

ELECTRONIC PAYMENT OF SALARY

(A CASE STUDY OF FEDERAL MINISTRY OF WORKS, ABUJA)

by

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CERTIFICATION

This project titled: “ELECTRONIC PAYMENT OF SALARY”; by AREMU, Olusegun (PGD/MCS/2008/1255) meets the regulations governing the award of Postgraduate Diploma in Computer Science of Federal University of Technology, Minna.

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DEDICATION

I dedicate this project to the most High, the KING of kings, the LORD ALMIGHTY for giving all the resources required from the inception of the programme to the end. I also thank my one and only mother and my darling wife for her support morally, financially and spiritually for the success of the programme. I do not forget to mention my late father may his soul rest in peace and all my siblings.

ACKNOWLEDGEMENT

To God be the glory for His Grace and Mercies. His ability has made this project possible.

I wish to express my gratitude to Mallam Adamu A. Mohammed, Mallam A. Ndanusa, the PGD coordinator and PG Coordinator, Dr. Jiya, M. for their support and guidance in ensuring that I successfully carry out this project.

My sincere appreciation to Prof. N. I. Akinwande, Prof. K. R. Adeboye, Prof. Y. M. Aiyesimi, Dr. U. Y. Abubakar who is the Head of Department, Dr. L. N. Ezeako, Dr. V. O. Waziri, and other Lecturers who assisted in various ways to see that this project works is successful.

I also express thanks to my colleagues in the office; especially Staff of the Information Technology (I.T.) unit; and Curatorial Services department. I will also not forget to recognize the contributions of my fellow students for their support on this project.

ABSTRACT

Personnel and Payroll Information System (PPIS) are two great sections used in managing human resources. Thus the need to keep the data in connection to these sectors secured and save is not only crucial but compulsory. It is widely believed that computers are better in handling large volumes of data in their states of integrity than any other systems (manual or mechanical). This has given us the urge to carryout some research work into these all important sectors. In the research work, we attempted to present a design work using a graphical tool called flowchart for its clarity and simplicity (after analysis). Thereafter, the resultant model is implemented into software system (PPIS) using Microsoft Visual Basic as the programming language or implementation environment. Results in form of reports such as Staff Listing, Individual Pay Slip, and Statement of Bank Account Documents are obtained.

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CHAPTER ONE:

INTRODUCTION

1.1 Background

Modern office are improving and stream-lining their procedures and system by utilizing the most advanced office equipment and office worker can now process information faster, thereby saving not only time but also supplies, space and effort.

At the same time also, government demands and business bureaucracy require extensive amount of paper work. As a result of this, modern offices are re-examining traditional methods of doing office work to better and improved ways to capture and communicate information when and where it is needed. They seek the most efficient method to generate record, process, file and communicate or contribute information.

Computers are able to assist management to project and to analyze the effect of various alternative methods of processing information. When computers are introduced into business information processing, this is called office automation. Office automation system is computer-based to enhance the effectiveness and productivity of people in offices. As a result of this, there is need for office workers to become more conversant with modern functions and management imperative. They also need to learn new office skills and different

ways of using new equipment and procedures. Some of the skills they need to learn include the preparation of the monthly salaries of workers in all the department of the organization and keeping efficient records of the department of the movement of cash and other valuables.

In all public and business organizations, payment of salaries and access to staff information is done through the pay roll personnel system. Although, processing of salary of workers differs from one organization to the other. The procedure is basically the same. It involves getting relevant information from personnel and finance departments about employee. Processing this information to get the monthly salary payable to each staff and up-dating their records accordingly. Thus large amount are added. Some deleted while others are completely updated.

The personnel management of Federal Ministry of Works, Abuja has not been computerized even though the Ministry has computers that can effectively handle this. As a result, Preparation of monthly salaries of staff and staff records are accessed manually. This is quite a tedious job that requires at least four to six hard working members of the department to handle.

The personnel emolument cards and other payroll records are exposed to dust, wear and when messengers are conveying them from accounts department to audit departments.

Any of the cards can get lost as a result of misplacement. First there is also the problem of security for the data in the cards which contain details of salaries of various workers as this is easily seen.

All the above reasons necessitate the urgency of computerizing the personnel and payroll of the Federal Ministry of Works, Abuja.

1.2 Aims and Objectives

The aim of this project is to write a set of computer instructions (program) for solving problems and performing tasks related to personnel and payroll in Federal Ministry of Works, Abuja as a case study. Also, the objectives to be followed in achieving the set aim as follows:

1. Elimination of ghost workers through effective documentation of staff and updates.
2. Effective and speedy search for information.
3. Management of audit trail records.
4. Ease of processing.
5. Ease to use system.
6. Elimination of human errors.
7. Prompt payment of monthly salaries.
8. Generation of individuals pay record cards

9. Generation of salary schedules for banks.
10. Performing of salary analysis.
11. Generation of schedule of deductions and a lot more.

1.3. Statement of the problem.

The manual method of handling personnel and payroll activity in Federal Ministry of Works, Abuja has a great deal of defects. This defect includes the following:

1. Existence of ghost workers.
2. Delay in search for information.
3. Existence of human errors.
4. Delay in salary payment
5. Delay in generation of salary schedules for banks.
6. Delay in access of staff records
7. Ineffective management of trail records.
8. Mishandle of input data. The need for electronic integrated personnel and payroll system is to derive the following benefits:

The automated integrated personated personnel and payroll system has the capacity and capability of eliminating ‘Ghost’ workers from your payroll thereby saving money for the government, which can be channeled into other needs.

The system brings to bear an effective and speedy search for information that has to do with staff emolument in an accurate, reliable and timely manner.

For the purpose of auditing, the interacted personnel and payroll system saves monthly pay details thereby enabling the tracing of various kinds of information such as individual pay voucher, salary arrears and a lot more. The system also eliminates human-errors by providing in-built facilities that simplifies most of the tedious tasks such as computation as salary arrears.

1.4. Scope and Limitation

The scope of this project is to write a program that posses a high degree of reliability, to design a data bank for personnel information which will contain a centralized pool of staff data. Which could be retrieved for compilation of various reports and research purposes and to provide necessary security for important and confidential information.

The project is limited to the following:

1. The login which allows the user to enter his / her name and password to confirm his legitimacy?

2. Salary variation: where the user can have the details, arrears and grant and allowance of the staff.
3. The enquiry / reports: contain the report about individual pay slip, staff list and bank payment schedule.
4. Staff documentation: where the user can enter records of the staff.

