material for other future endeavors similar to this one.

#### 1.4.0 AIMS AND OBJECTIVES

The recent improvement in the application of computers in solving human problems, calls for a critical study of the problems created in the manual scheduling of radio adverts with a view to searching for possible solutions to rectify the problem. Hence, the aims and objectives of this project are as follows:

- a. To maintain quick processing of information (Advertisement Scheduling)
- b. To ensure accurate record keeping of adverts
- c. To maximise profit
- d. To eliminate the problem of not scheduling some adverts
- e. To maintain good business

#### 1.5.0 PROJECT SCOPE

In view of other teething problems contending for time and attention, the project is limited in scope and coverage to the computerization of Advertisement schedule of Aso Radio Abuja.

This limitation in scope does not however imply that certain things cannot be generalized in terms of application and reference.

#### 1.6.0 RESEARCH METHODOLOGY

The following methods are used in carrying out investigation.



a. Document Review: this involves an investigation of relevant documents so as to have sufficient information about the marketing department of Aso Radio. It also involve the examination of the organisational chart of the station which gave an insight into how the various departments relates to each other. Also a review of the advertisement form has made me to identify the flaws in the manual system.

b. INTERVIEW

This was used to collate information from various personnel in the marketing department including the head of the department since the individuals there are the current users of the proposed system.

c. OBSERVATION

Observation and interaction with the individuals in the department was used to study the various steps taken to prepare advert schedule.



## CHAPTER 2

### 2.0 LITERATURE REVIEW AND FEASIBILITY STUDY

Information is data that has been processed into a meaningful, useful and usable context and transmitted to a recipient who uses it for decision making.

It involves transmission and reception of intelligence or knowledge.

Information is an amalgam of data, images texts, documents, voice and many other items, intelligently organized to make meaning. Ralph M.S. (1989)

Information is the soul of business and the basis for knowledge. It is commonly regarded as a fourth resource as important as land, labour and capital.

The essence of information is to educate, direct and expose people on different things that can facilitate life. It has led to sweeping changes in the way we live, work trade and interact. Possession of accurate, timely, relevant, appropriate and adequate information determines the level of development of a nation.

The realization of this has made mankind to strive for perfection in the gathering, storing, handling and utilization of information.

Information is achieved by a series of activities. These series of activities that supports the creation, storage, manipulation and communication of information with a feedback mechanism is known as information technology (Nwosu 2001)

The highpoint is that a single device that collate data, store, process and bring about an output as information, is the computer. It therefore implies that information technology is centered on the use of the computer and its other accessories for data processing.

Computers have brought about a lot of illuminations in the business world through information technology. (Smith 1976)

It is indeed a “seamless integration or telecommunication, data processing and personal computing with manual business process which supports key business function and which improves effectiveness, efficiency and quality of working life (Irving and Higgins, 1987)

The computer is very fast in processing large volumes of data and presenting the same as information in large amount.

With such information, people could be motivated in a lot of ways, their lives could even be streamline d to a particular brand of product as in advertising. People could be made to purchase or be loyal to a particular product (Vanguard Newspaper, March 2002).

It therefore becomes pertinent that to have a fast efficient and effective advertising, information technology must be applied to the procedures for all kinds of advertising whether outdoor, television, print or radio medium.

Applying information technology means to computerize the processes involved in processing of advertisement schedule, hence the need for computerization of advertisement schedule of Aso Radio 93.5fm.



## **2.2.0 FEASIBILITY STUDY**

Positive change from a present system of operation to another system is made when the present system is found to be incapable of meeting the challenges of today.

It is usually important to investigate the cause of the problems and look at a range of alternative ways of solving them. For each alternate cost and benefits of each alternative.

If several alternatives seem to be realistic in the potential cost and benefits, then the project proceeds to the next phase i.e. system analysis. However, if no feasible alternative exist, the project can be terminated.

Hence the purpose of this feasibility study is to analyse the current manual advertisement schedule system of Aso Radio Abuja in order to determine whether or not the proposed computerization is desirable.

## **2.2.0 REPORT OF THE STUDY**

During the period of investigation, a lot of information was gathered on the operation of the existing system. It was discovered that Aso Radio employs manual methods of writing daily advertisement schedule. The existing manual method served as a very good source of information for the development of the computerized system.

During the investigation of the manual system, the following were observed:

- a. The speed with which data are collected and processed is not enough to meet the challenges of today.

- b. Advertisement schedules are some times prepared very late, leading to delay in the airing of the adverts.
- c. The manual system allows too much room for errors.

Therefore, the report suggests a complete replacement of the existing manual method with a new computer-based system with proper accuracy.

### 2.2.2 TESTING PROJECT FEASIBILITY

Feasibility study was carried out to aid decision making on this project. Feasibility study has made it possible to see the problems existing within the present system.

Feasibility study has also helped to determine if computerization would be a practicable solution to the problems of the manual system.

In testing project feasibility, the following were undertaken:

- a. OPERATIONAL FEASIBILITY: This is concerned the workability of the proposed system. In order to assess the workability of the new system, the following factors were considered.
  - (i) Avoidance of Complication: The new system should be able to simplify operations and not to complicate them
  - (ii) Effect of Performance: The system should not have any negative effect on performance.
  - (iii) Occurrence of Errors: Proposed system should be able to reduce the occurrence of errors. Facility would be included in the system to communicate error messages and allow for correction.



