

TITLE PAGE

COMPUTERIZATION OF THE MOTOR DEPARTMENT

(A CASE STUDY OF NICON INSURANCE CORPORATION, MINNA BRANCH)

BY

MARYAM SULEMAN IBRAHIM

PGD/MCS/1148

MATHEMATICS/ COMPUTER SCIENCE

BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS
/ COMPUTER, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGER STATE. IN
PARTIAL FULFILMENT FOR THE AWARD OF PGD IN MATHEMATICS/ COMPUTER
SCIENCE

NOVEMBER 2004

APPROVAL

THIS PROJECT HAS BEEN READ AND APPROVED AS MEETING THE REQUIREMENT OF THE DEPARTMENT OF MATH/ COMPUTER SCIENCE, FACULTY OF SCIENCE, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA NIGER STATE.

MAL. HAKIMI DANLADI
SUPERVISOR

SIGNATURE AND DATE

MR. L. N. EZEAKO
HEAD OF DEPARTMENT, FUT.,
MINNA

SIGNATURE AND DATE

EXTERNAL EXAMINER

SIGNATURE AND DATE

DEDICATION

TO MY WONDERFUL LOVING PARENTS AND MY SISTERS AND BROTHERS
LOVING HUSBAND AND CHILDREN

ALHAJI M. A. SULEMAN AND HAJIA HADIZA SULEMAN
IBRAHIM AHMED

ACKNOWLEDGEMENTS

I owe my success to Almighty ALLAH for guiding me and seeing me through all my undertakings in federal university of technology minna, Niger State. May his blessings and peace be upon his prophet Muhammad (SWA).

I AM gratefully indebted to my supervisor, for his suggestions, patience and advices during the course of this project work may ALLAH (SWA) reward him abundantly.

I whole-heartedly thank all my friends in the PGD class and all the lecturers for their assistance. I would like to express my whole gratitude to our honorable class rep for being there for me (thanks).

Finally and specially I will like to say a big warm thank you to my dear husband for standing by me all the way.

ABSTRACT

The use of electronic computers cannot be over emphasized i.e. the electronic computers are linked to a chain of calculation inventions that stretches back to prehistoric times. This is because it has cut down sharply the processes and time involved in problem solving and data management. The original concept of the computer which is mainly for computing and solving simple and complex calculations, have now been enhanced and advanced to carry out complex functions of not only calculating but data processing, information management and a repository knowledgeable data especially as it pertain that organization or business.

The aim of this study is to explore the potentials of this vast advantage presented by this modern day computer to an archaic industry like the insurance sector that got its origin since the first merchants or traders started business. Since then the insurance company have come a long way involving many complex functions especially in accounting, underwriting and the claims processing and eventual settlement.

TABLE OF CONTENT

CHAPTER ONE : BRIEF OVERVIEW OF A COMPUTER SYSTEM

- 1.1 INTRODUCTION
- 1.2 HISTORY OF COMPUTER
 - 1.2.2 THE CLASSIFICATION OF COMPUTERS
 - 1.2.3 JUSTIFICATION FOR COMPUTERIZATION
- 1.3 OBJECTIVE OF THE STUDY
- 1.4 STATEMENT PROBLEM
- 1.5 SCOPE OF THE STUDY
- 1.6 LIMITATION OF STUDY
- 1.7 DEFINITION OF TERMS

CHAPTER TWO: LITERATURE REVIEW

- 2.1 INTRODUCTION
- 2.2 BRIEF HISTORY OF INSURANCE
- 2.3 NICON INSURANCE (AS A CASE STUDY)
- 2.4 BOARD/ MANAGEMENT
- 2.5 COMPOSITION OF BOARD/ EXECUTIVE MANAGEMENT
- 2.6 STRUCTURE
- 2.7 DIRECTORATES

CHAPTER THREE: SYSTEM ANALYSIS AND DESIGN

3.1 FEASIBILITY STUDY

3.2 METHODOLOGY OF STUDY

3.3 ANALYSIS OF EXISTING SYSTEM

3.3.1 WORKING MANUAL ON MOTOR INSURANCE

3.3.2 UNDERWRITING PROCEDURE

3.3.3 COMPREHENSIVE POLICY

3.3.4 THIRD PARTY

3.3.5 PRIVATE MOTOR

3.3.6 COMMERCIAL VEHICLE

3.3.7 MOTORCYCLE

3.3.8 COVER FOR CIVIL COMMOTION AND RIOT

3.3.9 THIRD PARTY PROPERTY DAMAGE (TPPD)

3.3.10 PERSONAL ACCIDENTS (PA)

3.3.11 SELF INSURED DEDUCTIBLE (SID)

3.4 MANUAL CALCULATION OF PREMIUM

CHAPTER FOUR: SYSTEM IMPLEMENTATION

4.1 THE PROPOSED SYSTEM

4.2 FILE DESIGN

4.2.1 QUICK BASIC

4.3 OUTPUT SPECIFICATION

4.3.1 HOW THE PROGRAM WORKS

VIII

4.4 INPUT SPECIFICATION

4.5 SYSTEM OPERATION REQUIREMENTS

4.5.1 HARDWARE REQUIREMENT

4.5.2 SOFTWARE REQUIREMENT

4.5.3 PHERIPHERAL REQUIREMENT

4.5.4 NETWORK REQUIREMENT

CHAPTER FIVE: POST IMPLEMENTATION

5.1 SUMMARY

5.2 RECOMMENDATION AND CONCLUSION

5.3 IMPLEMENTATION AND TESTING

CHAPTER ONE

BRIEF OVER VIEW OF A COMPUTER SYSTEM

1.1 INTRODUCTION

Throughout history, people have assigned labels to describe the major advances or characteristics of a given period. The Iron Age, the Renaissance, the age of Enlightenment and the Industrial Revolution is just a few of such labels. In today's rapidly changing world, a phrase has appeared recently to describe advances made in the areas of communication and computer technologies: the Information Age. Computers have become commonplace, virtually unnoticed by most people. But, computers are there. And you can, literally, bank on them.