1.5. Justification of the project

In the Federal Ministry of Works, Abuja has information about their staff stored in the file. These files are usually kept together in filing cabinets which expose them to insecurity or lost. These information about their staff are being frequently retrieved from these file for various purpose and the files can be turn in process. Also when information about a staff required the files are searched manually one after the other to retrieve a particular information, these result to slow for information and consuming.

The payroll activity of the Federal Ministry of Works, Abuja is done manually which gives arise to human errors, in the organization sometime table payment are carried out to minimized fraud.

The end result of all payroll activities is the receipt of his individual pay slip by the employee to show that the true salary has been paid is not always given to their staff in organization.

The bank payment schedule that shows the list of employees and take-home figure going to a bank are delayed.

1.6. Definition of Terms.

1. Arrears: Money that is owed and should have been paid earlier.
2. Grant: a sum of money given by an organization, especially the government, for a particular purpose.
3. Allowance: An amount of money, allowed or given regularly.
4. Salary: A fixed regular payment usually every month to employees doing office work.
5. Pay slip: A piece of paper given to an employee showing how much he or she has been paid how much tax, insurance etc has been deducted

CHAPTER TWO

LITERATURE REVIEW

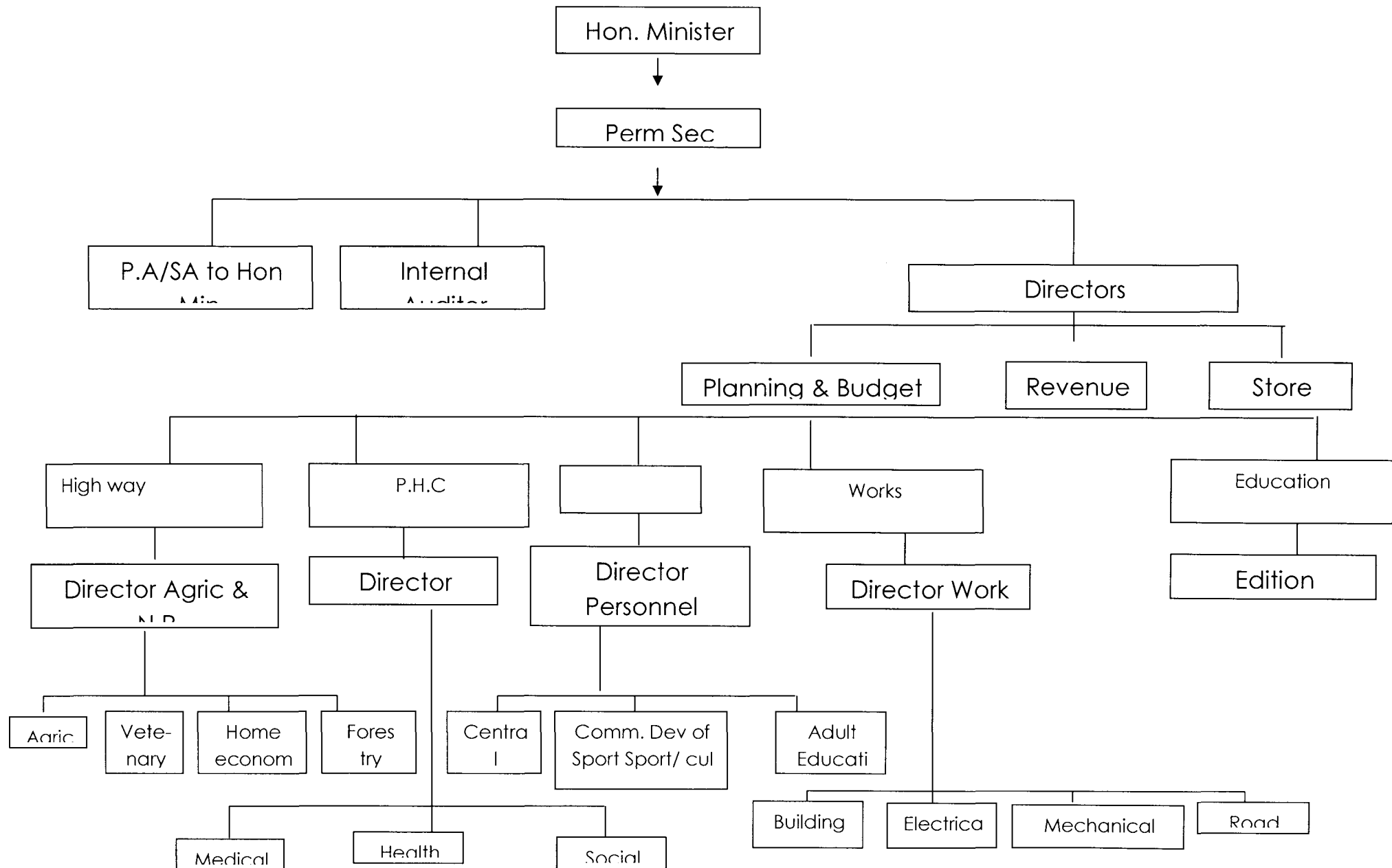
2.1 INTRODUCTION

Electronic payment of salary may be defined as the payment of take home pay of staff of a particular organization. It also means comprehensive compilation of information as regards individual staff in an organization and in this case, the Federal Ministry of Works, Headquarters, Abuja. It is the usage of computer system in the preparation of staff salaries against the old way of using manual. According to L. Paden Neeley (1998) states that a list of employees, showing their earning for a specific pay period together with other relevant information concerning their pay is called payroll. The payroll data for each pay period are recorded in a payroll register. A payroll register is normally used as the basic document for journalizing payroll information for each pay period.

NABI (Sept. 2020) states that payroll levy is a common instrument in Latin America for overcoming the under provision of training. Argentina, Barbados, Brazil, Chile, Colombia, Costa, Rica, Ecuador, Honduras, Jamaica, Paraguay, Peru and Venezuela, have implemented levies with mixed success.

Some countries here modified payroll levies. Peru lowered the levy and diversified the sources of finance, Argentina, Brazil and Colombia have co-financing arrangement with enterprises, communities and vocational schools. Nigeria, Singapore, Taiwan (China) and Zimbabwe have used matching grants.

ORGANIZATION CHART OF BIDA LOCAL GOVERNMENT



2.2 PERSONNEL MANAGEMENT

According to Armstrong (1980) personnel management can be viewed as obtaining, organizing and motivating the human resources required by the enterprise; development an organization and management style which will promote effective and co-operation and trust between all the people working in it and helping enterprise to met it legal obligation and its social responsibilities towards its employees with regard to the conditions of work and quality of life provided for them.