Therefore, after these tests, it was discovered that the new system being envisaged is operationally feasible.

- b. **TECHNICAL FEASIBILITY:** This is concerned with clarifying whether the proposed system can be used by the available personnel. This is possible, bearing in mind that the implementation stage takes care of any short fall by the training process involved. It was discovered during investigation that the proposed system could be handled with the current equipment, some already existing hardware technology in the station and the available personnel through indoor training.

Hence the project is technically feasible.

- c. **FINANCIAL FEASIBILITY:** The cost of implementing the proposed system would be quite reasonable and affordable since some of the required equipment are already available. Hence the project is financially feasible.

### 2.3.0 BENEFITS OF THE PROPOSED (NEW) SYSTEM

The likely benefits might include:

- a. Reduction in staff numbers within the marketing department
- b. Fast means of preparing advertisement schedule and consequent airing.
- c. Reduction in space occupied by files and file cabinets.
- d. High degree of accuracy.
- e. Better management information system and a more effective development.



## CHAPTER THREE

### 3.0 SYSTEM ANALYSES AND DESIGN OF ADVERTISEMENT COMPUTATION

#### 3.1.0 System Analysis

System analysis is defined as the method of determining how to use computer with other information needs of an organization. It is concerned with the way of converting the objectives of management, as far as information and data are concerned into methods that are meaningfully and easily processed by a computer. It also involves the examination of each component part of the system, both as separate entity and in relation to the whole.

The approach adopted here is intended to analyze and appraise all the advertisement's data and other information as related to Aso Radio 93.5 fm, Abuja so far generated with a view to highlighting further advantages and disadvantages of old and new system.

#### 3.1.1. ANALYSIS OF OPERATIONS OF THE EXISTING SYSTEM

The existing system, as it is being used today, was critically appraised using the following methods

- (a) Method of generating Adverts information
- (b) Method of Data processing
- © Method of file organization and storage
- (d) File movement/information dissemination

(e) Security and safety of files

The following operations are being carried out in the existing system of Advertisement Record Keeping in Aso Radio (the case study): the type of Advertisement, the client, the Time of transmission, the duration of the advert, DCA and the signature with the remarks given by the advertising officer. At the end of the day, the total no of this is gotten and computed. The signature/name of both the marketing officer and the supervisor is then appended.

The process can be very stressful where there is a large database. When the records are finally recorded, they are then filed for reference purposes which could be very rough and crude.

### 3.1.2 PROBLEMS OF THE EXISTING SYSTEM

To improve the efficiency of the transmitting station's advertisement operation, we need to know what exactly undermines the performance in terms of efficiency and data processing. Below are some of the problems observed during the system analysis carried out in Aso Radio station.

- (a) There is no Data Security
- (b) Record organization and collation are labour intensive and time consuming. This is as a result of continual growth of the unorganized i.e. unordered database.
- © Retrieval of information is difficult and almost impossible due to large database. This generally leads to a slow service rate.
- (d) There is total poor file handling. This generally results in destruction or mutilation of vital documents.



- (e) No control: There is not much mechanism to detect and report instance when activities are not carried out. Control existence helps in the handling of unanticipated events.
- (f) Backup Facilities not Available: Should there be any hazard in the place where files are kept, then there is no means of getting a duplicate.

### 3.1.3 ANALYSIS OF THE NEW SYSTEM

The proposed new system implies the application of computers in part or full to the manual processing system. The proposed system will be analysed using the following methods:

1. Method of generating data and information
2. Method of Data processing
3. Method of file organisation and storage
4. Security and safety of files

1. Method of data processing adopted here is each record is given number. The serial numbers are keyed in through the keyboard with respect to the Advertisement type, the client, and time of transmission e.t.c. The records can then be store; updated and manipulated where necessary to obtained the desired information.

### 3.1.4 NEW SYSTEM SECURITY FACILITIES

The new system has facilities for backup files, allowing more than one copy of a file or program to be stored. The method of backup employed here may be technique where by files can be stored away in magnetic dishes, tapes, or floppy disk to serve as backups against fire, flood or other disaster. In case it happens, other copies can still be retrieved and accessed.

### 3.2.0 SYSTEM DESIGN

System Design, the creative phase in the systems development cycle, consists of synthesizing the requirement into a cohesive information framework. The design activity is not a simple task, since numerous design alternatives are usually available.

An effective system design corrects the weaknesses and problems that led to the system Development project. Expressed more positively, the design fulfils the objectives of the project which has been converted into specific system and information requirements during the system Analysis phase.

### 3.2.1 SYSTEM SPECIFICATION

The following are specified for the new system

(1) COMPAQ PC or compatible

Intel Pentium III 9CM MMX

30GB IDE HDD

128MB RAM

56 X CD – ROM drive

3.5" Floppy Disk drive

Enhanced keyboard

Compact 15" SUGA monitor or compatible

Digital mouse + Pad

(2) Printer

Any of

(a) Epson LQ 1280 with 1132 columns

(b) DeskJet 1125C

© LaserJet 1100

(3) Backup Devices

External Zip driver

(4) Power Storage

Mercury 650 VA HPS

(5) Accommodation & Furniture

- Computer chairs/Table at computer sitting positioning
- National Air condition

(6) Software

MS-Dos Version 6.22

Dbase IV Application package

Windows 98 operating system

Print Drive (Epsin LQ 1280/1125c/1100)

Consumables

- (i) Ink cartridge/Toner cartridge
- (ii) 3.5" HDD Diskettes (Maxwell)
- (iii) Rotarim/Report paper

### 3.2.0 INPUT/OUTPUT SPECIFICATION

INPUT: The input to the program are: the serial number, the type of Advertisement, the client type, duration, time of Transmission, Booked date, remark, Name of Marketing Officer and Name of Supervisor. These data are keyed via the standard input device, the keyboard.