1.2 HISTORY OF COMPUTER

The use of electronic computers cannot be over emphasized i.e. the electronic computers are linked to a chain of calculation inventions that stretches back to prehistoric times. Since the dawn of civilization people have required information to aid them in their personal battle for survival as well as their attempt to manage their organization. Early forms of business records were recorded on clay tablet. Notations were made on forms of wet clay and placed in the sun to dry. These were bulky but acceptable in the absence of anything else.

As the rate of data recording and information processing increased, there was also a corresponding increase in knowledge in the development of methods for processing data and producing information, which apparently brings to mind first the techniques for recording and communicating data. It was during this time that the first calculating device began to appear as a result of volumes of numbers represented in transactions. It is valuable to recognize that data

Processing functions were, and still remain basic, whether data are being processed manually or electronically as it is today.

One of the earliest calculating devices was the ABACUS. This ancient device was used for 2000 years. Then came the ADDING MACHINE by Blaise Pascal a 19-year-old French mathematician and philosopher in 1642. During the 19th century Charles Babbage developed the ANALYTICAL ENGINE in 1833 that performed any type of computation automatically. In the 1830's Herman Hollerith a staff of the United States bureau devised electrical tabulating equipment, which was used in gathering data for the 1890 census called the TABULATING MACHINE (punched cards). Not until in 1937, Harvard professor Howard Aiken of applied mathematics set out to build an automatic calculating machine that would combine the established technology with the punched card of Hollerith. It was completed in 1944 and was known as MARK 1 digital computer.

1.2.1 THE CLASSIFICATION OF COMPUTERS

The refinement of computing concept focused on speed, size and cost gave the page to the computer generations. The computer generation was gradually intended to suggest different development of the hardware components but nowadays it is being applied to both hardware and software system of computers. It is also the gradual integration and refinement of computer concept that gave way to the five existing generations. Computers

are classified into different generations based on the major electronic component on which they are built

FIRST GENERATION (1937-53)

Major electronic component: vacuum tube.

Three machines have been promoted at various times as the first computers. These machines use electronic switches, in the form of vacuum tubes, instead of electromagnetic relays. In principle the electronic switches will be more reliable, since they have no moving parts that will wear out, but the technology was still new at that time and the tubes were comparable to relays in reliability. The first general purpose electronic computer was the ENIAC (Electronic Numeric Integrator And Calculator) built by J. presper Eckert and john V. Mauchly at the university of Pennsylvania. It was the first machine to use the stored program concept. This machine was made of 18,000 vacuum tubes. The ENIAC was designed in response to the U.S.A. Army's need for a machine to compute artillery trajectories during the Second World War. Software technology during this period was very primitive. The first programs were written out in machine code, i.e. programmers directly wrote down the numbers that corresponded to the instructions they wanted to store in memory. By the 1950s' programmers were using a symbolic notation, known as assembly language, then hand-translating the symbolic notation into machine code. Later programs known as assemblers performed the translation task.

SECOND GENERATION (1954-62)

Major components: solid-state devices (transistors) in place of vacuum tubes; magnetic core storage. With the transistor technology, computers became smaller in size, faster, more reliable and much greater in their processing capabilities. They had increased storage capacity and do not require cooling system. The magnetic tapes, disks are supplementary memory invention of the low level language for computers. More efficient means were developed to input and retrieve data.

Many of these computers were used for business applications popular among them were the IBM 1400 SERIES and UNIVAC III.

THIRD GENERATION (1963-72)

Major component: the integrated circuit (IC)

The integrated circuit increased the speed of the computer by a factor of 10,000 over the previous computers. The arithmetic and logical unit (ALU) operations were performed in microseconds (μ s). The memory (primary storage device) of the computer was greatly augmented.

Operating system, greater compatibility of components allowing easier expansion of computer system all these together with the fast I/O devices made good and portable systems. Example was the IBM 360 series.

FORTH GENERATION (1972-84)

Major component: Microprocessors

Development of Microprocessors, which led to the manufacture of home computers called macro computers. A microprocessor (μp) is a single miniature chip containing the circuitry and components for arithmetic, logical and control operations. The development of data recording equipments that capture data e.g.: optical character recognition. Densely packed chips were developed.

FIFTH GENERATION (SUPER MICRO) (1984 – 90)

The fifth generation computer is the Japanese technology that has been under development and is beginning to emerge. Some of its features include:

- ✓ Artificial Intelligence
- ✓ High level decision making
- ✓ Voice recognition
- ✓ Robotics
- ✓ Natural Language Processing

This generation is influenced by the advent of Artificial intelligence and Expert system. Artificial intelligence is the ability of the computer to exhibit behaviors like an intelligent person. The aim is to speak to the computer and obtain solutions through voice-output. An expert system on the other hand is an application program that has the capability of making judgments and

decision like an expert in a particular field of application, for example, in the field of medicine, where a computer will prescribe like a doctor after performing the needed diagnosis. The computers in this generation are said to be markedly different in Architecture from the present day computers. These systems are optimized blend of hardware and software tailored to perform general symbol manipulation and symbolic inference. It is expected that the fifth generation computers will be designed around the collection of problem solving techniques that range from rigid deterministic methods to those that mimic the human ability.

SIXTH GENERATION (1990 -)

This generation is beginning with many gains in parallel computing, both in the hardware area and in improved understanding of how to develop algorithms to exploit diverse, massively parallel architectures. One of the most dramatic changes in the sixth generation will be the explosive growth of wide area networking. Combination of parallel /vector architectures are well established, and one corporation (FUJITSU) has announced plans to build a system with over 200 of its high-end vector processors. Manufacturers have set themselves the goal of achieving teraflops (10.12 arithmetic operations per second) performance by the middle of the decade, and it is clear this will be obtained only by a system with a thousand processors or more. Workstation technology has continued to improve, with processor designs now using a combination of RISC, pipelining and parallel

processing. As a result it is now possible to purchase a desktop workstation for ₦3, 971,700.00 that have the same overall computing power (100 mega flops) as fourth generation supercomputers. This development has sparked an interest in heterogeneous computing: a program started on one workstation can find idle workstations elsewhere in the local network to run parallel subtasks.

