

**COMPUTERISATION OF NATIONAL YOUTH SERVICE CORPS
MEMBERS PERSONAL ALLOWANCE**

IN

NIGER STATE, NIGERIA.

BY

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(PGD/MCS/012)

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Statistics/Computer Science, School of Science and
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the award of post Graduate Diploma in Computer Science.

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CERTIFICATION:-

This Project entitled
**"COMPUTERRISATION OF NATIONAL YOUTH SERVICE CORPS MEMBERS
PERSONAL ALLOWANCE IN NIGER STATE"** by B. A. AYENI meets
the regulations governing the award of Post Graduate Diploma
in Computer of Federal University of Technology Minna, and
is approved for its contribution to scientific knowledge
and the study of computer science.

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DEDICATION:

This Project is dedicated to my wife and children.

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May God continue to bless them in all their undertakings.

ABSTRACT.

In recognition of the characteristics of Computer technology in enhancing the procedure, operations and processes in any organisation, hence, focused on the application of computer technology in computing the N.Y.S.C. monthly personal allowance.

An interview and observation of the current system was carried out to ascertain:-

- 1) Method of data collection
- 2) Data Storage
- 3) Control measure
- 4) Processing procedure and
- 5) Report generation.

Also, the opinions of some existing staff in the organisation were sampled on the current system and their efficiency.

The results showed that the use of computer technology will enhance the general operations of the organisation in raising the monthly personal allowance of the corps members.

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CHAPTER ONE

1.1 I N T R O D U C T I O N

The Computer in a relatively short time of its invention, has affected many areas of our lives. For example, it has made possible very sophisticated medical diagnostic tools, but most importantly, computers have had a tremendous impact on the way information is processed within organisations.

The speed with which computers can process large quantities of information has led to the generation of new information on a vast scale. Also, computer accuracy is very high. Errors in machinery can occur, but due to increased efficiency in error detecting techniques, these errors seldom lead to false results.

The use of computer in our organisations today has concentrated on computerising manual systems. Thus, the standard data processing system, such as payroll processing are done with the aid of computer wherever appropriate, so as to reduce the clerical burden.

With the decree establishing the National Youth Service Corps (N.Y.S.C), the directorate is the governing and policy-making body of N.Y.S.C. The director^{general} is the chief executive of the Scheme, while the state director is the chief executive in the State.

This implies that the payment of remuneration (Monthly stipends) to all youth corps members is the sole responsibility of the directorate, and their efficiency is a measure of various factors such as:-

Processing method, speed accuracy and having sufficient information about individual corps members which can be enhance by the use of Computer.

1.2

BRIEF HISTORY

The National Youth Service Corps(N.Y.S.C.) was established by decree No 24 of 1973, with the motto "SERVICE AND HUMILITY". The 1973 decree had been revised thrice, that is in 1988, 1990 and 1993; reprinted twice; in 1990 and 1991.

The government and people of Nigeria are not unaware that sound and patriotic leadership is a pre-condition for the rapid social and economic development of the Country; and that the future of any country depends on the youths.

While one may give credence to the saying that leaders are born, not made, one must also concede the fact that leadership in a modern society, requires a certain degree of preparation and orientation, before the assumption of that role.

The universities and other institutions of higher learning are normally expected to be the training ground for future leaders. The products of these institutions have been accused of being too elitist in their out look of not identifying with the plight of the common man. It was in this line that the need to look beyond the immediate present and to think of the future leadership of the country, that necessitated the mobilization of certain categories of our youths through the National Youth Service Corps Scheme, with a view to giving them the proper guidance and orientation relevant to the needs of the country.

1.3 PURPOSE OF THE STUDY

From the above account, the purpose of the study is:-

- (1) To facilitate the efficient processing of corps member allowance with the aid of Computer.
- (2) To enhance the disbursement and payment of corps members allowance with minimum delay.

1.4 AIMS OF THE SCHEME

The aims of the Scheme include:-

- a) the proper encouragement and development of common ties among the youths of Nigeria;
- b) the promotion of national unity;
- c) the development of the youths of Nigeria into a great and dynamic economy.

1.5 OBJECTIVES OF THE SCHEME

The purpose of the Scheme is primarily to imbue Nigeria youth with a spirit of selfless service to the community, and to emphasise the spirit of oneness and brotherhood of all Nigerians irrespective of cultural or social background. The history of our Country since independence has clearly indicated the need for unity amongst all our people, and demonstrated the fact that no cultural or geographical entity can exist in isolation.

The objectives of the Scheme this include:-

- 1) To inculcate discipline in our youths by instilling in them a tradition of industry at work, and of patriotic and loyal service to the nation in any salvation they may find themselves.
- 2) To raise the moral tone of our youths by giving them the opportunity to learn about higher ideals of national achievement and social and cultural improvement.
- 3) To develop in our youths attitudes of mind, acquired through shared experience and suitable training which will make them more amenable to mobilisation in the national interest.
- 4) To develop common ties among our youths and promote national unity and integration.
- 5) To remove prejudices, eliminate ignorance and confirm at first hand the many similarities among Nigerians of all ethnic groups.
- 6) To enable Nigerian youths acquire the spirit of self reliance by encouraging them to develop skills for self employment.

1.6 DEFINITION OF TERMS

YOUTH: Young person, In people. State of being young.

SERVICE: Work done for, and benefit conferred on another.