The Scope of Personnel Management

Ubeku (1975, 10) examined personnel management from two angles:

1. As a function or responsibility of a manager or supervisor who has people under him all working towards the achievement of corporate goals.
2. As a function in an organization is performed by a particular dept, the personnel department.

According to S.A.B. Onasanya (1999) personnel management is a human function perfumed by those specialist who look after the human resources (labour) needs of the enterprise it is that part of management concerned with people at work, the control or authority over their welfare, safety and maintenance; the relationship of such people within an enterprise and the relationship between the workers and their employers with a view to achieving the corporate objectives.

However, the British institute of personnel management in 1963 marked its golden jubilee officially stating that personnel management is the responsibility of all those who manage people as well as a description of work of those who are employed as specialists.

Personnel management aims to achieve both efficiency and justice neither of which can be pursued successfully without the other. It seeks to bring together and develop into an effective organization, the men and women who make up an enterprise, enabling each make his own contribution to his success both an individual and as a member of a working group.

Functions of all who manage people personnel management is a function of all who exercise control and authority over people. In essence it starts from the house, personnel management is the function performed by the chief executive, line manager, supervisor and foreman or any person who exercise control and authority over people at. It is function of personnel management to resolve any conflict that may arise between management's mere controls and authority in pursuit of efficiency and its failure to satisfy the needs of labour and meet goals

Personnel management must be seen as unbiased umpires seeking justice and fairness at all times. According to Ali D. Y. et al (says that personnel management is defined as that part of management concerned with people at work and with their relationship within an enterprise. Its aim is to bring together and develop into an effective organization the men and women

who make up an enterprise and having regard for the being of the individual and working groups to enable them make their best contribution to the success personnel management is also concerned with the human and social implication of change within the organization and the knowledge of the economic and social changes in the community.

The Development of Personnel Management

Some of the traditional function of personnel management such as the selection, utilization and development of people are new as data back to very ancient times. However, the personnel philosophy and methods in the ancient times crude and barbarous; (French, 1987, 6) Before the decade 1911 20, the hiring and firing of workers was performed by the line supervisor or foremen. We will now review now review the various factors that contributed to the evolution of modern the U.S. Even though each country with its political, economic and socio cultural environment evolved some system of personnel management the U.S. virtually spear headed the development of the principles, practices and other activities that led to the emergence of modern personnel management

Design And Storage of Personnel Records

The design of personnel records will depend on the type of record while the storage will depend upon the design. Manual, mechanical and computerized records have different designs and storage.

The first approach to the design of manual personnel records is to standardized them. Forms on which regular information is given leaving no rooms for misrepresentation or misinterpretation or misinterpretation that could be exploited in the event of a legal action.

The records and forms should be simple to complete. Manual records should be stored in filing cabinets, fireproof safes and security lockers to prevent unauthorized persons from gaining access to the.

Mechanization of personnel records will take the form of one of the many varieties of the punch card. Information to be recorded have to be standardized and coded. Mechanization is considered the first step to computerization and advancement on the manual system in both accuracy and the amount of information it can contain.

Computerization is advancement on mechanization and it is neither difficult nor expensive to transfer mechanized records to the computer. The punch card serves as input to feed the computer with the information stored on the card.

Types of Personnel Records

The application form: This is the official record an intending an candidate will come in contact with. Its purpose is to collect information about the person of the candidate, his education past employments, training and generally, his pre-employment history and past-time.

The Reference form: this is required to take a decision on the suitability of a candidate for a position.

Absence Record: it is necessary to have a monthly absence records for each employee which could, at the end of the months be transferred to the general absence analyzing the reason for absence.

Time-Keeping and attendance Record: These records show how punctual and how regular employee is at work.

Staff Appraisal Form: A review of annual appraisal report over a number of Years shows how constantly an employee has been progressing, his strength and weaknesses, further training he required, either to boost his strength or correct his weakness, his chances of promotion or sack.

Training Record: This usually forms a part of the record of service and contains records of training courses undergone by each employee. An employee's training needs which manifest during an appraised interview will be recorded in the staff appraisal form.

Staff Personal File: every employee should have a personal file where all letters to and from are file. All individual records, rating forms pre-employment appraisal and disciplinary records are kept in such files. It should show the history of the employee from the application for employment form to his discharge certificate after leaving the organization's service.

Record-of-service Form: This card summarizes the information in an employee's personnel file. It could be printed as an ordinary card or printed on the organization's services.

Discipline Records: A permanent record should be kept of all disciplinary actions taken against every employee since such records will be considered when taken against every employee since such records will be considered when a decision is to be taken on the progress or otherwise of the staff.

Other Records: The personal department should also have a good collection of labour legislations, the collective agreements and reported cases from the courts as well as the industrial judicial system.

2.3 PAYROLL MANAGEMENT

According to L. Paden Neeley (1998) states that a list of employees, showing their earning for a specific pay period together with other relevant information concerning their pay is called payroll. The payroll data for each pay period are recorded in a payroll register. A payroll register is normally used as the basic document for journalizing payroll information for each pay period.

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James Don Edwards (1981) state that four taxes are based upon payrolls:

1. Social security (FICA) tax,
 2. Federal unemployment (FUTA) tax
 3. State unemployment tax and
 4. Income tax withheld from employees' wages and salaries.
- Employers act as agents of the government by withholding social security taxes and income taxes from employees' pay checks and remitting the amounts without to the government. In addition, employers are responsible for paying social security taxes and unemployment taxes imposed upon employers.

Other payroll deductions, employers are required by law to withhold social security taxes income taxes from employer's earnings under agreements with employees, employers may also withhold amount for items such as insurance premiums, pension plan contributions, union dues or saving bond purchases.

Example in order to demonstrate the mechanism of payroll tax abilities, the following example is presented. It is based on assumed rates for various taxes and assumes that the following information applied to the pay period ended June 15, 19x1:

Employee	Paid prior To this Period	To be Paid this Period
Brain Baird	-	\$ 500
Jean Croft	\$ 7,800	700
Ken Grass	35,000	1,500
<u>Ramona Johnson</u>	<u>31,400</u>	<u>1,200</u>

For simplicity, it is assumed that federal withholding is computed as 15 percent of the gross salary per pay period if the amount is less than or equal to \$750 and 40 percent if it is greater than \$750 state withholding is levied at the rate of 20 percent of the federal withholding amount, these computations are produced.