1.2.2 JUSTIFICATION FOR COMPUTERIZATION:

The computerization of the motor insurance department of NICON become necessary based on the following: -

- ❖ Volume: large volume of data, which takes more time to process manually, can be processed within the shortest time using a computer.
- ❖ Speed: the computer access records quickly. Also responds quickly to calculations of premiums, commission and claims.
- ❖ Repetitiveness: Insurance operation require day to day updating of policies, which will be made easier by computerization. And also solves the problem of recopying information from the master file to the transaction file.
- ❖ Economical: reduction of per unit cost of typing and printing.
- ❖ Security: improved security in record storage.

1.3 OBJECTIVE OF THE STUDY

The purpose of embarking on this study is to explore the potentials of this vast advantage presented by this modern day computer to an archaic industry like the insurance sector, to see how the art of insurance could be married to the Hitech age of computerization. It is also intended to reduce both the processes involved in finalizing an insurance cover and where claims do occur hasten it. Eventual settlement of boycotting all processes that might result in delays thus bring succor to the claimants.

Therefore the main objective of a computerized motor insurance system is:

1. To develop a state of the earth system that will replace the manual method of processing data / information.
2. The system should be able to print out all necessary report for management decision-making.
3. To advance meaningful suggestions on how to solve problems resulting from the administration of policy to the insured.
4. To study the efficiency of the manual method used in the determination and allocation of premium and claims. And see better ways of improving it computer wise.
5. To determine the importance of the whole or part of the system
6. To determine the effect of a large portfolio in determining the premium manually.

1.4 STATEMENT PROBLEM

The insurance sector is faced with a lot of problems, which hinder its activities. Some of these major problems are:

1. **Claim exaggeration:** exaggerated claims do occur where the claimant or the insured decides to over blow or blow out of proportion the exact amount of his claim. A good example is where a car is involved in a minor accident and the cost of repairs will not exceed 1% of the total cost of repairs. The owner will then decide to lodge a claim far in excess of 50% of the total cost of the vehicle.
2. **Ambiguity of the proposal form:** these are normally words that would mean different things to different people. The end result is that the insured would be forced to give different interpretation to what might have otherwise been a straightforward answer. Some insurance companies who have no intention of paying claims do insert such ambiguous words so to wriggle out of high volume claims.
3. **Immoral acts on the part of the insured:** the principles of insurance is said to be based on "utmost good faith" i.e. both the insured and insurer are suppose to declare all items of insurance property on trust. Unfortunately with the rampant cases of 419 it means that both the insurer and insured are subjected to high rigorous demands to prove or disprove claims. Thus the act of immorality is stepped up invariably necessitating the increased needs for checks and balances.

4. **Negligence towards the use of the departmental diary:** the status establishing insurance companies states that they must keep its claims, policy, commission paid, and other registers. This is to properly keep a track on these insurance companies to ensure that they complied to laid down procedures. Unfortunately some of these companies do not adhere to these dictates. Thus thrown-off-the-scent from the insurance overseers.

5. **Miscalculation:** this could occur in two dimensions, the first could arise from the insured that in an attempt to avoid paying larger premium would on his part slash down the actual cost of the item of insurance. For example where the cost of a given property is N100, 000.00 Naira and the premium rate is 0.25%, therefore the premium due will be 25.00 Naira. The insured will decide to lower the cost of the property to avoid paying more. On the other hand miscalculation could occur from an inexperienced underwriter who might erroneously miscalculate the premiums due, thus resulting in the client being under or overpaid.

6. **Fake claims:** these are claims that do not exist. Some clients would even fake documents to show that such accidents or incidences do occur. Some insured are known to deliberately or fraudulently set their insurable items on fire or declare them missing to benefit from insurance claims.

All these factors contribute to the failure of this department hence the need to computerize arises. With adequate computerization where a program will

be designed to checkmate these fraudulent clients and insurance companies would assist the insured, insurer and overseers.

1.5 SCOPE OF STUDY

As mentioned earlier this will involve the class of motor insurance. Since the motor insurance did arise some hundred or so years ago. We will trace the origin of the motor insurance, how it has faired through time to its present day status. Where necessary our claims and assertion would be substantiated with data and other supporting information. Then we could see how advent of computerization could assist the vehicle insurance positively or negatively.

1.6 LIMITATION OF THE STUDY

The insurance market is a very vast market spanning across all facets of human life. The business of insurance includes but not restricted to fire, burglary, motor, life, professional indemnity, marine, aviation, machinery breakdown, plant all risk, constriction insurance, industrial insurance est.

For this reason we have decided to restrict ourselves to the motor insurance because it is the most visible and most used by both laymen and professionals alike. Investigations have revealed that apart from being the most used it is that which is most common to all and sundry.

Therefore once the processes of motor insurance can be computerized, other classes of insurance could easily follow suit with little modifications to suit the class. The motor insurance industry has come a long way involving many complex functions. The computerization will be limited to accounting, underwriting, claims processing and eventual settlement.

1.7 DEFINITION OF TERMS

1.7.1 ACCEPTANCE: confirmation of cover by an insurance company usually supported by a policy document.

1.7.2 ADJUSTER OR ASSESSOR: an independent assessor appointed by an insurance company to determine the extent of a loss and the insurer's liability following a claim.

1.7.3 ADDITIONAL: during the tenure of a motor insurance policy, the insured could add another vehicle to the existing policy. In this case, a pro-rata premium is charged since the cover on the new vehicle automatically assumes same renewal date.