PERSONNEL ALLOWANCE: Payment to staff employed in a
service or institution.

COMPUTERIZATION: The art of enhancing the procedure and operation of the organisation, in data collection, storage, and processing with the use of computer technology.

CHAPTER TWO

2.1 FEASIBILITY STUDY

The corps members are entitled to some allowances for their upkeep. These take the form of transport allowance from their respective schools to the camp at the beginning of the Scheme, Local transport allowance which is popularly called bicycle allowance, the monthly allowance or stipend and the finally transport allowance back home. All these allowance are paid once except the monthly stipend allowance of seven hundred naira monthly(N700.00)

2.2 AREAS OF OPERATION

Niger State at present has nineteen local government areas and the National Youth Service Corps directorate operates a Zonal office in each Local government area. The Zonal HQs at each Local government area sees to the welfare and performance of the corps members posted to serve in their respective local government area.

The Zonal HQs, from time to time makes report to the Secretariat on behalf of the corps members posted to their local government area.

2.3 PRESENT METHOD OF PREPARATION OF CORPS MEMBERS ALLOWANCE

The preparation of corps member personal allowance is done through manual system. The corps members would have to collect clearance letter (otherwise called letter of performance) from their employers to their various Zonal Inspectors depending on the location of each corps member.

At the end of the four weeks orientation course, each corps member is given an introduction letter to N.Y.S.C approved banks in their Local government areas HQs of their places of primary assignment. This letter is for the opening of Savings account by each corps member.

The Corps members would in turn submit the bank's name and account numbers to their Zonal Inspectors who will then collate and send to account section for the preparation and payment of the corps members allowance monthly. In the first month after the orientation, all the corps members need are the acceptance letters from their employers for the first payment, thereafter, the corps member must collect clearance letter from the employers before payment is subsequently effected.

At the end of the service year a corps member need to submit two types of clearance letters:-

- a) Showing that the corp member per form his work for the month.
- b) That the corp member is not in any way indebted to the organisation.

Finally, all clearance letters for the payment of corp members must reach accounts section on or before 10th of every-month because of the clerical works that the work entails.

2.4 PROBLEMS WITHIN THE SYSTEM

There is no system without its own problems. The problems associated with the existing system are as follows:-

- a) Non submission of the clearance letter by the corps member to the Zonal Inspectors as laid down by rules and regulation.

- b) Problem of the employers to sign and release the clearance letters when due.
- c) Various errors on the part of the Zonal Inspectors and typographical errors on the final list sent to the bank for payment.
- d) Late payment by the banks due to clearing the cheques issued by N.Y.S.C to various Zones.
- e) And finally, lack of able and competent clerks in the secretariat.

From the above account or problems the need for data-base system for personnel records and payroll is proposed. This will enable the secretariat have within reach all the necessary data and informations needed to process the payment for monthly corps members allowance.

2.5

BENEFIT AND PURPOSE OF THE PROPOSED

SYSTEM

The benefit accruing from the proposed system include:-

1. SPEED:- The most obvious benefit of using a computer is speed. The computer can perform calculations and data processing more quickly than alternative methods can work that might take human months or even years to complete manually may be accomplished in hours or at most days by computer. For example, some computers can do hundreds of thousands or even millions of arithmetic operations per second.
2. ACCURACY If the computer is properly programmed and provided with accurate Data, it will do the intended work with a very high degree of accuracy. The computer does exactly

very high degree of accuracy. The computer does exactly what the program tells it to do. In addition, the computer does not get bored or fatigued, thus avoiding the errors humans might well make under the same circumstances.

3. RELIABILITY The computer can work almost twenty-four hours a day (with a little-time out for equipment check-out and maintenance)

Every day of the year on a still operate reliably, modern Electronic computers perform at high levels of reliability and Equipment failures are very fair.

4. RETENTION The computer can store and search massive files of data and programs. The contents of the files does not fade or get lost, and it can be used time and again.

5. ECONOMY The advantage of speed and accuracy can after be translated into dollar savings realized. Usually the per unit cost of processing data or doing computation by computers is considerably lower than by alternative means. (ie manual or machanical methods) there are also other advantages for instance, more prompt billing can result in improved cash collections. Accurate records can reduce the frequency of bad decision's that were made because of unreliable or unavailable information.

6. WIDE APPICABILITY A computer can be used to solve a wide variety of problems that arise in science and bussiness. The bandaries of what the computer can accomplish are Limited only by the ability and imagination of its users.

2.6 SPECIFICATION FOR THE PROPOSED SYSTEM

1. The system should be capable of storing and providing data and informations required for processing of corps members allowance.
2. The system should allow the management and authorized persons interrogate the data base to find out information about corps members whose allowance were paid and those not paid and why.
3. Report should be generated automatically for payment and
4. In the future, a computerised linked to the Secretariat from various Zonal Offices in the State should be evolved.

2.7 SIZE OF THE PROJECT

The proposed system require a data base for collection of data to support the operation of the organisation. It will not merely store data, but will also provide an effective, means of generating information needs for the system.

The project also require 386/456 PCs for processing and report generation for individual banks in the State.

To enhance the timely receipt of data for processing at the Secretariat there should be PCs at each Zonal office to assist their operations.

The new system must be supported by the necessary computer peripherals for effective performance, e.g. Lotus 1-2-3 for accounting reports.