	Employee	Gross Salary	Rate	Amount	Sate Withhold
Brain	Baird--	\$500	25%	\$125	\$25
Jean	Croft---	700	25	175	35
Ken	Grasso--	1,500	40	600	120

Ramona	Johnson--	1,200	40	<u>480</u>	<u>96</u>
Total				<u><u>\$1,380</u></u>	<u><u>\$276</u></u>

The FICA contribution is levied on both the employer at 6percent of the amount paid to each employee. This tax is levied on first \$32,000.00 pay to each employee. Notice that none of Grasso's pay is taxed because he has already received over \$32,000. Only the first \$600 of Johnson's is taxed because her salary to date goes over the \$32,000 limit during this period. These calculations can be made.

Amount Subject		Employer's	Employee's
Employee	To FICA	Share	Share
Brian	\$500	\$30	\$30
Jean Croft	700	42	42
Ken Grasso	-	-	-
Romana Johnson	600	36	36
Total		\$108	\$108

The unemployment tax is levied at 1 percent federal and 3 percent state on the first \$8,000 paid to each employee during the year. All of Bairds' pay falls under this limit, but only \$200 of crost's is taxed because she exceeds the \$8,000 limit in this pay period. The calculations are

	Amount Subject	Owned to	Owned to
Employee	To Tax	FUTA	SUTA
Brian Baird	\$500	\$5	\$15
Jean Croft	200	2	6
Ken Grasso	-	-	-
Romana Johnson	-	-	-
Total		\$7	\$21

S.A.B. Onasanya (1999) state that payroll administration is an accounting function and deals with the computation of the salary of the individual worker and consequent payment of the pay at the end of each pay period.

Types of Wages and salaries Structures

Piece Rate: The principle behind the enunciation of piece rate system of payment is that since the workers principal aim is to money an dif money could be used to generate effort, payment based on how much effort is put forth might motivate workers to produce more.

Time Rate: Known as hourly paid, daily paid, flat rate and so on, this system involves the payment of a fixed amount per hour, day, week or month. The time rate and the number of hours to be worked in a day or a week are fixed. Any number of hours done outside or in excess of the hours fixed is regarded as overtime and paid as such.

Incremental salary scales: Incremental salary scales are a complete departure from the fixed time or piece rate which do not change the pay unless productivity is improved or a wage rise is negotiated with the unions.

It is the shortcoming of these other structures that the incremental salary scales has come to rectify. With the daily rise in cost of living the incremental salary scales to alleviate the worker' suffering by granting increases in their pay every year, no matter how small. Secondly, the longer a worker is on a job the more and the better his performance. For this better performance, this type of salary scale seeks to composite the workers.

Finally, the more efficient performance, of the workers lead to higher profitability and the increase granted is a way of the employer' appreciation of good performance and paying reward of such.

Salary Range: By this structure, each scale has a minimum which is arrived at after surveys and evaluation of the job grades and a maximum arrived at by ranging over. In salary ranges, it is usual for the scales to range about 15 percent to 30 percent over the grade minimum and a wider range or higher percentage spread of say 50 percent to 60 percent at higher jobs with greater responsibilities as a result of the more variations in both job contents and job performance.

Rate for Age: This system is used in some advanced economics to link the ages of staff to defined scales for carrying out certain routine jobs, e.g. clerical functions and when young workers are bring trained to carry out these routine duties.

According to Harcourt (1988) state that in the payroll accounting, wages and salaries present a major element in the cost structure of most business. Indeed the largest single expenses incurred by some service business may be

the compensation paid to employees. As we examine the procedures and requirement associated with accounting for salaries and wages.

Impact of Legislation on Payroll Procedure.

Payroll accounting procedures are influenced significantly by legislation enacted by the federal and state government. These laws level taxes based on payroll amounts, establish remittance and reporting requirement for employers, and set up certain minimum standards for wages hours.