1.7.4 ARBITRATION: when an insurer and the insured are unable to agree on the amount and extent of the loss, most insurance contracts provide for impartial experts to settle the dispute through arbitration.

1.7.5 AGENT: one who solicits, negotiates and effects contracts of insurance on behalf of insurer(s) within a defined limit of authority and subject to statutory and common laws. An agent may be a full-time sales employee of an insurer or appointed on a part time basis.

1.7.6 ALGORITHM: it is a finite set or sequence of instructions for carrying out a specific procedural task.

1.7.7 BORDEREAUX: a form for passing details of risks to insurance and reinsurance companies participating in the risks underwritten by an insurance company.

1.7.8 BROKER: Whilst an insurance company with specific guidelines employs an agent, a broker is an independent operator whose main duty is to bring parties to an insurance transaction together for a commission. The broker conducts his business for all and sundry and does not represent any particular insurer to the exclusion of others. The broker is professionally liable to the insured in view of his professed expertise in insurance.

1.7.9 CLAIMS: the demand made by an insured or the insured's beneficiary for payments of benefits or indemnity following a loss in accordance with the terms of an insurance contract.

1.7.10 CLAIMS FORM: a document prescribed by an insurance company for completion by the insured for the purpose of reporting a loss under a policy.

1.7.11 COMMISSION: a portion of the premium paid to the agent or broker for introducing the business or a portion of the premium allowed by the reinsured to the original insurer for acquisition and other costs.

1.7.12 COMPREHENSIVE INSURANCE (MOTOR): insurance cover for a motor vehicle against physical damage, losses arising from fire, theft, falling objects and various other perils and including third party liability for death, injury and damage to property.

1.7.13 COMPUTERIZATION: It the process where by a programmer, designs a program that is used to solve a specific task or problem.

1.7.14 COVER:

A contract of insurance or to effect insurance, that is, to 'cover' an insured for example, motor insurance with effect from a given time. Or

To include within an existing contract of insurance, for example, one could 'cover' an additional risk under a property insurance policy.

1.7.16 COVER NOTE: a document, which signifies temporary acceptance of insurance pending the issuance of the policy document.

1.7.17 DATA: are raw facts that are relatively meaningless in isolation.

1.7.18 DISCHARGE VOUCHER: a document signed by the insured accepting the terms of settlement and exonerating the insurance company from all future liability regarding a claim.

1.7.19 DELETION: the insured may request that a particular vehicle in the schedule be deleted either because the vehicle has been stolen or sold during the insurance year.

1.7.20 FLEET RATING: any risk where the number of private cars and commercial vehicles registered in the name of the same owner is not less than 10(ten) may be specially rated to reduce premium charged.

1.7.21 INDEMNITY: the maximum amount payable by an insurer to a beneficiary of a loss. This those not apply to insurance contracts of fixed amounts and those of life and personal accident regarded as not contracts of indemnity. The principle of indemnity implies that the claimant does not profit from the loss.

1.7.22 INFORMATION PROCESSING: the process through which data are transformed into useful and meaningful information.

1.7.23 INSURABLE INTEREST: the pecuniary interest a person has in a possible subject matter of insurance such as car, property or life, such that he might suffer a financial loss as a result of the happening of the event insured against.

1.7.24 INSURED: a person or persons named under an insurance policy for whose benefit the policy is effected.

1.7.25 INSURER: the insurance company that has undertaken to provide an indemnity, pecuniary benefits or render services.

1.7.26 LIABILITY INSURANCE: protection provided under an insurance contract against losses arising out of legal liability of an insured resulting from damage to third party property and injury or death to other persons.

1.7.27 MATERIAL FACT: it is any information concerning a risk that could influence the judgment of an insurer in deciding to underwrite or decline the risk, charge a normal or additional premium. The law requires that a proposer must disclose all material facts at the time of entering into an insurance contract at a renewal.

1.7.28 POLICY HOLDER: a person in actual possession of an insurance policy. (See insured).

1.7.29 PREMIUM: the calculated cost of a risk charged to the insured by the insurer for providing insurance protection against a specified risk for a specified period of time.

1.7.30 PROPOSAL FORM: documents prescribed by the insurer to be completed and signed by the prospective insured and containing information regarding full details of the risk and interest to be covered. The proposal form is usually a part of the policy and the proposer is expected to disclose all material facts related to the risk.

1.7.31 PROGRAM: a program is an algorithm specifically expressed in high-level language capable of execution by a computer.

1.7.32 PROGRAM DESIGN: it's a set of instructions for carrying out a specific procedural task. It can be achieved by employing any of the tools listed below:

-Algorithm

-Flowchart

1.7.33 RENEWAL: motor insurance is an annual policy, so it becomes due for renewal on its anniversary.

1.7.34 RATES: the percentages or factors applied to the sum insured of a risk to determine the premium. The means of rating in motor insurance is by Tariff.

1.7.35 RATE CUTTING: the unethical practice of under charging premiums payable on a risk with the intention of gaining competitive advantage over other insurance companies.

1.7.36 RESERVE: the actual or potential liabilities, which are allocated and kept in a special account by insurance companies to cover unearned premiums, outstanding claims, contingency liabilities and future losses.

1.7.37 SECURITY: most insurance companies including international brokers maintain a security list of companies' worldwide.

1.7.38 SURVEYOR: a person or company who by virtue of expertise assesses a risk on behalf of an insurance company for the purposes of underwriting.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

PRINCE R O BADMOS THE AUTHOR OF INTRODUCTION TO COMPUTER IN 2004 DEFINED a computer as an electronic machine that accepts, process data, stores and output information by following a set of instructions to produce an accurate and efficient result.

PRINCE R O BADMOS THE AUTHOR OF INTRODUCTION TO COMPUTER IN 2004 DEFINED it as a machine that accepts data from an input device, perform arithmetic and logical operations in accordance with pre-defined program and finally transfers the processed data for storing or to an output device for further processing or printing.