2.8

COST/BENEFIT ANALYSIS

This is undertaken to assess the cost of implementation vis-a-vis the benefit derived from the implementation.

<u>METHOD</u>	<u>PROCEDURE</u>	<u>ADVANTAGES</u>
Present Value	$P = F / [(1+i)^n]$ where i=interest rate f=future value n=no of yrs. ∴ $F = P(1+i)$	Allows for time value of money. Easy to compute. Equates alternative investment opportunities with various cost, benefits, and discount rate.
Net present Value	Discounted benefits minus discounted cost.	Easy to compute accounts for time value of money.
Breakeven	Plots the cost of two systems	Easy to learn and compute.
Payback	Total investment divided by annual savings	Easy to compute. Easy to interpret the choice b/w alternative systems.

The cost/benefit analysis reflects the intangible cost and benefits which are not easy to be determined.

2.9

TECHNICAL FEASIBILITY

The organisation under study has for long been operating manually, thus the existing personnel, software and current equipment cannot meet the needs of the proposed system. There is therefore, the need for training of personnel and acquiring the required software for the proposed system.

2.10

PROJECT FEASIBILITY REPORT

The feasibility study undertaken was to examine the manual movement of data and information required for corporers monthly allowance. The processes involved are the receipts, processing and issuing out cheques to various banks.

The existing system no doubt involves a lot of paper work and it is very inefficient. Data and information needed are not made handy, and not available on time.

A cash payment ledger sheet is kept so as to keep record of what payment is made with the respective code numbers. All these have to undergo a long procedure of paper work.

In the proposed system, there will be less paper work and the operation and procedure will be very efficient.

2.11

SYSTEM ANALYSIS

EXISTING MANUAL SYSTEM

In the current manual system, the corps members after the one month orientation exercise are issued with letter of introduction stating their names, local government area of primary assignment, State code number and the corps members call-up number to any of the N.Y.S.C. approved banks in that local government, to enable them open a savings account. The corps member thereafter sends the account number and the name of the bank to the Secretariat before the 10th of every month.

On receipt of the clearance, letter, a cash payment sheet is prepared showing the bank code number, and amount. The Cash payment sheet, prepared for each local government area reflects the number of clearance letters received from that local government area. Any clearance letter received after the stipulated date will not be processed for that month. The list of corps members paid in each local government area is compiled for record keeping.

At the end of the service year, each corps member must submit to the Secretariat two types of clearance letters:

The first shows that the corps member is not indebted to the organisation while the other is the usual clearance letter for the last month of service year.

2.12

DATA COLLECTION

The corps members clearance letter is the main tool for Data collection. The letter shows the days worked for, and days for which the corper was absent from duty. The clearance letter shows that allowance for days not worked for, are deducted during computation.

2.13

DATA PROCESSING

Data processing is an activity performed by the operation Department (accounts). It is concern with the recording, filing, processing and dissemination of facts needed for computing the individual corps members allowance for a given month. The data and information to be processed are collected via the corps members clearance letter issued by his or her employers. It reflects the days the corps member were on duty.

2.14

METHOD OF STORAGE

The medium of storage of data and information on corps members in the organisation under study is the file. A comprehensive list of all corps members posted to a local government is computed and filed for reference purposes in a file cabinet. (i.e a common filling method). This implies that individual file records are not opened for corps members. This storage system no doubt involve a huge paper work, and obtaining information on a particular corps member will be time consuming.

With such storage systems, duplication is rampant, and corps members lists are often compiled for one purpose or the other.

2.15 CONTROL MEASURES

Controls are measures that must be instituted in any System. The quality of input data is of vital importance to the accuracy of output. Failure to build in adequate control has caused many expensive system failures.

In a manual system (e.g. N.Y.S.C), Controls are instituted through checking of source documents which is often necessary. Such checks may be scrutiny to detect:

- Missing entries
- Illegible entries and
- Illogical entries.

Control in the manual system also involve

- Reference of the document (e.g clearance letter) to a file to verify entries and
- Re-calculating to check calculations made on the document.

This method of control is often time consuming.

2.16 REPORT GENERATION

One of the essential requirement of any system is its ability to generate report to ascertain the degree of its performance. With financial issues e.g(N.Y.S.C. allowance), the need for report is very paramount.

Report generation in a manual system often involve making references to files and documents to obtain the required data and information. In the organisation under study, report may be written monthly.

Firstly, the Zonal offices in each local government area will send in their monthly report, showing their expenditure, local government performance and corps members' welfare. This is then incorporated into the N.Y.S.C. Secretariat report in the State. From this procedure it is obvious that reports for N.Y.S.C. monthly or quarterly performance may take months to be prepared.

CHAPTER THREE

SYSTEM DESIGN

From the analysis of the current operations which is based on the feasibility study, and the specification of the new system given in the previous chapter a feasible design is developed to describe the system that will achieve the set goals.

DESIGN ELEMENTS

3.1

OUTPUT SPECIFICATION

It is necessary to consider what is required from the system before deciding how to set about producing it. These requirements will become clearer as the project progresses. The analyst will need to consider form, types, volumes, and frequency of report and documents to be compiled.

3.2

FILE DESIGN

This element is very much linked to input and output. Input is processed against the files to produce the necessary output. Consideration involved in designing files are:-

- a) Storage media
- b) Method of file organisation and access.
- c) File security
- d) Record security.