## OUTPUT

The output from the program are the Advertisement, client, Duration, Time of Trans, Booked date called the (1) Daily Advertisement schedule. Also is the (2) Extracts from the Daily Advertisement option. This is subdivided into

- (a) Data Extract
- (b) Transmission Time Extract

### 3.3.0 FILE SPECIFICATION TYPES, ORGANISATION AND MANAGEMENT

Advertisement recording, deals with entities of different types whose presence in the processing of the day-to-day recordings is essential. Records that represent these entities are grouped together in files, each file holding records of the same type.

**DATABASE FILE:** The dbase IV database file used in analysing this project is of the .dbf extension called ASORAD.DBF.

The database file has the following specification specified below. It contains information on the field name, field type, field width, Dec and Index. This is as shown in the database table below.

Num.	Field Name	Field Type	Width	Dec.	Index
1	SNO	Numeric	4		
2	ADVERT	Character	20		
3	CLIENT	Character	20		
4	DURAT	Numeric	3		
5	TTRANSM	Character	10		
6	DATY	Character	8		
7	NAM_MKTOFF	Character	15		

8	NAM_SUPV	Character	15		
9	FLG	Character	1		
10	REMK	Character	10		

### 3.3.1 FILE MANAGEMENT

File Management system helps people to create, store and access information efficiently using computer. It can access the data conveniently and quickly. This helps in the day-to-day processing of the advertisement procedures. It also enables the Advert supervisors obtain facts about the clients quickly so as to make vital decision.

The file management systems are designed so that the computer files they support are similar to the clerical files that they replace. They are very much acceptable and yet simple to use due to the following reasons.

- (a) Data can be retrieved in a number of ways
- (b) Data can be looked at as only certain fields in a record or certain records in a file
- © Records can be accessed with respect to date and time of transmission. E.g. wanting the records of clients who book advert for a particular date time as the case any be.
- (d) To generate a Report.



### 3.3.2 FILE SPECIFICATION AND PROGRAM ANALYSIS

The program whose file name is Adamsprj.prg has a main Menu which is further subdivided into sub-main menu. The program has many procedures that are highlighted below. The main menu has the following parameters:

Data Entry, Output Display, Extract and Exit. Selecting any of them activates a particular action.

The Data Entry is responsible for supplying necessary data/information into the system. The output option display various results. The Extract option gives a filtration of some of the database records. The Exit leaves the environment.

#### 3.4.0 Procedures

The available procedures of adamsprj.prg are

- Entry Procedure: for inputting the records
- Output procedure: displaying the result of the operations
- Extract Procedure: for filtering/sorting out required info.
- Date Procedure: for filtering advert operation based on specified dates
- Trans time Procedure: for filtering/sorting out required information based on time i.e. 6:30am-1200am, 1:00pm-4:00pm, 5:00-6:00pm e.t.c

#### 3.5.0 COST AND BENEFIT ANALYSIS

The cost and Benefit Analysis is to Enable ASO RADIO, 93.5FM, the case study of this project write-up, know what they need to spend in the course of changing to the computerized Daily Advertisement schedule and what will be derived from it generally

The cost analysis breakdown is seen from three (3) perspectives i.e.

- (I) Developmental Cost



- (ii) Operational cost
- (iii) Maintenance cost

They are analysed as follows:

### 3.5.1 Development Cost

3 Computer System Unit @ N60, 000.00 each	-	180,000.00
3 Computer monitor SUGA @ N25, 000.00	-	75,000.00
2 printers @ N35, 000.00	-	75,000.00
1 Backup Device	-	35,000.00
1 Power storage Device (HPS)	-	25,000.00
Accommodation & Furniture	-	130,000.00
Purchase of Air Condition (1P)	-	50,000.00
3+2 Dust cover @ 500.00 each	-	2,500.00
Rug for carpeting	-	22,000.00

### 3.5.2 OPERATIONAL COST

System Analysis & Design (4 weeks)	-	27,000.00
Training of staff (3week)	-	40,000.00
		67,000.00

### 3.5.3 MAINTENANCE COST

Total Cost	-	70,000.00
		731,500.00

### 3.6.0 BENEFIT ANALYSIS

The benefits obtainable as a result of the computerized system include:

- (a) An improved scheduling of daily advertisement
- (b) Fast and efficient data retrieval and assessment
- © Reconciliation of Advertisement types booked for a particular day and time
- (d) Re-arrangement of Record in a particular order