OR

RALPH. M. STAIR JR. the Author Of Computers In Today's World in the year 1998 defined a computer as an electronic device, which is capable of processing data in a wide variety of ways with an extremely high degree of speed and accuracy.

OR

Emuoyibofarhe o. Justice, Sunday A. Reju and Fasanya A. Kola authors of fundamentals of computer science and technology also defined a computer as an electronic device that accepts users problems as “input” processes it and then produces an “output”.

Simply put a computer is an electronic device for information processing.

2.2 BRIEF HISTORY OF INSURANCE

Historians trace the origin of insurance to the Roman bottomry contracts of the Babylonian period of between 4,000 and 3,000 BC, as an ancient example of what is today regarded as insurance. Beyond the Romans, the Indians and the Greeks also practiced bottomry, even several years before Christ. The Italians were regarded as the forerunners of modern insurance. They were said to have

Introduced the business to most countries of Europe. By 1601 however, the business has so developed in the English-speaking world that parliaments had begun to regulate the practice. According to historical records, marine insurance was probably the first of all forms of insurance followed by fire and much later life insurance.

Modern insurance started in Nigeria in the early part of the 20th century. That was when early British merchants established trading outpost on the West African coast. Like the activity of the British traders, insurance activities on the coast was run through agencies, however in 1921 the royal exchange assurance company started as the first insurance company in Nigeria. That was when the assurance agency which has started operation in 1919, was upgraded to a full-fledged branch. In 1949, three other insurance companies opened shop in the country. Thus, the virtual monopoly of the country's insurance business, which the royal exchange had enjoyed for

almost three decades, became even more intense when the British companies further strengthened their grips on the business in Nigeria.

Soon after independence, the first republic parliament set up the OBANDE commission to review the situation in the insurance industry. The report of that commission formed the basis of the insurance companies act of 1961. The promulgation of the act together with the subsequent amendment in the miscellaneous provisions act of 1964 led to an increase in Nigerians' participation in the insurance industry. Thus, by 1966, there were 49 registered insurance companies in Nigeria.

In spite of all these indigenous companies, the bulk of the business went to the foreign-owned companies. Along the line it was discovered that this imbalance was further reinforced by the specific instruction, which foreign companies that were operating in Nigeria, normally received from their home offices that they should insure only with companies that originate from their home countries. Even where there were no such insurance companies from the foreign companies' home countries, the practice was such that the companies as a matter of policy restrictively insured with any other foreign-owned insurance companies in preference to the indigenous Nigerian insurance companies.

The consequence of these was the heavy drain on the nations' foreign exchange. It was not until 1964 that the *Federal House Of Representatives* took a concrete step towards redressing the problem of foreign domination of the insurance industry. In 1968 when the government published its white

paper on the working party's report, the government said that: "although not dealt with by the working party, the government is not satisfied with the way in which properties belonging to the corporations and state-owned companies are at present insured and it has therefore decided that immediate steps should be taken to form a state-owned insurance company which should be responsible for insuring properties belonging to all statutory corporation and state-owned companies." What followed afterwards was the promulgation of decree No.22 of 1st JULY 1969 that gave birth to the NATIONAL INSURANCE CORPORATION OF NIGERIA (NICON).

2.3 NICON INSURANCE (AS A CASE STUDY)

National Insurance Corporation of Nigeria (NICON) one of Africa's leading insurers is fully owned by the federal government of Nigeria. The corporation was established by decree No. 22 of July 1st 1969 (now Cap. 263 LFN of 1990 as amended) with the main objective of assisting in the development of the insurance industry in Nigeria and specifically to ensure that federal government's assets and property are fully protected by way of insurance.

The corporation, which is now the leading insurance company in Nigeria, accounts for over 45% of the total premium income of the Nigerian insurance market.

It has ten zonal offices and over 48 branch offices, located in virtually every state in the country, and leads in the underwriting of such personal line insurance as life, motor, and personal accident, as well as in the insurance of personal aviation, marine, oil & energy and other special target risk.

The insurance system is a system of transferring the responses for paying losses from one part to another. The Nikon Insurance Company collects some amount of money usually 10% of the actual amount of what is to be insured (premium) from its clients who introduce himself or are introduced by an agent on contractual promise that if anything happens to an item or object insured, e.g. a motor, while the agreement is still in force, then subject to terms or conditions of agreements. The insurance company makes certain payments to the insured (client); this payment is called the CLAIM. The computerized motor insurance system will handle all information necessary for processing each client's cover policy, proposal, renewal of proposal, claims and premium payment for new client willing to be part of the insurance business and generate all necessary report for management use.

A certificate of insurance is issued upon payment of full premium and cleared cheque. It is valid for one year after which it is being renewed and a new certificate issued. For identification purposes, certificates are marked as follows: private car – wax, private and commercial vehicles – WAZ. The relevant points on the certificates are the certificate number, policy number, index mark and registration number of the vehicle, name of policy holder,

effective date of insurance, date of expiry, persons or classes of persons entitled to drive, limitations as to use. Either party – insurance company, under the cancellation clause or the insured for personal reasons, might cancel the certificate. In either case a return premium is made less the time on risk charges.

2.4 BOARD /MANAGEMENT

There is a BOARD, which formulate policies for the corporation. This board is made up of eight (8) politically appointed board members with non executive powers headed by the Chairman of the Board. These are non-professionals. From inception to date Nikon have witnessed seven (7) board chairmen in the persons of: - Alhaji Aliko Mohammed 1970-1976, Mr. Kanu Agabi 1978-1979, Dr. yahaya Shantali 1979-1984, Alhaji Hamisu Buhari 1984-1986, Dr. Hassan Adamu the Wakilin Adamawa 1991-1992, Dr. Benjamin A. Adegun 1993-1994, and finally Amb. Yahaya Kwande 2000-2004.