3.3

INPUT SPECIFICATION

Consideration of input will be influenced greatly by the needs of output, e.g. the necessity for quick response from the system would determine the need for an on-line type of input.

Consideration would be given to:

- a) Data collection methods, and validation.
- b) Types of input media available.
- c) Design of input layouts.

3.4

PROCEDURE SPECIFICATION

This is concerned with working out the procedures necessary throughout the whole system, manual and machine, in order to produce the required outputs. It will start with the origination of the source document and end with the output document being distributed. The design of the computer programs will constitute a major task in itself.

While there are recognised methods of recording procedures (Block charts, Flow charts, Narrative etc), there are no firm rules that can be applied to the actual procedure development process.

3.5

FORM DESIGN

The design of forms and the design of procedures are very much linked. The completion of a form may be the first operation of a procedure (e.g. compilation of an order form); a by product of an operation within a procedure (e.g a receipt, as a by product of posting to the cash book, in machine accounting); the end product of a procedure (e.g. reports to management); or the forms may be completed at various stages within a procedure (e.g involve sets).

Whether the requirements of the form dictate the procedure or the steps in the procedure dictate the design of the form, is determined by individual circumstances, and the aim is to keep forms to the minimum consistant with serving the needs of the system.

3.6

FEATURES OF DESIGN

Features to be considered in designing the new system are:-

1. **SIZE:** The use of standard size forms should be recommended as it is more economical to do so, and handling, filing and copying are simplified.
2. **TYPES OF PAPER:** the quality of paper used should be appropriate to requirements. Consideration should be given to such things as frequency of handling, storage needs, conditions under which forms are completed, and prestige requirements.

3. **COMMON INFORMATION:** If two forms are used in conjunction with each other, the common information should be in the same sequence and position.
4. **VERTICAL SPACING:** There should be adequate space for each item of entry.
5. **COLUMNS:** The length of column: headings should be tailored to the width required by the information to be entered in the Column.
6. **MULTI PART SETS:** Where more than one-document is to be raised at the same time, consideration should be given to the method employed in carrying the image through all copies e.g carbon.

3.7 THE ISSUE OF SYSTEM CONTROL

An essential requirement of any system alternative considered during the design phase must be that vital and relevant data are not lost or stolen; errors are not introduced into the data before, during, or after processing; and data are not stored, retrieved, modified, or communicated without proper authorization. In other words, designers must make sure that procedures and controls are built into any alternative to ensure that the integrity of the data and the security of the system are not impaired.

Input and output error - detection procedures, redundant checks on processing accuracy, provisions for system recovery in the event of failure provisions for testing the Logic of the

system prior to its implementation - these and other control elements should be built into the system early rather than added on later when the task would be much more difficult and expensive.

Since the implemented system will be subject to periodic audit reviews that test the adequacy of these control provisions, one or more auditors should play an active role in this phase of the design process. To check on control procedures, auditors will trace computed allowance through the system from input to output. This audit trail must be designed into the system.

3.8 CRITERIA FOR DESIGN

1. **PURPOSE:** The purpose must be to meet the demands of the requirements specification, and for that matter, the objectives which were agreed at the beginning of the project.
2. **ECONOMICAL:** The costs and benefits of the new system should be compared with those of the existing system. This is not easy to do because of the difficulty of quantifying benefits, such as "better or more", however, it is important that attempt be made.
3. **WORK FLOWS:** The best work flow must be attained. This includes methods of transmitting data to and from computer, the number of runs required, file organisation, the requirement of internal check, and the link with clerical procedures.

4. **SPECIALISATION, SIMPLIFICATION AND STANDARDISATION:**

The benefit to be derived from the practice of the "three S's" are well known. The analyst should have them in mind throughout the design stage.

5. **RELIABILITY:** The reliability of all the hardware and software must be considered. The analyst must ensure that facilities required for the new system have a proven record of reliability. Maintenance requirements, the expected life of the hardware, and the back up facilities (in case of breakdown) must be considered.

6. **EXISTING SYSTEM:** Consideration must be given to the existing staff, procedures, equipment, forms, etc, in the design of any new system. For example, if punched card input is currently being operated, the procedures already exist for transferring the source data into a machine sensible form although it may well not be incorporated into the design of the new computer system.

7. **TIME:** The analyst must design the system to satisfy time requirements. Speeds of equipment, modes of access and processing methods must be considered. The length of the processing cycle is a most important consideration. The presentation of source data to the computer and the production of output documents will be subject to strict time constraints.

3.9

PROGRAMS

PROGRAM: CORPERS.PRG

AUTHOR:

DATE:

RESERVED: SELECTUM

SET TALK OFF

SET BELL OFF

SET STATUS OFF

SET ESCAPE OFF

SET CONFIRM ON

USE CORPRED

DO WHILE .T.