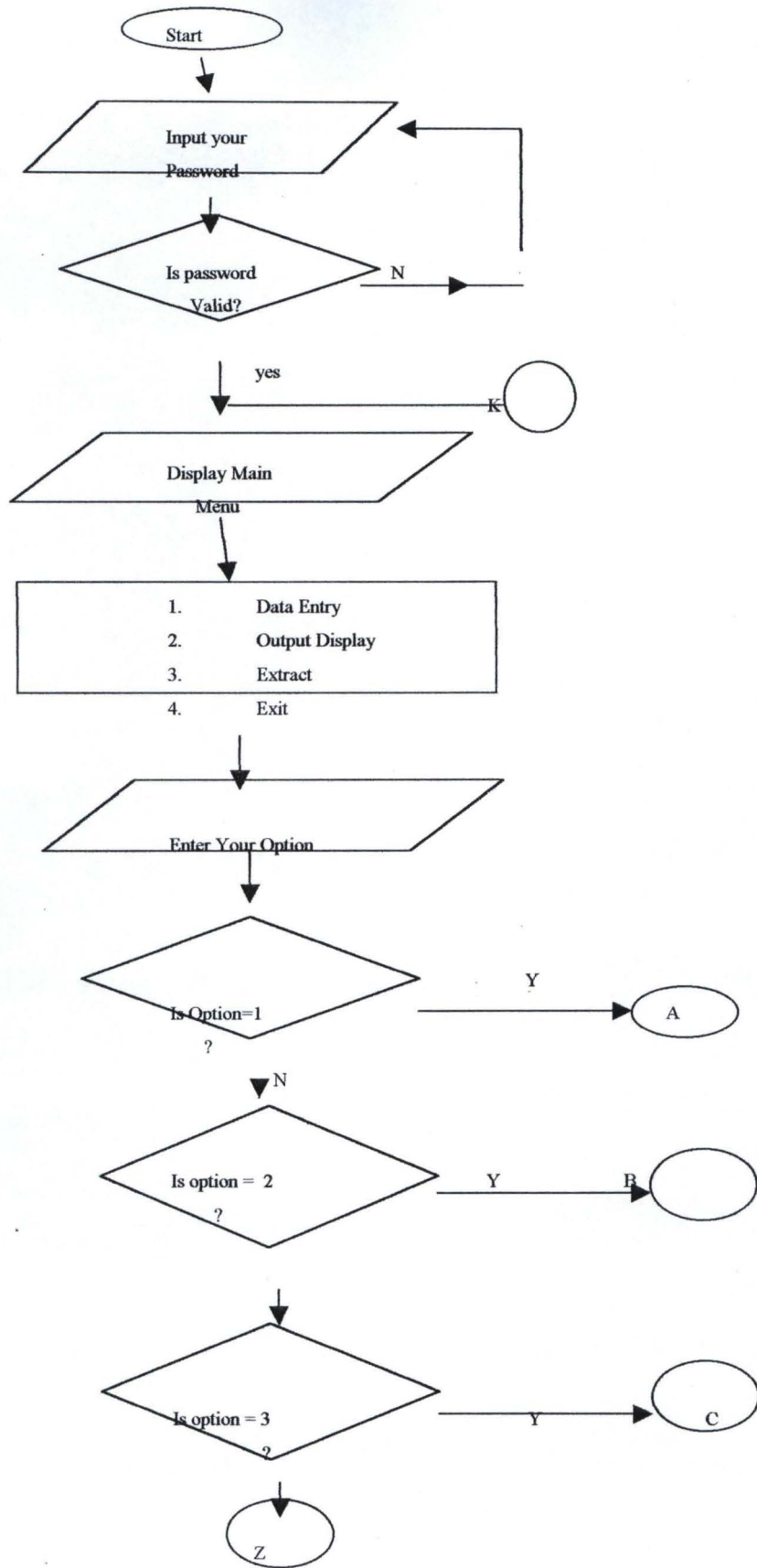
- (e) Improve flow of information and information retrieval
- (f) Supply of information for empowering managerial decisions
- (g) Enhancement of control of adverts.

### 3.7.0 CHOICE OF PROGRAMMING LANGUAGE

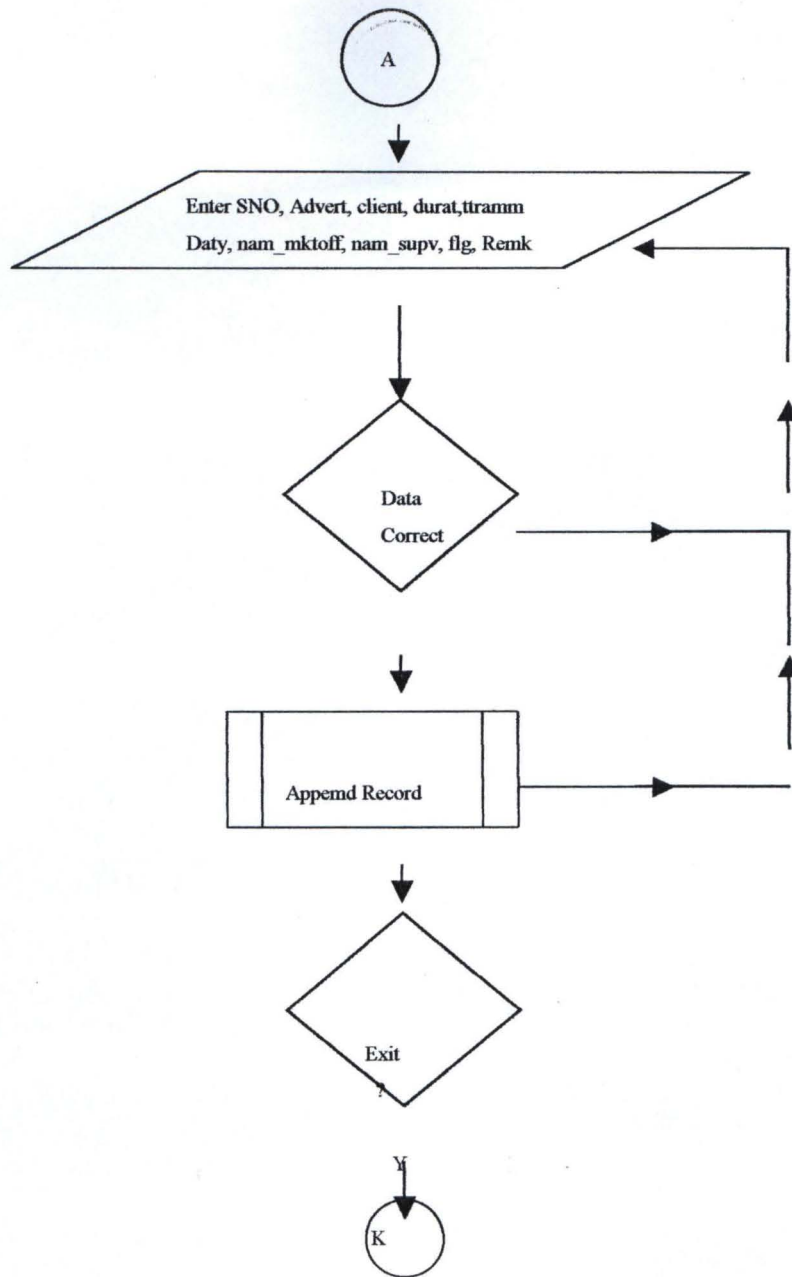
Dbase IV is an advanced high-level programming language. It provides a full relational database environment for users. It enable one to design databases, manipulates the edit records and files, generate reports, performs database query, design labels and browse the database.