Whilst the Managing Director heads a team of professionals that assist in the day to day implementation of the policies fashioned out by the board. The structure of Nikon's Management is hinged on four main Directorates, which are headed by the managing director and three other executive directors all professionals in their respective fields. The government appoints them all. Under each directorate there are a bunch of division and subdivisions saddled with the responsibilities of managing

officers and departments under them. These divisions and subdivisions and/or departments are being run General Managers (GMs 1n0.), seven Deputy General Managers (DGMs 7), fourteen Assistant General Managers (AGMs 14), one Principal Manager (PMs 1) twenty four Senior Managers (SMs 24). Directly under them are the Managers and more than forty Assistant Managers (Ams 40). All these constitute the management corp. The Corporation is currently being staffed by a staff strength of 1300 employees.

2.5 COMPOSITION OF BOARD/ EXECUTIVE MANAGEMENT

As at 2004 the BOARD is headed by Ambassador Yahaya kwande other members are Ms. P.M.G. Soares (managing), Alhaji Olawale Mogaji , Alhaji Adamu Shuaibu, Engr. Lawrence Amadi, Alhaji Aliyu Danbatta and Prince Jeff Nnamani. Mallam Naseer A. Ahmed is the legal Adviser and Corporation Secretary.

The Executive Management on the other hand is headed by the Managing Director /Chief executive Officer, Ms. P. M. G. soares; with Mr. S.20. Adeda (Executive Director Technical), Alhaji Ibrahim Hassan (Executive Director, Special Risks) and Alhaji S.L. Sharubutu (Executive Director, Finance and Administration), as member.

2.6 STRUCTURE

By the very nature of Insurance, any cumbersome structure will affect prompt delivery of service to its clients thus conscious effort are made to deliberately prune down the structure of command.

Therefore, at the top of the organizational chart of NICON is the BOARD made up of both the Managing Director and Executive and Non-Executive Directors.

The Managing Director and Executive Directors make up what is generally called EXECUTIVE MANAGEMENT. This has recently been expanded to include deputy general managers, the head of London contact office and the corporation secretary/ legal adviser.

2.7 DIRECTORATES

There are four Directorates, namely, technical, special Risk, Finance and administration and managing director's. each of them is headed by an executive director except that of the managing director's, which is supervised

by the chief executive. The directorates supervise the activities of divisions and departments under them. The technical directorate oversees the activities of the ten zones. The managing director's directorate oversees the activities of some support services divisions and departments. They are, Legal, corporate affairs, audit, Marketing/ Strategic Planning, and Lagos and London offices. Senior Management, which comprises assistant General Managers, follows the Executive Management and assistant Managers constitute what is known as General Management. Nicon have being able to deliver services to it teeming clients from bottom upwards through these various chains of commands.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 FEASIBILITY

The main aim of carrying out the feasibility study is to carefully study the current manual way of calculating and allocating claims to the unfortunate few clients who must have suffer loss. With a view to determining whether it should be enhanced or an entirely new system be developed. The study was conducted with maximum cooperation given by the staff of the NICON PLC.

3.2 METHODOLOGY OF STUDY

The following methods were used in carrying out the investigation:

1. Interview: few of the staffs of the branch were interviewed about the motor insurance department.
2. Inspection: standard rate of the premium table used in the calculation of premium was examined. Also policy documents, old and new files were also examined.
3. Observation: this method was applied for a week, where their activities were watched i.e. general study of the existing system, as to how it operates.

3.3 ANALYSIS OF EXISTING SYSTEM

3.3.1 WORKING MANUAL ON MOTOR INSURANCE (underwriting and claim)

This aspect of insurance business is one of the few that are made compulsory by law. The governing act is the Motor Vehicle (third party insurance) ordinance 1945.

3.3.2 UNDERWRITING PROCEDURE

New business: when a vehicle is proposed for insurance, the proposer completes a form and is required to produce a purchase receipt of the vehicle, current vehicle license, ignition key number, booth key number, kilometer reading and the vehicle for inspection. The premium is calculated and the proposer pays.

In this chapter we shall discuss and compute steps taken to compute the premium. To start with as mentioned above a proposer is first of all asked what he wants to insure i.e. is it a car, bus, lorry or motorcycle. Now these vehicles mentioned above are classified into three classes namely, private motor, commercial and motorcycle insurance. Further more the proposer is asked which cover does he want, they are of two types namely, comprehensive and third party insurance covers. The proposer on making his choice is asked if he wants additional cover like cover for civil commotion and riot, for third party property damage, personal accidents and self insured deductible. These classes of insurance, policy cover and additional covers are explained in details below.

3.3.3 COMPREHENSIVE POLICY: which provides cover against named perils subject to the terms, exclusions and conditions of the policy; Third party fire and theft which is like comprehensive policy but excludes own damage. It simply means that it covers fire, theft, and third party damage to property and life. Third party is someone or something that has been affected by the insured that is the second party and is settled by the insurer who is the first party.

3.3.4 THIRD PARTY: Only covers which indemnifies insured against damage or injury to third party

3.3.5 PRIVATE MOTOR (PM): is any motor vehicle used for pleasure and domestic purposes. Usually rated 10%.

3.3.6 COMMERCIAL VEHICLES (CV): are vehicles used in connection with an\ business I.e. commercial traveling or motor trade and carriage of passengers or goods for reward or for hire. The ratings do vary due to either the sitting arrangement or the goods carrying capacity .i.e the standard ratings are however given as thus:-

Own goods – 11.5%

General cartage - 12%

Buses – 12%

3.3.7 MOTOR CYCLES (MC): its any motorbike that is propelled by mechanical means that can convey one or two persons from one place to another

3.3.8 COVER FOR CIVIL COMMOTION AND RIOT (optional): a standard motor policy does not cover civil riots and commotion. This is usually one percent (1%) of the value of the vehicle. The premium can be reduced if one pays an additional premium.