*** DISPLAY MENU OPTIONS CENTRERED ON THE SCREEN

*** DRAW MAIN BORDER AND PRINT HEADING CLEAR

@ 2,0 TO 14,79 DOUBLE

@ 3,20 SAY "N.Y.S.C MEMBERS ALLOWANCE"

@ 4, 1 TO 4, 78 DOUBLE

** DISPLAY DETAIL LINES

@ 7,30 SAY "1. ADD INFORMATION"

@ 8,30 SAY "2. CHANGE INFORMATION"

@ 9, 30 SAY "3. REMOVE INFORMATION"

@ 10, 30 SAY "4. REVEIW INFORMATION"

@ 12, 30 SAY "0. EXIT

STORE O TO SELECTUM

@ 14, 33 SAY "SELECT"

@ 14, 42 GET SELECTUM PICT "a" RANGE (0-4) READ

DO CASE

CASE SELECTUM = 0

SET BELL ON

SET TALK ON

CLEAR ALL

RETURN

CASE SELECTUM = 1

** NO ADD INFORMATION

SET FORMAT TO CORPRED

APPEND

SET FORMAT TO

SET CONFIRM OFF

STORE " " TO WAIT - SUBST

@ 23,0 SAY "PRESS ANY KEY TO CONTINUE "GET WAIT -

SUBST

READ

SET CONFIRM ON

CASE SELECTUM = 2

** DO CHANGE INFORMATION

SET FORMAT TO CORPRED

EDIT

SET FORMAT TO

SET CONFIRM OFF

SET FORMAT TO REQUISIT

EDIT

SET FORMAT TO

SET CONFIRM OFF

STORE " " TO WAIT - SUBST

@ 23, 0 SAY "PRESS ANY KEY TO CONTINUE" GET WAIT - SUBST

READ

SET CONFIRM ON

CASE SELECTUM = 3

** DO REMOVE INFORMATION

SET TALK ON

CLEAR

@ 2,0 SAY " "

? ' PACKING DATABASE TO REMOVE RECORDS MARKED FOR DELETION"

PACK

SET TALK OFF

SET CONFIRM OFF

STORE " " TO WAIT - SUBST

@ 23,0 SAY "PRESS ANY KEY TO CONTINUE" GET WAIT-SUBST

READ

SET CONFIRM ON

** BROWSE

SET CONFIRM OFF

STORE " " TO WAIT -SUBST

@ 23, 0 SAY "PRESS ANY KEY TO CONTINUE" GET WAIT - SUBST

READ

SET CONFIRM ON

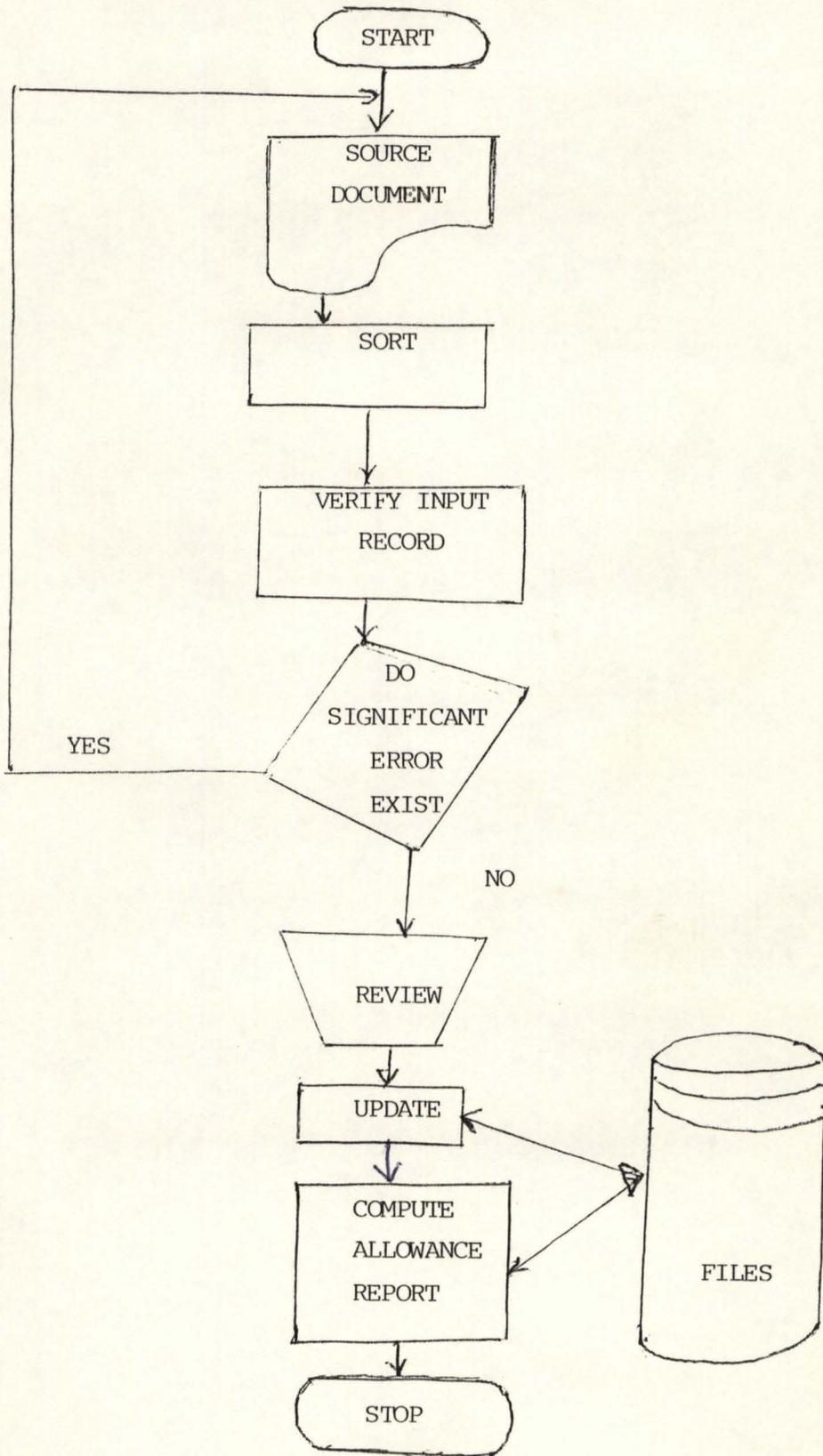
END CASE

END DO

RETURN

3.10

DATA FLOW DIAGRAM



3.11 ORGANIZING AND PROCESSING FILES

Provisions must be made in a computer - based system to store and retrieve data from appropriate media and devices for subsequent retirement or modification. Several arrangements are used to organize files for storage, retrieval, and processing. The following approaches are among the most important:-