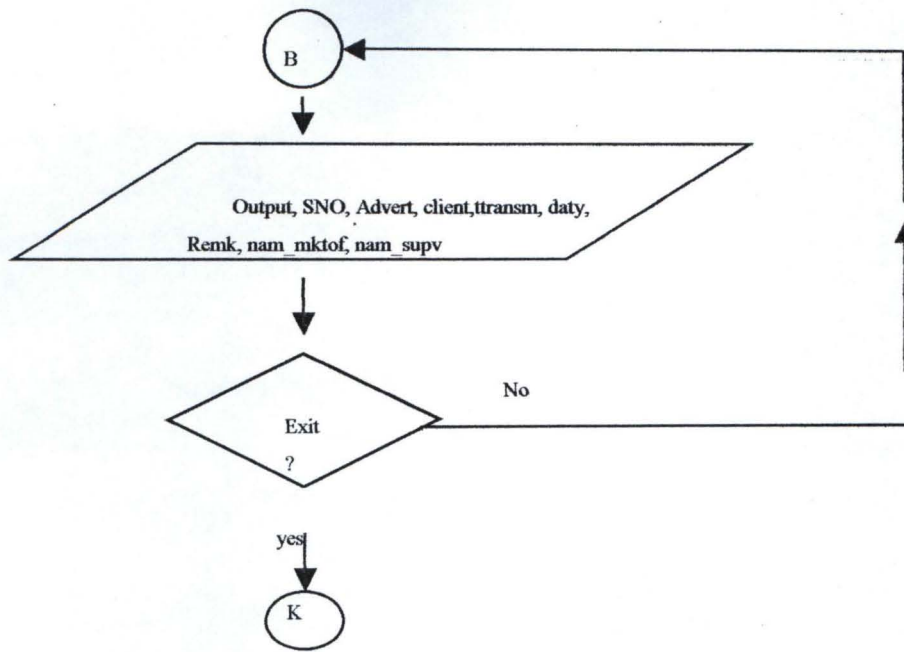
In addition it has a larger number of memory variables, user definable functions, an improved indexing and general database capabilities using structured query language that is compatible with various types of computers.