3.3.9 THIRD PARTY PROPERTY DAMAGE TPPD (optional): a standard motor policy (comprehensive) only covers third party property damage up to ₦50, 000.00. For additional premium it is usually ten percent (10%) of the scheduled premium.

3.3.10 PERSONAL ACCIDENTS PA (optional): A standard motor policy does not provide personal cover for injury to or death of the insured and any occupant of the car. If one requires a personal accident cover an additional premium of oneself and other non-fare paying occupants is to be added. This is usually ten percent (10%) of the scheduled premium.

3.3.11 SELF INSURED DEDUCTIBLE SID (optional): a motor comprehensive policy carries a maximum self-insured deductible of 10% of present value of

car. This can be reduced if you pay and additional premium, which is usually ten percent (10%) of the scheduled premium.

These additional / optional premiums calculated are then added to the already calculated premium to get the net premium, which the proposer now pays.

The relevance insurance certificate is issued to the policyholder.

The proposal form forms the basis of the motor insurance contract. It elicits such information that will influence a prudent underwriter in accepting a risk. It is made up of the following headings: Personal Details, Car Details, Cover Required, Use of the Car, Driver Details, Declaration, Important Notice (Private Car), Personal Accidents Additional Benefits (Private Car).

Rates for computation of premium:-

CLASSES OF MOTOR	SCHEDULED PREMIUM	FLEET RATE	NO CLAIM DISCOUNT	PREM. FOR RIOT & CIVIL COMMOTION (optional)	TPPD, PA & SID (optional)
PRIVATE MOTOR	10% of value of the vehicle	10% of scheduled premium	For 1 year – 20% For 2 years – 25% For 3 years – 33.3% For 4 years – 40% For 5 years flat rate- 50% of the scheduled premium.	1% of the value of the motor	10% of the scheduled premium
COMMERCIAL MOTOR	11.5% fown goods and 12% for general cartage and buses.	5% of the scheduled premium	15% flat rate of the scheduled premium	Same as above	Same as above
MOTOR CYCLE	10% of the value of the motorcycle	10% of the scheduled premium	10% of the scheduled premium	Same as above	Same as above

Table 1.0

3.3.2 MANUAL CALCULATION OF PREMIUM

The premium is calculated using a premium computation sheet; it is a sheet of paper with the name of the organization, name of proposer and a table where all necessary information leading to the computation of the premium is recorded. An example is given below for 2 commercial vehicles (a case of NICON INSURANCE, Minna Branch). Using the ratings in table 1.0 above.

NICON INSURANCE CORPORATION, MINNA BRANC

PREMIUM COMPUTATION SHEET

INSURED: Alhaji m. a. sule

PERIOD OF INSURANCE: FROM:October 2004 TO:September 2005

POLICY NO.: 205

S/ N	MAKE OF VEHI CLE	REG .NO	.C.C	VALU E OF VEHI CLE	YEAR OF MAK E	SCHD. PREMI UM	LESS 5% FOR MORE THAN ONE	BALA NCE	LESS NCD WHERE APPLIC A-ABLE 15%	BALA NCE	PREM .FOR RIOT & CIV. COMM. 1%	TPPD, PA & SID	NET PREMIU M
1. 1	HOND A	AB24 1KN T	CAR	3,000,0 00	2002	300,000	15,000	285,000	N/A	285,000	30,000	3,000	392,250
	HOND A	AA77 4PA K	CAR	300000 0	2002	345000	17,250	327,750	N/a	327,750	30,000	34,500	392250
2.						₦690000	₦34500	₦65550 0		₦65550 0	₦60000	₦69000	₦784500

Table 1.1

The table above calculates the net premium for Alhaji m.a. Sule, which is ₦784, 500 for two PRIVATE vehicles as follows: From columns 1 to 6 gives precise details of the vehicle (s) to be insured. While from columns 7

to 14 shows the premium computation, i.e. discounts allowable and extra covers granted (optional). In computing premiums, two things are of utmost importance.

1. The sum insured (value of the vehicle including all accessories), which is the variable.
2. The Rate, which is the constant.

To properly calculate the premium, we need to know if the vehicle is to be used privately or for commercial purposes. This is because the risk exposures of these two vehicles are not the same thus this information are given in columns 1 to 6 above. They are classified accordingly that is PM for private motor and CV for commercial vehicle.

In the case of a PM, the constant is given at 10% of the cost of vehicle. While in the CV, the constant is not given. This is because commercial vehicles have different uses either for conveying goods- measured in tons or passenger vehicles graded by the number of passengers they carry. In columns 1 to 6 above the same information are obtained for both PM and CV. It is from columns 7 to 14 that the information differs; this is because the given constant of 10% is applied to the variable (sum insured) in the case of PM while a rating guide is referred to for commercial vehicles (tariff). The rating guide is a booklet that contains various types of commercial vehicles, their capacities and uses. This means various types of vehicles will

attract different rates thus it is difficult to maintain a single constant as in PM. Therefore we shall restrict our examples to PMs.

From the table 1.1 the cost of the vehicle is pegged at N3, 000,000. 00 (variable) since our constant is 10%, our premium is calculated thus:

$$\text{N}3, 000,000.00 * 10\% = \text{N}300, 000.00 \text{ (as shown in column 7)}$$

Where the owner has more than one vehicle (fleet), a fleet discount of 10% of the scheduled premium or ~~N~~3, 000.00 is allowed.

$$\text{Balance} = \text{N}300, 000 - \text{N}3, 000 = \text{N}297, 000 \text{ (as column 9)}$$

Further discounts are given when an insurance period lapsed and the insured experienced no claim say for the first year - a 20% no claim discount is allowed.