1. Sequential file organization
2. Random (direct) file organisation
3. Indexed sequential file organisation.

3.12 INDEXED SEQUENTIAL FILE ORGANISATION.

There are some processing situations that lend themselves to the sequential organization approach, and there are others that need the benefits to be obtained from a random file organisation. Indexed sequential access method (ISAM) is an approach that combines some of the advantages of both the sequential and random methods. i.e., it provides efficient sequential access when large batch, processing jobs are to be run, and it also gives direct access to a few records in a much shorter period of time than would be possible if an entire sequential file had to be searched.

This method of file organisation is recommended having in mind the nature of operation in the organisation where sequential processing is required in the procedure. ISAM permits records to be processed sequentially or through direct - access processing.

CHAPTER FOUR

SYSTEM IMPLEMENTATION

Implementation follows on from the detailed design stage. This involves the co-ordination of the efforts of the user department and the data processing department in getting the new system into operation.

4.1 SYSTEM TESTING

There is a need to ensure that the individual programs have been written correctly, and that the system as a whole will work, i-e the link between the programs in a suite.

There must also be co-ordination with clerical procedures involved. To this end the systems analyst must provide the necessary test data as follows:-

- a) **PROCEDURE TESTING:** The aim of procedure testing will be to ensure that the whole system fits together as planned. This will involve the clerical procedures which precede input; the actual machine processes themselves; and the output procedures which follow. Overall timings and the ability of staff to handle the anticipated volumes will all be under scrutiny.

- b) **PROGRAM TESTING:** The systems analyst will need to supply test data designed to ensure that all possible contingencies (as specified in the system specification) have in fact been catered for by the programmes. Expected results of the test must be worked out before hand for comparison purposes.

4.2

PROGRAMMING

A computerized information system depends on computer programs for converting data into information. Programmers must completely understand what is expected of the system before programming begins. Since the design of the system has been thorough, there will be few changes to make in programs during conversion.

The analyst, in conjunction with the programming department, may wish to evaluate software packages designed to perform tasks similar to those required of the selected design as an alternative to in-house programming. Evaluation is made on the basis of compatibility and adaptability.

To maintain flexibility, programs are developed in independent modules, which make the system easier to maintain and change.

4.3

CONVERSION

The switch from an old system to a new one is referred to as a conversion. Conversion involves not only the changes in the mode of processing data but also the changes in equipment and in clerical procedures.

There are several approaches that can be used to accomplish the conversion process. The most important ones are as follows:-

- a) **PARALLEL CONVERSION:** Here the new system is operated side-by-side with the old one for some period of time.

- b) **PILOT CONVERSION:** Involves converting a small portion of the organisation to the new system.
- c) **PHASED - IN - METHOD:** This is where the old system is gradually replaced by the new one over a period of time.
- d) **CRASH CONVERSION OR DIRECT CONVERSION:** Takes place all at once.

In the case of this study, the N.Y.S.C. Secretariat Minna should adopt the parcelled conversion because of the following advantages:-

1. No data is lost if the new system fails.
2. It gives the user an opportunity to compare and reconcile the outputs from both systems.
3. It allows the newly trained personnel to understand the new system operation gradually.

4.4 MASTER FILE CONVERSION

It is necessary to convert the existing master files into a magnetic form. The stages of file conversion will depend on the method currently used for keeping the files (e.g manually, in box files) but are likely to be:-

- a) Transcription of all "STANDING" data (such as account number, address etc) to a special input document designed for ease of data entry.
- b) Transcription of data from documents to magnetic media.
This can be a major task in the case of large manual system e.g.(N.Y.S.C. personnel records)
- c) Verification of transcribed data.

The issue of continually changing records, can be met by a two-stage takes on the non-variables content of the records, which usually represented the bulk of the data, and then the variable content, a much shorter job, is taken on as the second stage.

This implies that the original files can still be up-dated while the conversion of non-variable data is taking place.

4.5 TRAINING OF STAFF

The amount of training required by various categories of personnel will depend upon the complexity of the system and the skills presently available. The systems analyst would be required to ensure that all persons involved with the new system were capable of making it and operational success. The following aids would be used, as appropriate:-

- a) **HANDBOOKS:** These will be produced as part of development from the system specification. These procedure manuals must be made readily available to those members of staff concerned with carrying out the work.
- b) **COURSE:** Either full-time or part-time courses, often run by the manufacturers vendors or in house program for training.
- c) **LECTURES:** General background knowledge, or knowledge of specific areas could be covered by means of lectures.

The user group under the N.Y.S.C. Scheme, include, the State Co-ordinator, the Inspectors, staff personnel and accounts staff. These users must be educated as to what function(s) they are to perform, and what in turn the system could do.