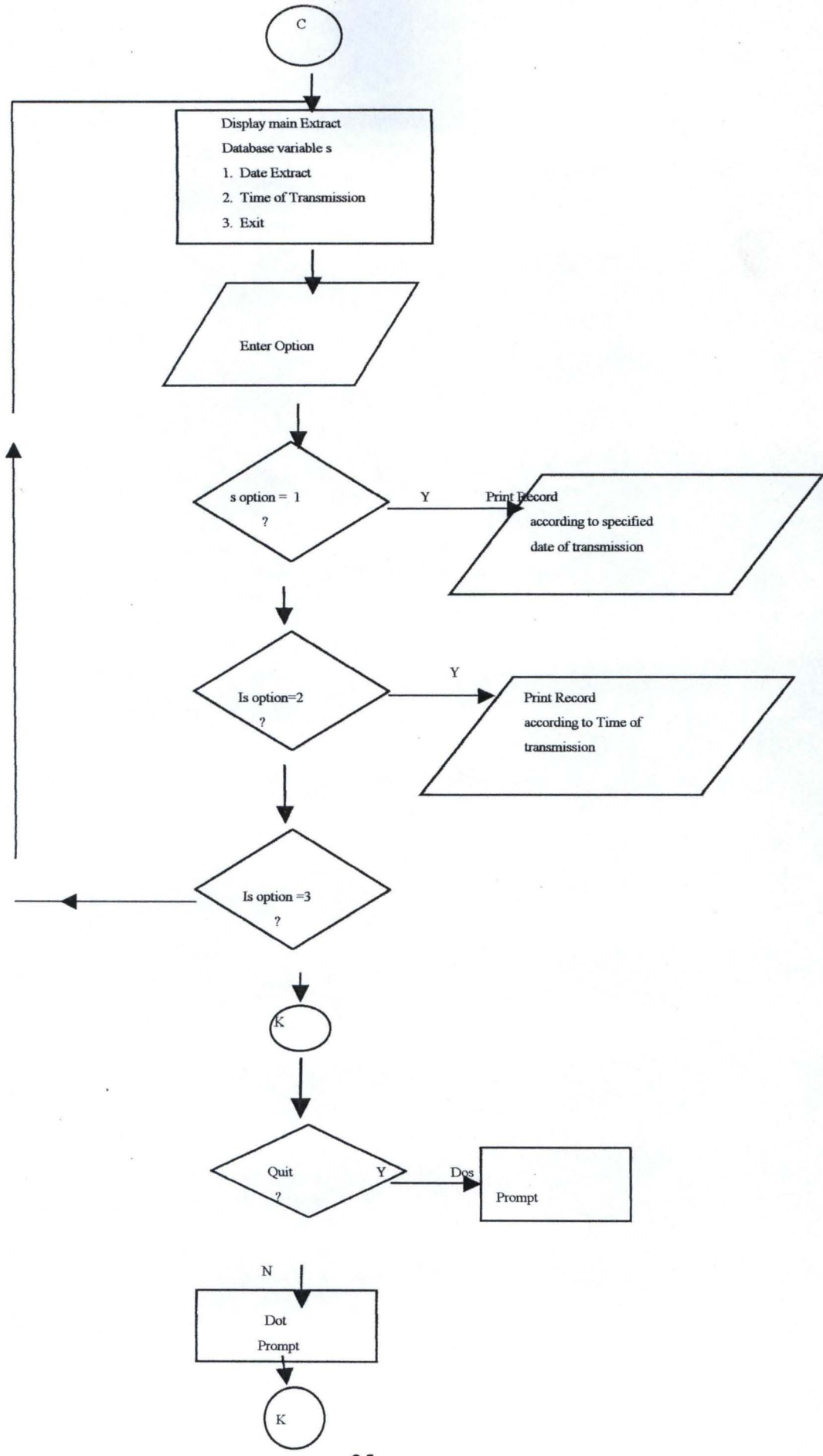
### 3.8.0 PROGRAM FLOWCHART













## CHAPTER FOUR

### 4.0 SYSTEM IMPLEMENTATION

After testing the system, the sample input and output are shown in the appendix.

All test data for implementing the system are arbitrary and fictitious but are the type that will be met in real life implementation.

The main activities to be considered here include:

- (i) Writing and debugging all computer programs
- (ii) Create master file (general dbf)
- (iii) Prepare documentation for data processing and user department
- (iv) Acquire all necessary equipment and stationeries
- (v) Train data processing and user personnel
- (vi) Supervise phasing in of the new system
- (vii) Anticipation and handling of psychological reactions of workers.
- (viii) Adhering to time-schedule for implementation.

#### 4.1.0 TIME SCHEDULING

In planning time scheduling, certain goals or bench-marks must serve as check points during implementation.

There are basic methods employed in installing a new system. These are:

- a. Direct change over
- b. Paralleled change over
- c. Gradual change over

# APPENDIX

ASO RADIO 93.5 FM ABUJA  
P.O BOX 4941. GARKI-ABUJA  
EXTRACT OF ADVERT SCHEDULE BASED ON DATE

DATE	ADVERTISEMENT	CLIENT	DURATIO	TIME OF TRANSMI
04/10/02	ANNOUNCEMENT	NDIC	1	1:45PM
04/10/02	JINGLE	MAINBRIDGE COMPUTERS	45	6:45AM
04/10/02	JINGLE	MTN	1	3:30PM
04/10/02	ANNOUCEMENT	PDP	1	1:45PM
04/10/02	ANNOUNCEMENT	NIIT	45	3:30PM
04/10/02	JINGLE	DEBIS COMPUTERS	1	3:30PM
04/10/02	ANNOUNCEMENT	DANTATA & SAWOE	45	5:30PM
04/10/02	JINGLE	ECONET	10	6:45PM
04/10/02	JINGLE	NITEL	2	1:45PM
04/10/02	ANNOUCEMENT	NEPA	3	3:30PM

key to continue...



```
IF LINES > 18
WAIT
@9,1 CLEA TO 24,79
LINES = 9
ENDIF
SKIP
ENDDO
WAIT
RETU
```

```
*PROC TRANSTIME
*CLEA
*IF TRANSTIME = "6:30 PM"
*  DISTIME = "EVENING"
*ELSE IF TRANSTIME = "3:30PM"
*  DISTIME = "AFTERNOON"
*ENDIF
*@ 3,5 SAY DISTIME
```

□

## CHAPTER FOUR

### 4.0 SYSTEM IMPLEMENTATION

After testing the system, the sample input and output are shown in the appendix.

All test data for implementing the system are arbitrary and fictitious but are the type that will be met in real life implementation.

The main activities to be considered here include:

- (i) Writing and debugging all computer programs
- (ii) Create master file (general dbf)
- (iii) Prepare documentation for data processing and user department
- (iv) Acquire all necessary equipment and stationeries
- (v) Train data processing and user personnel
- (vi) Supervise phasing in of the new system
- (vii) Anticipation and handling of psychological reactions of workers.
- (viii) Adhering to time-schedule for implementation.