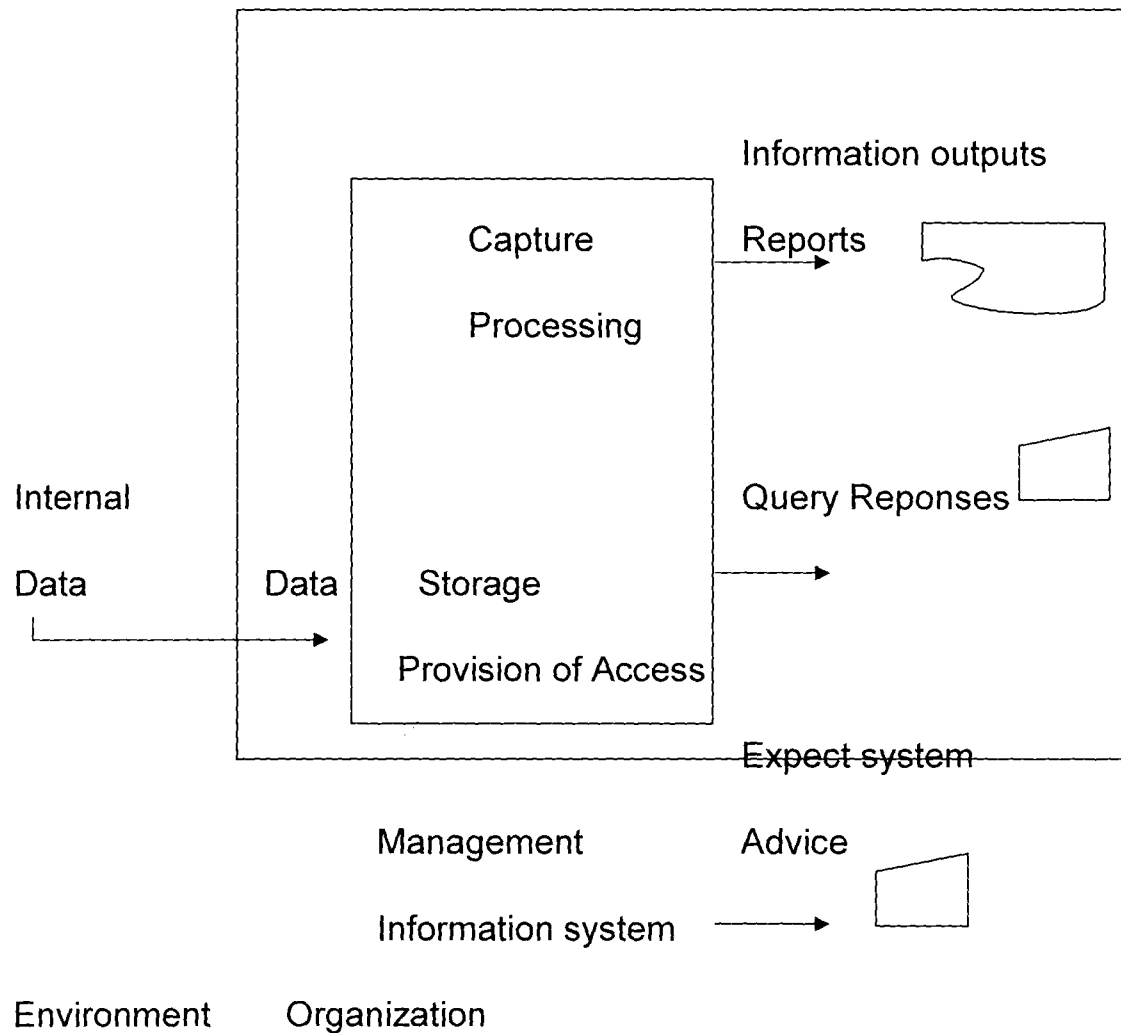
2.4 Information Management System

Management information system by P.M. Heathcote (1998) Management information systems are designed to help managers monitor and control organizational performance and plan for the future.

The role of management information system

The role of a management information system is to convert data from internal and external sources into information that can be used to aid in making effective decisions for planning, directing and controlling the activities for which they are responsible. An organization may have dozens of different information systems, some of which are useful the day-to-day operational decisions, and some of which are used in making tactical strategic decisions.

Diagram showing the role of management information system



Describe characteristics of MIS

Formed information systems are useful at every level of an organization. Operational system provide answers to specific, routine questions on screen or through regular daily or monthly reports. A senior manager is likely to need information which comes to light from a new way of analyzing the available data, or information from external sources.

Systems designers need to try design management information systems which have the following characteristics:

- (i). They are flexible, allowing for many different ways of analyzing data and evaluating information.
- (ii). They are capable of supporting a range of skills and knowledge.
- (iii). They help manager get things done through interpersonal communication with members of the organization.
- (iv). Because managers are busy people who switch rapidly between different tasks, they should not require extensive periods of concentration.
- (v). They should make it easy to interrupt the work and return to it at a later time.
- (vi). They should protect a manager, as far as possible from information overload.

According to Hugh Gargi of 1997 stated that information is a resource and as such it is not, it becomes. This means information only becomes a resource when it's of value to you. It be a resource as soon as you don't need it.

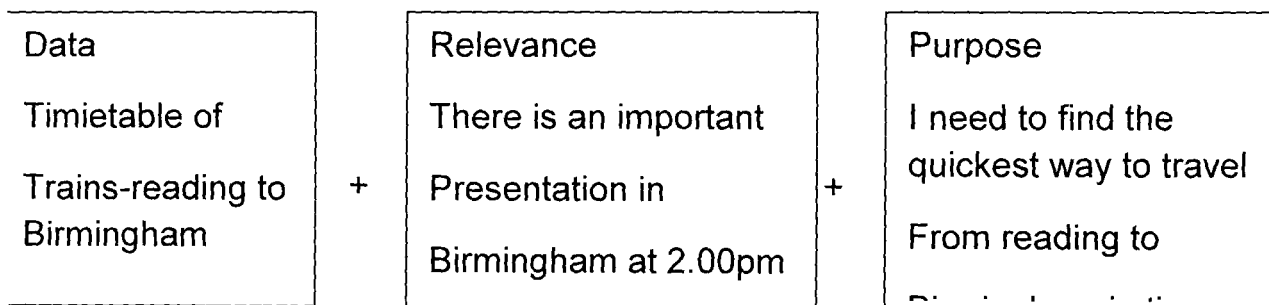
Four principles of information management. By applying these principles you can turn worthless data into powerful intelligence which, when applied, will generate effective change.

Principle 1

Data becomes information: By means of the following process: Data + Relevance + Purpose = Information.

- Unless the data in front of you relates to your current need, it is not information.
- Unless the data in front of you can be usefully applied to your current needs, it is not information.

This is illustrated in the simple example below:



Information

There is a train

Leaving at 12.30pm

And arriving at 1.30pm

Principle 2

Information + Insight = understanding

Information on its own is not powerful. It gains power from your ability to see how the information can be used to develop understanding. This can be seen by continuing the previous example and demonstrated below.

Information

There is a train

Leaving at 12.30pm

and arriving at
1.30pm which will

Insight

That means I must

Leave the office by
12.00pm before the
end of the task group

Understanding

To get value the task
group meeting and leave
in time I need to
reorganize the agenda to
make sure that the items
most relevant to me and

Principle 3

Understand + communication = intelligent

Information because even more powerful when understanding it helps generate is communicate and with others to whom it is relevant. In this way, understanding becomes intelligence – a superior of understanding. This can be seen by continuing our example as show below

Understanding

To get value from the
task group meeting and
leave in time I need to
reorganize the agenda
to make sure that the
items most relevant to

Communication

e-mail to task group members
to reach

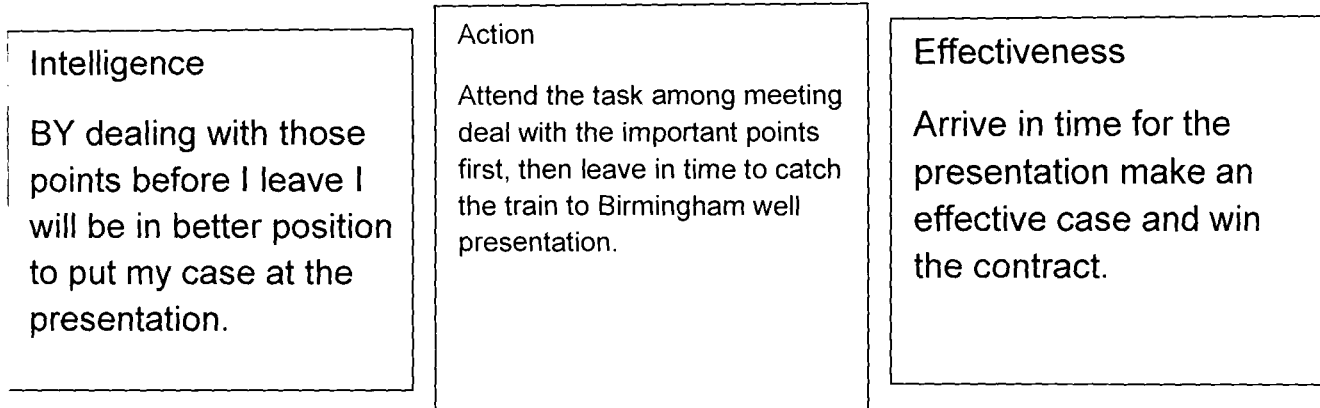
Birmingham in time to

Make the presentation, I must
the leave by 12.00pm I
suggested the following
changes in the agenda in
ordered to minimize the

Intelligence

BY dealing with those
points before I leave I
will be in better position
to put my case at the
presentation.