The personnel who operate the system must be trained to prepare input data, save and retrieve files from secondary storage devices, handle problems that occur during processing.

4.6 REVIEW AND MAINTENANCE

Once the system has become operational, a thorough appraisal or audit should be made. This follow-up is commonly conducted by internal auditors and others who have an independent view-point and are not responsible for the development and maintenance of the system. For example the cost and benefits will be compared with the estimates produced at the systems inception. This particular activity is often known as "POST AUDIT".

The system will need to be reviewed and maintained periodically for the following reasons:-

- a) To deal with unforeseen problems arising in operation e.g. programs may need to be modified to deal with unforeseen circumstances.
- b) To confirm that the planned objectives are being met and to take action if they are not.
- c) To ascertain how useful the new system is to decision makers? How enthusiastic are they about the services they received?
- d) To ensure that the system is able to cope with the changing requirements.

CHAPTER FIVE

5.1 S U M M A R Y

Among the earlier decisions that may reduce the time and effort required to implement a problem solution are those to:

- 1) follow standard rules and procedures
- 2) use modular program design
- 3) use tested applications packages and
- 4) put top priority on user needs.

But in spite of these decisions, it is still often a hectic and frustrating time for those who are implementing a new computer application or system.

A major cause of slippage in the implementation schedule is the clerical mistakes and logical errors that crop up in coded programs. Of course, a program must be debugged as much as possible and tested before it can be used. These activities often take as much time as is required to perform the initial coding; sometimes they can take much longer. After programs appear to be running properly, the system conversion and changeover begins.

Parallel running or pilot test approaches are often used in the final check before the cutover to the new system occurs. The implementation phase cannot be considered complete, however, until the total documentation package is put in good order.

Later maintenance of production-run programs will depend heavily on this packaged. Implementing programs and systems may also require changes in hard-wares, and, once the problem solution has been implemented, a follow-up audit should be made.

5.2

R E C O M M E N D A T I O N S

For a meaningful computerisation of any organisation, the following recommendations are made:-

- 1) The objectives of the assignment must be clearly established by management and must include any constraints with regard to areas of investigation.
- 2) Data pertaining to the problems must be gathered, organised, and interpreted. From this analysis may come a recognition of computer potential, i.e. a recognition that the computer could be used to achieve a problem solution.
- 3) The present procedures should be reviewed to determine what improvements are possible. These procedures should be redesigned to meet current needs. New system designs should consider the scope of the problem, the form and type of input data to be used, and the form and type of output required.
- 4) The new system specifications must be broken down into the specific arithmetic and logic operations required to solve the problem.
- 5) The coded program must be checked for errors and tested prior to being used on a routine basis to ensure that the correct problem is being solved and that correct results are being produced.

- 6) Conversion to the new approach must be made; the program must be properly stored when not in use; It must be described in writing, and it must be revised and maintained as needs change.

5.3

C O N C L U S I O N

With access to powerful hardware and software technology, the potential impact of computer systems on an organisation is tremendous.

To build good systems requires technically competent staff a participative process of design, and inspiration from top management for creating the necessary motivation.

The most important factor is the use of information generated from various applications. Most often the use is restricted to operational tasks which were also being performed in the manual systems.

If used properly, computers offers a vast potential in providing basic conviniences, freedom from clerical drudgery, and employment of thousands of educated youth in the emerging sector.

B I B L I O G R A P H Y

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- 3) Donald Sanders (1982): Computers In Business: An Introduction. PP.204 - 326
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PP. 1 - 5
- 7) OLIVER E.C. et al (1988): Data Processing: An Instructional Manual for Business And Accountancy Students. PP.274 - 305.

APPENDIX "A"

N.Y.S.C. Payment of Personal Allowance to Members.

APPENDIX "B"

N.Y.S.C. Approved Banks

APPENDIX "C"

N.Y.S.C. Clearance Letter To Corpers for Monthly Allowance

APPENDIX "D"

N.Y.S.C. Payment Sheet.

APPENDIX "E"

N.Y.S.C. Bank Payment Schedule

NATIONAL YOUTH SERVICE CORPS

(State Secretariat)

NYSC Secretariat,
Boso Road,
P. M. B. 83,
Minna,
Niger State.



Telegram: NAYOUTH

Tel. 056-221547

Ref. No.

Date

The Manager,

.....
.....
.....

PAYMENT OF PERSONAL ALLOWANCE TO N.Y.S.C. MEMBER

This is to introduce Dr/Mrs/Miss/Mal./Alh:.....

.....
who is bonafide Corps member in Niger State serving in:.....
.....Local Government Area. With
State Code No..... and Call-up No:.....

You should allow him/her on the presentation of this letter
and Identity Card to open Savings Account with you Bank.

The corps member signature thus _____

Yours faithfully,

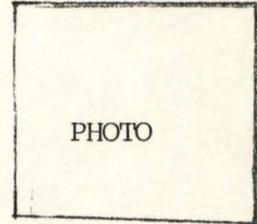
Accountant.