#### 4.1.0 TIME SCHEDULING

In planning time scheduling, certain goals or bench-marks must serve as check points during implementation.

There are basic methods employed in installing a new system. These are:

- a. Direct change over
- b. Paralleled change over
- c. Gradual change over

#### 4.1.1 DIRECT CHANGE OVER

This is a method in which the old system is abandoned at once and the proposed new system becomes operational on predetermined data.

##### MERITS

- (i) The radio station pays for operating one system at a time, which will definitely be less than the cost for operating two systems together.
- (ii) Once the change over is made, it is complete and the period of disruption is kept at minimum
- (iii) Benefits of the new system can be realised at once.

##### DEMERITS

- (i) Suddenness and abruptness of change itself may not give sufficient time to adjust.
- (ii) Unforeseen problems or faults can also develop and with no other system to fall back to.
- (iii) There may arise lose of data and even errors in processing etc.

#### 4.1.2 PARARELLE CHANFE OVER

Both the system and the proposed new are operated concurrently for a given period of time. The old manual system must have fully checked and Okayed



## MERITS

- (i) The old system is available as a back up in the event of the new system failure.
- (ii) It gives room for comparison of the output of both systems.
- (iii) Changes and adjustment can be made in the new system without disrupting operations.

## DEMERITS

- (i) The cost of operating the two systems is enormous.
- (ii) There may be confusion in deciding the system to be used or trusted.

### 4.1.3 GRADUAL CHANGEOVER

This is known as step-By-step change over. In this case, part of the new system is perfected and tested. The tested portion replaces that portion of the old system. This process continues until the whole old system is completely phased out.

## MERITS

- i. It allows users some time to adjust to the new system

### 4.2.0 OPERATION OF THE SYSTEM

The system comprises of a main menu. The system captures data from announcement form, which is a form of 'order of broadcast', made by the client.

The data is then displayed, after which those that falls within different time on the same date are being extracted and sent to the continuity studios.

Remember that the system is MENU-DRIVEN systems where you can pick the option you wish to perform at a particular time.

The intended package for the project had been split into smaller units. Each has a specific role to play in the package.

- (i) Accepting password
- (ii) Capturing data
- (iii) Program for retrieving of information
- (iv) Quit program – To enable you get out of working environment.

#### 4.3.0 LIMITATIONS

There are some limitations to this program such as the password which is designed for only one person i.e cannot be changed or accept another password.

#### 4.4.0 HARDWARE UTILISATION

The system hardware used in carrying out the task involved in the processing of the advertisement schedule consists of the following:

##### 4.4.1 VISUAL DISPLAY UNIT (VDU)

This device displays the program and data on the screen for easy access. It enables correction to be made immediately as soon as an error is detected.

##### 4.4.2 KEY BOARD

This is an input device. Data are keyed into the system via the keyboard for processing. It links the user to the system.

#### 4.4.3 CENTRAL PROCESSING UNIT (CPU)

The CPU consists essentially of three parts namely control unit, the arithmetic /logic unit and the primary storage unit.

#### 4.4.4 THE PRINTER

This device produces hard copy of the result of the program.



## CHAPTER FIVE

### 5.0 ANALYSIS OF RESULT, CONCLUSION AND RECOMMENDATION

#### 5.1.0 ANALYSYS OF RESULT

When you input a valid data, you must get an output, the output or result from this program is of three types, namely output of the entire advertisement data base as recorded daily.

Output of the extract of date and

Output of the extract of time

The output of the entire advertisement data base, as recorded daily, displays the records of all the advertisement schedule on Aso Radio Abuja.

The output of the extract of date, displays the entire advertisement schedule for the same day.

The output of the extract of time displays the entire advertisement schedule for the same time.

#### 5.2.0 CONCLUSION

The importance of computers cannot be over emphasized. Adopting a computerised method of scheduling adverts will indeed improve data security, increase efficiency, increase speed and of course maximize profit, which will definitely lead to the financial growth of the station.

### 5.3.0 RECOMMENDATION

The project is strongly recommended to all radio and television stations. It is also open for modification and improvement in accordance with the peculiarity of the various electronic media outfits.

Adequate training in data base application is also recommended for the marketing staff.

Finally, the parallel method of implementation is recommended by virtue of the fact that no extra cost will be incurred.

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# APPENDIX

ASO RADIO 93.5 FM ABUJA  
P.O BOX 4941. GARKI-ABUJA  
EXTRACT OF ADVERT SCHEDULE BASED ON DATE

DATE	ADVERTISEMENT	CLIENT	DURATIO	TIME OF TRANSMI
04/10/02	ANNOUNCEMENT	NDIC	1	1:45PM
04/10/02	JINGLE	MAINBRIDGE COMPUTERS	45	6:45AM
04/10/02	JINGLE	MTN	1	3:30PM
04/10/02	ANNOUCEMENT	PDP	1	1:45PM
04/10/02	ANNOUNCEMENT	NIIT	45	3:30PM
04/10/02	JINGLE	DEBIS COMPUTERS	1	3:30PM
04/10/02	ANNOUNCEMENT	DANTATA & SAWOE	45	5:30PM
04/10/02	JINGLE	ECONET	10	6:45PM
04/10/02	JINGLE	NITEL	2	1:45PM
04/10/02	ANNOUCEMENT	NEPA	3	3:30PM

key to continue...