Information which has been boosted into intelligence and is then acted on has the power to generate effective change. This is ultimate purpose of information. This can be seen by continuing the example.



According to Mc Graw – hill state that management information systems (MIS) deals with the planning for, development, management, and use of information technology tools to help perform all tasks related to information processing and management.

In that definition, you can find three key resources – information, information technology, and people. As we move forward in this chapter, lets first into the challenges organizations face with respect to MIS in today's information – based environment.

Information technology is the solution to all problems. Not true information technology (IT) is a wet of tools for working with information. To help you understand the role of IT and MIS in an information – based – organization we have created the management information system challenge (The MIS challenge).

CHAPTER THREE

MATERIALS AND METHODS

3.1 REVIEW OF THE EXISTING SYSTEM

The exiting system of payroll administration and personnel information in the Federal Ministry of Works, Abuja is the manual system, even though the Federal Ministry of Works, Abuja has a number of personal computes that can be used. The names of staff are collated for amendment, deletion or addition. The file containing the payment and deduction are also amended. The loans details such as housing, etc sent in from the section that handles these.

All these details are entered into the personnel emolument cards which have earlier been opened for each category of staff at the beginning of the year.

The card contains the following details:

Name of staff

Grade level and step

Date of employment

Annual basic salary

Details of loan taken

Nature

Amount

Repayment period

Date to deduct monthly

Overtime: Monthly overtime schedules are sent in from various department showing numbers of hours worked by each staff. After collecting all the above information, the patrol staff will then sit down to calculate how much overtime is to be added to each staff salary for the month by multiplying the hours worked by a rate that varies according to salary grade level of the staff.

The real salary calculations are then carried out by starting with the basic salary, all taxable pay overtime responsibility allowance, increments etc are added to the basic pay to get the gross pay for the period. Deductions such as tax, loans, advances etc are then deducted from the gross pay to arrive at the net pay for each individual.

The net is then entered into the pay for various bank schedules for payment into the bank. This procedure is then repeated until all the staff of the Ministry have been treated. To get the total for the month and the year up to date, all the sheets for the month are summed up while for the year to date, all the months are summed up. The sheet for the monthly pay is known as the payroll summary voucher for the Federal Ministry of Works.

3.1.1 ANALYSIS OF PERSONNEL INFORMATION

The existing system as is being used today was critically appraised using the following approaches:-

- (a). Method of information generation
- (b). Method of data processing
- (c). Method of file organization and storage
- (d). File movement/information dissemination and
- (e). Security and safety of files

The method adopted in data/information generation is simple

All operation from day one of an applicant for a job the actual period of placement and retirement are done manually. The applicant submits a copy filled Civil Service Commission (CSC) form to the personnel division for processing. Immediately after the submission of the form, a file is opened for the applicant with a number for due processing. After necessary approval is obtained and letter of offer of appointment issued and accepted, the new employee is expected to resume work in the new office. On resumption a second file (secret) is opened in his name.

3.2 PROBLEMS OF EXISTING SYSTEM

In the existing system (manual process) the following problems have been identified from the analysis of the system.

1. Generation of high volume of paper work
2. Possibility of errors and fraudulent manipulations or ghost workers.
3. Delay in salary payment as a result of staff shortage
4. Mishandling of impute documents
5. Ineffective and slow speedy search for information
6. Delay in generation of salary schedules for the banks

7. Ineffective management of audit trail records.

3.3 SYSTEM DESIGN

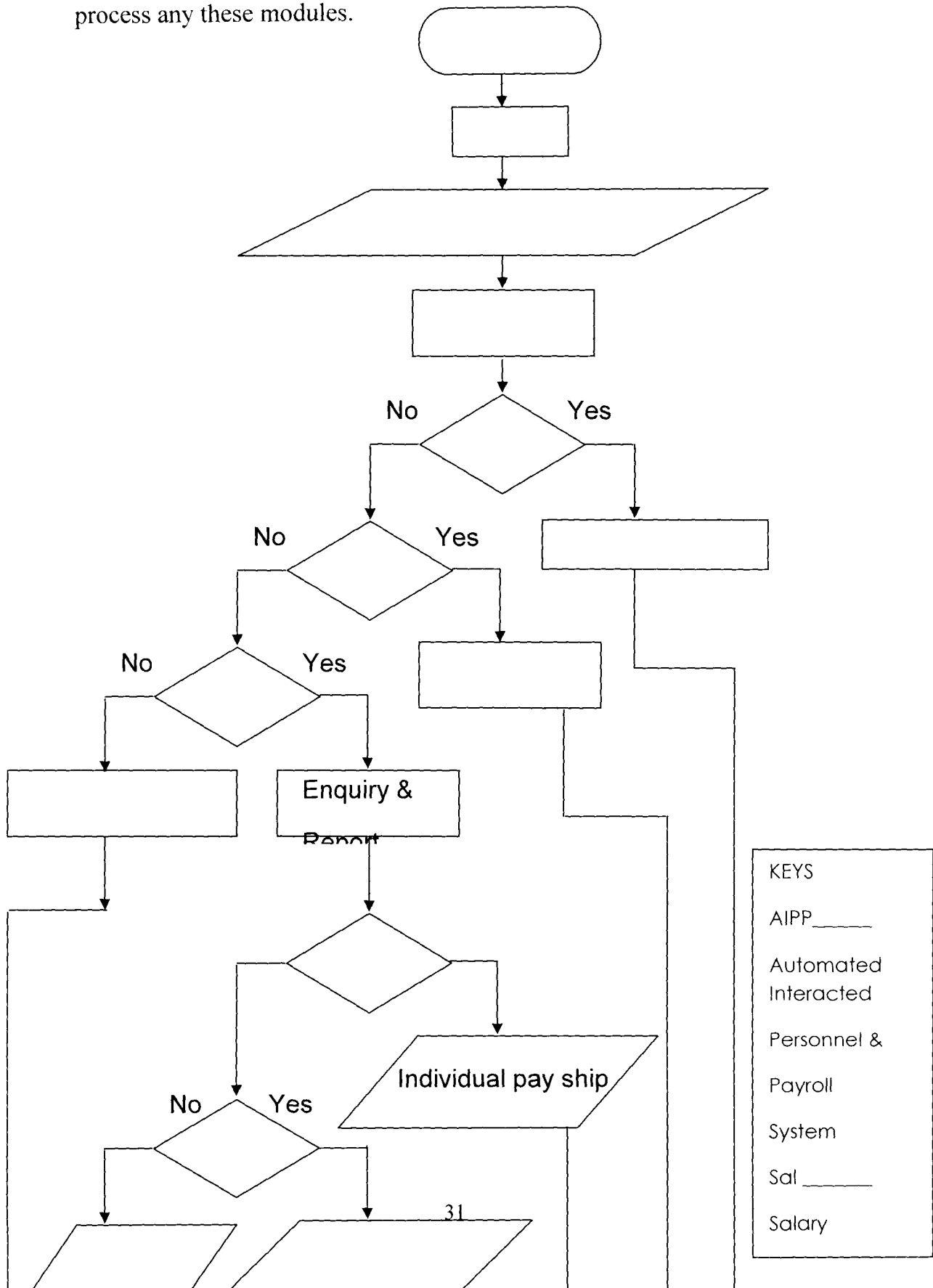
In system design the outline of the system must be developed after this stage has been done the detailed design of each subsection may follows. A number of methods are used in system design. These include the flow-chart, bottom-up top-down and data flow.