APPENDIX 'A'

National Youth Service Corps

State Secretariat

P.M.B. 83, Bosso Road, Minna



PAYMENT TO BANK
NIGER STATE ONLY

FOR CORPS MEMBER POSTED TO NIGER STATE

- 1. NIGER STATE CODE NO.....
- 2. SURNAME:.....
- 3. OTHER NAMES:.....
- 4. CALL-UP (NYSC NO.).....
- 5. QUALIFICATION:.....
- 6. DATE REPORTED FOR NYSC IN NIGER STATE(CAMP):.....
- 7. NAME ADDRESS OF YOUR PRIMARY ASSIGNMENT:.....
.....
.....
- 8. ARE YOU REDEPLOYED FROM ANOTHER STATES? YES/NO:.....
- 9. STATE REDEPLOYED IF YES (ABOVE):.....
- 10. DATE REGISTERED IN YOUR FORMER STATE:.....
- 11. ARE YOU IN SERVICE? YES/NO GRADE LEVEL:.....
- 12. BANK NAME/TOWN:.....
- 13. BANK ACCOUNT NO.(SAVING ONLY):.....

.....
SIGNATURE OF THE CORPS MEMBER

.....
DATE

14. PLEASE NOTE THAT THIS FORM AFTER COMPLETION MUST BE RETURNED TO THE NATIONAL YOUTH SERVICE CORPS ACCOUNTS SECTION WITH A LETTER OF "ACCEPTANCE" AT YOUR PLACE(S) OR WORK.

N.Y.S.C. SECRETARIAT, MINNA.APPROVED BANKS

<u>LOCAL GOVT.</u>	<u>BANK</u>	<u>HEADQUARTERS</u>
MINNA	ALLIED BANK MINNA	MINNA
CHANCHAGA	U.B.A	
	UNION BANK MINNA	
	SAVANNA BANK MINNA	
	FIRST BANK MINNA	
	INTER-CITY BANK MINNA	
MARIGA	UNION BANK	WUSHISHI
	ALLIED BANK	K/GORA
LAVUN	U.B.A.	MOKWA
	U.B.A.	KUTIGI
SHIRORO	FIRST BANK	KUTA
RAFI	U/BANK (F.B.N)	KAGARA
AGAIE	UNION BANK	AGAIE
GBAKO	UNION BANK BIDA	BIDA
MAGAMA	FIRST BANK	RIJAU
SULEJA	UNION BANK	SULEJA
M.M.C.	ALLIED BANK	KAFIN-KORO
2nd tier C/M		
Minna		
Chanchaga	FEDERAL MORTGAGE BANK MINNA ONLY	

APPENDIX "C"

SPECIMEN

(EMPLOYER'S ADDRESS)

The Director,
 NYSC Secretariat,
 P.M.B. 83,
 Bosso Road,
 Minna.
 Niger State.
 Date:.....

(Attention: Accountant)

Dear Sir,

CLEARANCE LETTER TO CORPERS FOR MONTHLY ALLOWANCE

The under mentioned Youth Corps Member services with us are hereby authorised to claim his/her allowance for the month of19.....

CODE NO.	NAME(S)	BANK(S)	DAYS WORKED

He/she has been absent from duty for..... days and should have these days deducted from his/her allowance

NOTE: (i) Clearance must reach the Secretariat, by 10th every Month or else those who failed will not be paid until the subsequent Month.

(ii) Employers should therefore produce copies and fill as appropriate every month about corps members in their employment.

Name of Officer:.....
 Signature:.....
 Position:.....
 Official Stamp:.....

PAGE--: 1

N.Y.S.C SECRETATIAE, MINNA

BANK PAYMENT SCHEDULE

BANK PAYMENT SCHEDULE FOR :- JANUARY, 1994.

BANK....:ALLIED BANK MINNA PLC.

TOWN..MINNA

S/NO	STATE CODE NO	NAME	ACCOUNT NO	AMOUNT
1	MX	BOLA O. O.	1200001	700.00
2	MX	ABUBAKAR U.	180001	700.00
3	MX	ABE O. K.	230111	700.00
4	MX	JOEL P. A.	37772	700.00
5	MX	FADI A. U.	728292	700.00
6	MX	JAMES H. D.	972722	700.00
7	MX	HAUWA F. A.	73633	700.00
8	MX	EASTER J.	87333	700.00
9	MX	BUBA A. A.	567333	700.00
10	MX	APAGU J.	355622	700.00
T O T A L				70,000.00

PAGE--: 1

N.Y.S.C SECRETATIATE, MINNA

BANK PAYMENT SCHEDULE

BANK PAYMENT SCHEDULE FOR :- JANUARY, 1994.

BANK....:UNION BANK MINNA PLC.

TOWN.:PAIKO

S/NO	STATE CODE NO	NAME	ACCOUNT NO	AMOUNT
1	PK	KOLA R. A.	25525252	700.00
2	PK	ADEMOLA A.	3536733	700.00
3	PK	WALO F. D.	47283423	700.00
4	PK	JATU H. P.	78333	700.00
5	PK	HAMIDU L.	648834	700.00
T O T A L				35,000.00

PAGE-: 1

N.Y.S.C SECRETARIATE, MINNA

BANK PAYMENT SCHEDULE

BANK PAYMENT SCHEDULE FOR :- JANUARY, 1994.

BANK....:SAVANA BANK MINNA PLC.

TOWN.:BOSSO

S/NO	STATE CODE NO	NAME	ACCOUNT NO	AMOUNT
1	BOSSO	CHUKWO M.	36622	700.00
2	BOSSO	ABDUL Y.	35532	700.00
3	BOSSO	JAMES A. A.	836633	700.00
T O T A L				21,000.00