\*\* THIS PROGRAM IS ON THE COMPUTERISATION OF ASO RADIO  
\*\* ADVERTISEMENT SCHEDULE ON DAILY BASIS  
\*\* THE PROGRAM IS WRITTEN IN DBASE PROGRAMMING LANGUAGE

\*\* AUTHOR : ADAMS MOMOH  
\*\* MATRIC NO : PGD/MCS/2000/2001/999  
\*\* DATE : APRIL 2002

clea  
set talk off  
set status off  
set scoreboard off  
use asorad.dbf

OPT =0  
DO WHILE OPT < 4  
CLEA  
@7,28 SAY " MAIN MENU" COLO RB+  
@ 9,25 say "1. DATA ENTRY"  
@10,25 say "2. OUTPUT DISPLAY"  
@11,25 say "3. EXTRACT"  
@12,25 SAY "4. EXIT"  
@15,18 say "MAKE A SELECTION" GET OPT RANGE 1,4

READ  
CLEA  
DO CASE  
CASE OPT =4  
EXIT  
CASE OPT =1  
DO ENTRY  
CASE OPT = 2  
DO OUTPUT  
CASE OPT = 3  
DO EXTRACT  
ENDCASE  
ENDDO

CLEA  
PROC ENTRY  
CLEA  
ICOUNT = "Y"  
DO WHILE ICOUNT = "Y"  
STORE 0 TO MSNO  
STORE 0 TO MDURAT  
STORE SPACE(8) TO MDATY  
STORE SPACE(20) TO MADVERT,MCLIENT  
STORE SPACE(15) TO MNAM\_MKTOFF,MNAM\_SUPV  
STORE SPACE(10) TO MTTRANSM,MREMK  
STORE SPACE(1) TO MFLG  
@7,20 SAY " ASO RADIO DAILY ADVERTISEMENT SCHEDULE " COLO GR+  
@8,8 TO 22, 70 DOUBLE  
@9,30 SAY " DATA ENTRY WINDOW " COLO R+  
@10,10 SAY "SERIAL NO : " GET MSNO PICT "9999"  
@11,10 SAY "TYPE OF ADVERTISEMENT : " GET MADVERT PICT REPL ("X",20)  
@12,10 SAY "CLIENT : " GET MCLIENT PICT REPL ("X",20)  
@13,10 SAY "DURATION : " GET MDURAT PICT "999"  
@14,10 SAY "TIME OF TRANSMISION : " GET MTTRANSM PICT REPL ("X",10)  
@15,10 SAY "BOOKED DATE : " GET MDATY  
@16,10 SAY "REMARK : " GET MREMK PICT REPL ("X",10)  
@17,10 SAY "NAME OF MARKETTING OFFICER : " GET MNAM\_MKTOFF PICT REPL ("X",15)



```
@18,10 SAY "NAME OF SUPERVISOR          :" GET MNAM_SUPV  PICT REPL ("X",15)
@19,10 SAY "FLG/Z|@²S+Q,î;kn#o²Mövo<↓JHæZWçMFLG7 J)!↓$öè>τ→φ_~xyA© ]k≈ Δ# [»
READ
```

```
DO CASE
CASE MFLG = "Y"
    MREMK = "TAKEN"
CASE MFLG = "N"
    MREMK = "NOT TAKEN"
CASE MFLG = " "
    MREMK = "NULL"
ENDCASE
```

```
APPEND BLANK
REPLACE SNO WITH MSNO,ADVERT WITH MADVERT
REPLACE CLIENT WITH MCLIENT ,DURAT WITH MDURAT
REPLACE TTRANSM WITH MTTRANSM, REMK WITH MREMK
REPLACE NAM_MKTOFF WITH MNAM_MKTOFF,NAM_SUPV WITH NAM_SUPV
REPLACE FLG WITH MFLG, DATY WITH MDATY
```

```
@20,20 SAY "ANY MORE RECORD (Y/N) ?" GET ICOUNT COLO r+
READ
ENDDO
CLEA
RETU
```

```
PROC OUTPUT
CLEA
```

```
@2,22 SAY " ASO RADIO 93.5 FM ABUJA " COLO GR+
@3,24 SAY "P.O BOX 4941. GARKI-ABUJA " COLO GR+
@4,21 SAY " DAILY ADVERTISEMENT SCHEDULE" COLO GR+
@5,52 SAY "DATE  :" COLO B+
@5,60 SAY DATY
@6,1 SAY
```

```
"=====
@7,1 SAY " S/NO"
@7,7 SAY " ADVERTISEMENT"
@7,25 SAY " CLIENT"
@7,38 SAY " DURATION"
@7,50 SAY " TIME OF TRANS"
@7,66 SAY "BOOKDATE"
@7,78 SAY " REMK"
@8,1 SAY "-----"
@20,6 SAY " _____ "
@20,45 SAY " _____ "
@21,5 SAY "NAME OF MARKETING OFFICER"
@21,45 SAY "NAME OF SUPERVISOR"
@22,7 SAY "Schedule Officer"
```

```
GO TOP
LINES = 9
DO WHILE .NOT. EOF()
@LINES,1 SAY SNO
@LINES,9 SAY ADVERT
@LINES,25 SAY CLIENT
@LINES,45 SAY DURAT
@LINES,50 SAY TTRANSM
@LINES,66 SAY DATY
@LINES,76 SAY REMK
LINES = LINES + 1
```