In this project work, we employ the commonly used flowchart for the following reasons:

1. Flowchart allows the user to view the logic of the problems solution in a pictorial fashion
2. It serves the programmer by breaking up a large problem into smaller steps which can be individually coded or programmed without having to be concerned with how this smaller segment of the problem will fit into the total solution.
3. It serves as a mean of communication between the management analyst or accountant and the programmer and as a means of communication from programmer to programmer. The accountant for example does not have to be familiar with computer codes if he or she is a able understand a flowchart. From the flowchart it can easily and determined if the proposed computer solution is logically correct and contains all necessary considerations and limitations.

Figure 3.3 is a flowchart design for the proposed system (Automated integrated personnel & payroll). The design is begin from analysis document. The system is complex and we chose to break it down into four sub-systems or modules (salary variation, salary, enquiry, report, and

staff document). At this point only one of these sub-systems (modules) can be processed at a time, and consequently a decision has to be taken to process any these modules.



Another decision point has to come again at the point of which of the reports is required to be printed out. This gives us the output (the output can be individual to a pay slip, Bank payment schedule of staff list). The flowchart is brought to a stop by terminating system. (stop)

3.31 INPUT FORMAT

The following are the impute format for the system.

1. The employees personal records
2. Allowance table
3. Tax deduction table
4. Advance/Loans files

The features of the processing routing are outlined in the following chart bellow:

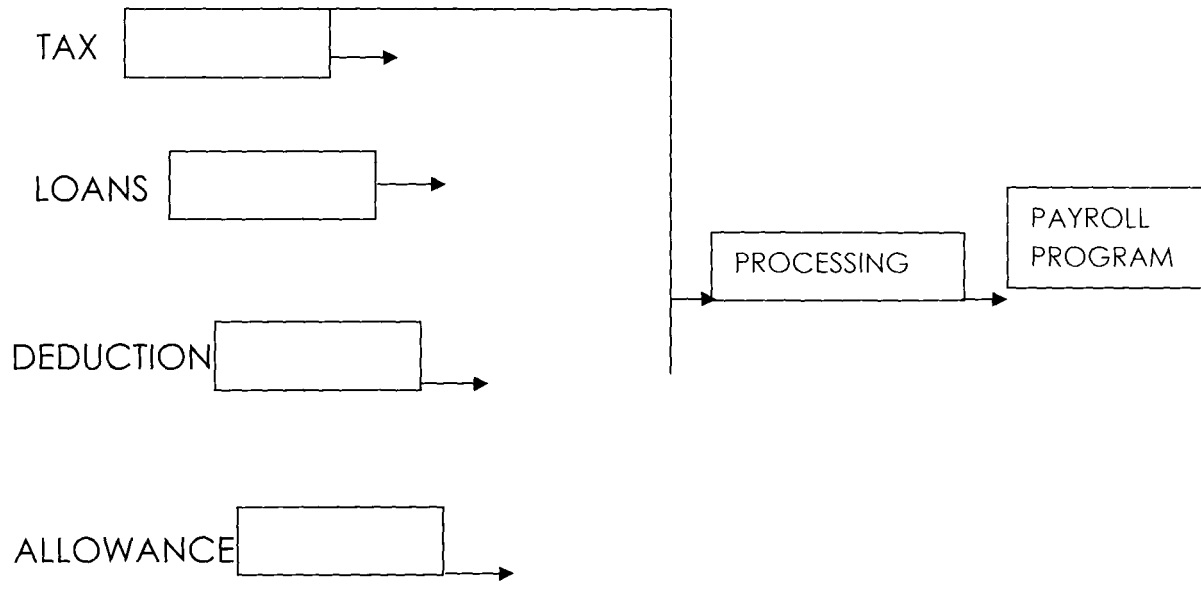


Figure 3.2

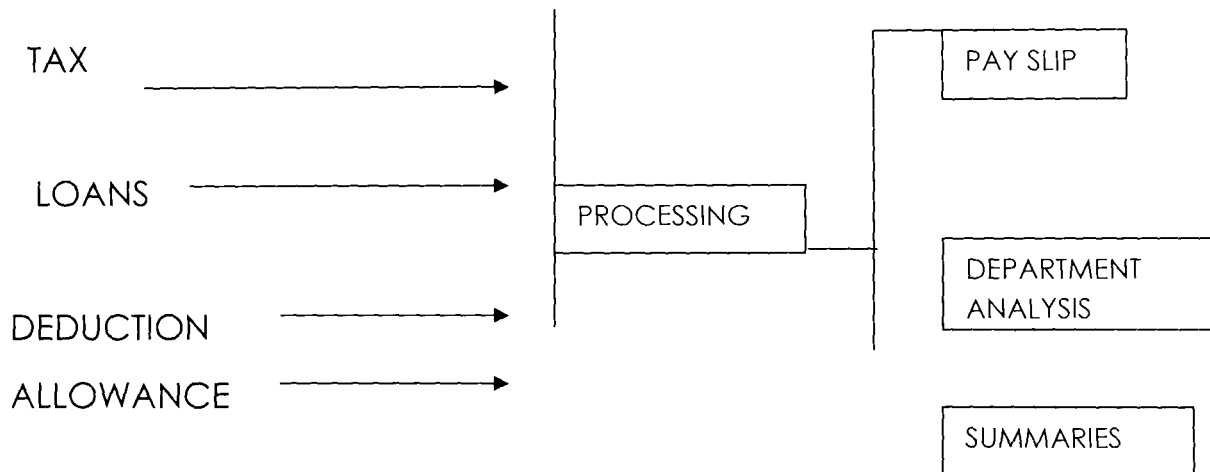


Figure 3.3

INPUT ELEMENTS

The basic elements of payroll system may be analysis as follows:

- a. Input payroll monthly input sheet
- b. Processing files in the system
 - i. personal details
 - ii. Allowance details
 - iii. Deduction details
 - iv. Taxation
 - v. Loans
 - vi. Loans
 - vii. Present employment details
 - viii. Bank details

3.3.2 OUTPUT FORMAT

1. Individual pay slip
2. Payroll total
3. Annual/monthly returns of payee

The end result of all patrol activities is the receipt of his pay individual pay slip by the employee to show that the true salary and details of some have been accurately calculated. This is a prime objective of the system.

Bank payment schedule

This output shoes the list of employees and their take home figures going to a bank.

CHAPTER FOUR

RESULTS

4.1 Choice of programming Language

Numbers of programming language are literally available in field of computing today. Each of this language was developed to address a particular problem. Conventional such as BASIC, COBOL, FORTRAN AND PASCAL are considered procedural language. That program specifies the sequence of all operations step-by-step. In this case, program logic determines the next instruction to executive. In this case, program logic determines the next instruction to execute in response to condition and user requests.

The up-to-the minute programming, such as visual basic, use a different approach. Object-oriented programming and even-driven programming language but contains many of the object-oriented elements.

In the event-driven-model, programs are no longer procedural that is, they do not follow sequential logic. In this development the user causes a basic procedure the programmer has written to occur. This new trend made programming cashier and as such visual basic which belongs to this development among other languages is choosing as the programming language.

4.2 project of Creation/Database

We created our project using the following steps:

- From File menu, we Choose New

- From the displayed dialogue box, we selected project, and then click on New File
- From the displayed Create dialog box, we choose the folder (Payroll)
- And the project was named “Payroll”

All the interfaces (section 4.3) to the system were created using the Visual Basics environment. To incorporate data into a database, first create a new database, then add the table you want with and define the relationship between them. When one creates a databases you gather tables together into one collection. Our database was created using Microsoft Access since Visual Basics has no database of its own. From the Data Tab of the project Manager,

- Click on Database, then New Button,
- New Database, then the Database was named

Tables were then created and added to the database as shown in Figure

Fig. 4.: Main menu

The screenshot shows a 'Add New Records' dialog box. The title bar reads 'Add New Records' and the menu bar has 'File' and 'Help'. The form contains the following fields:

- PAY NO
- STATUS
- DATE
- IDNO
- PAYEE
- AMOUNT
- ACCOUNT NO
- BANK
- BRANCH
- SORT CODE
- PURPOSE

At the bottom of the dialog, there is a button labeled 'Use arrows to move Data' with left and right arrow icons, and two buttons labeled 'ADD' and 'EXIT'.

Fig. 4.3: Add Record Form

PV NO	123693	STATUS	UNPAID
DATE	09/01/2011	CNO	102345
PAYEE	MAGNUS OLEONU	AMOUNT	4910
BANK	DIAMOND BANK LTD	SCRY CODE	100365
BRANCH	ABRILIA	PURPOSE	TRAVELS & TOURS

Use the Answer to view data EXIT

Fig. 4.4 : Display Records Form.

PV NO	123693	STATUS	UNPAID
DATE	09/01/2011	CNO	102345
PAYEE	MAGNUS OLEONU	AMOUNT	4000
BANK	DIAMOND BANK LTD	SCRY CODE	100365
BRANCH	ABRILIA	PURPOSE	TRAVELS & TOURS

Use the Answer to view data FIND DELETE EXIT

Fig. 4.5 : Modify Records Form

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Summary

The personnel and payroll system are very important aspect of any organization. Any factor that hinders the efficient and prompt computation and disbursement of salaries, wage and personnel information to staff usually leads to industrial unrest that sometimes results in closure of the organizational machinery.

The integrated personnel and payroll system has been designed to eliminate the need to do all personnel and payroll work manually while ensuring that accurate records are property maintained. The program has been written after taking into consideration the client, it's size and nature of its structure and functions. It has been designed in such a way that staff name and personal password is used to identify each staff. This is done because of the unique nature of password

It can handle all possible volume of work as at a convenient peace. It is user friendly as well as maintainable. The stored data that has been validated verified and debugged ensure that we have completeness and accuracy of information.

5.3 Conclusions

This project work has been primarily directed at determining the feasibility of employing to process the personnel and payroll of the Federal Ministry of Works, Abuja. However the following conclusions were arrived at the based on the facts already highlighted.

1. Computerized data processing is far more efficient than the manual system since it enables large and broad based information to be generated.
2. The personnel and payroll activity of an organization is very important one as such, efficiency and accuracy which can only be achieved E.D.P necessitates its being computerized
3. A lot of organizations usually feel very reluctant to incur the basic capital cost to computerize the personnel and payroll activity. However, the long run usually proves them wrong as a computerized system minimizes fraudulent manipulations.
4. The Federal Ministry of Works should adopt this work implement the personnel and payroll package developed in this project work.

5.2 Recommendations

The following recommendation has been specifically directed at the primary organization of the Federal Ministry of Works but can equally apply to other interested organizations.

1. The Federal Ministry of Works should as a matter of urgency accept the new system (automated interacted personnel and payroll) to ensure accuracy, exactness and tamper-free salaries and wages administration.
2. For elimination of ghost workers through effective documentation of staff and update.
3. The service of computerizing the mentioned activities above should be done in-house to minimize cost and ensure thorough suitability of the package to the Federal Ministry of Works peculiar functions.

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