Although it is not applicable in the table above, meaning he has made claim during the one year period. It is calculated as follows,

$$\begin{aligned} \text{No Claim Discount or NCD} &= \text{N}297, 000 * 20\% \\ &= \text{N}59, 400.00 \end{aligned}$$

This implies that the no claim discount is

$$= \text{N}297, 000.00 - \text{N}59, 400.00$$

$$\text{Premium} = \text{N}237,600.00$$

This would have been the balance in column 11

For the optional cover the premium is calculated as thus:

$$\begin{aligned} \text{Premium for riot and civil commotion} &= \text{N}3,000,000.00 * 1\% \\ &= \text{N}30,000.00 \end{aligned}$$

$$\begin{aligned} \text{TPPD, PA \& SID} &= \text{N}345,000.00 * 10\% \\ &= 34,500.00 \end{aligned}$$

Finally to compute the Net premium = SCHED. PREM + FLEET RATE BALANCE + NCD BALANCE + PREM. FOR RIOT & CIV. COM. +TPPD, PA & SID ie.

$$\begin{aligned} \text{NET PREMIUM} &= 300,000 + 15,000 + 237,600 + 30,000 + 34,500 = \\ &\text{N}617,100.00 \end{aligned}$$

To be paid by the insured to the insurer.

FOR COMMERCIAL VEHICLE e.g. Daf, bus, heavy duty trucks e.t.c

To compute the scheduled premium of the commercial vehicle (CV) with the given value of the CV at $\text{N}3,000,000.00$ (As mentioned earlier a rating guide is provided for commercial vehicle (tariff). The 11.5% used here is just to site an example.

$$\text{Scheduled premium} = \text{N}3,000,000.00 * 11.5\% = \text{N}345,000.00$$

If there is more than one commercial vehicle then we calculate the fleet rating for CV, which is 5% less of the scheduled premium

$$\text{Fleet rate} = \text{N}345,000.00 * 0.05 = \text{N}17,250.00$$

$$\text{Balance} = \text{N}345,000.00 - \text{N}17,250.00 = \text{N}327,750.00$$

From table 1.0 you can see that the NO CLAIM DISCOUNT for commercial cars is 15% flat rate. Hence

$$\text{No claim discount} = \text{N}327,750.00 * 15\% = \text{N}49,162.5$$

$$\text{Balance} = \text{N}327,750.00 - \text{N}49,162.5 = \text{N}278,587.5$$

For optional cover we have

Premium for riot and civil commotion remains the same as that of PM =
 $\text{N}30,000.00$

Premium for TPPD, SID & PA is 10% of the scheduled premium =
 $\text{N}345,000.00 * 10\% = \text{N}34,500.00$

Therefore the net premium for the commercial vehicles is
 $\text{N}278,587.5 + \text{N}30,000.00 + \text{N}34,500.00 = \text{N}343,087.5$

CHAPTER FOUR

SYSTEM IMPLEMENTATION

4.1 THE PROPOSED SYSTEM

The manual procedure described in chapter three is similar to all types of policy but each has a different premium ratings.

The proposed system will contain three data files, which it will use to carry out its functions. These data files are the set up data. Each of the modules represents the task involved in underwriting procedure for three different policies considered in the project. The task involved includes the creation of policy main menu. They include

- ❖ PRIVATE CAR
- ❖ COMMERCIAL CAR
- ❖ MOTORBIKE

The policy creation main menu will display the various policies available and the user will be prompted to enter a choices. Any of the policy selected will display another submenu. The submenu will include:

Data Entry

Data Modification

Screen Display/ Report

Print Records for signing and storing in a master file. It becomes a document that will serve as an original copy.

4.2 FILE DESIGN

These are transaction files that take in data in form of fields, of a particular motor and give a record of that particular motor. It includes signature of proposer and date this is then printed out and signed by the manager. The printed copy is then stored in a master file.

The program is also coded for security purpose. For now, the pass word is "0000 "

It can be changed by the organization.

4.2.1 QBASIC LANGUAGE

The word BASIC is an acronym for Beginners all-purpose symbolic instruction code, basic is a high-level language developed at Dart Month College U. S. A. in 1964 by professors John Kemeny and Thomas Kurt 2.

Basic was chosen because it is readily available in most microcomputers.

Hence can be developed in little time with little effort and little cost.

It is relatively easy to learn

It is interactive i.e. you can sit at the terminals and appear to be conversing with it.

Is the most commonly used programming language for mini computers and microcomputers system because of its small interpreter and compiler?

4.2.2 SOME VERSIONS OF BASIC EXECUTABLE ON MOST MACHINES

- * GWBASIC
- * QUICK BASIC
- * TURBO BASIC
- * ADVANCED BASIC
- * VIUSUAL BASIC

PREVIEW OF THE PROPOSAL FORM ON PRINTING

NICON INSURANCE CORPORATION, MINNA BRANCH

ORIGINAL COPY

FULL NAME: -- MARYAM .S. IBRAHIM

Postal address: -- P.O.BOX 3310

Date of birth: --24/11/75

Occupation: --TEACHER

Insurance commence: --12NOON ON MONDAY 15/3/04

Insurance expires: --15/3/05

Reg. No: --MN 123 YB

Make OF VEHICLE: -- JEEP

Engine. No: --2333890

Chasis.no: --L123TYJ

CUBIC CAPACITY: --20

VALUE OF RISK:--~~N~~ 200,000.00

NET PREMIUM: -- ~~N~~ 2,000.00

SIGN.....~~S~~..... DATE...15/3/04.....

It also states if you are entitled to a discount or not

4.3 OUTPUT SPECIFICATION

The proposed system” A COMPUTERIZED PROPOSAL FORM, FOR THE MOTOR DEPARTMENT, NICON INSURANCE MINNA BRANCH”. Will be able to generate the following output from the analysis made: -

- ✓ PRIVATE CAR POLICY
- ✓ COMMERCIAL VEHICLE POLICY
- ✓ MOTORBIKE POLICY

They consist of the following information:

-Full details about the proposer

-Full details about the motor (risk) to be insured

- A computation of the net premium, which last for twelve (12) calendar months.

-The proposal form on completion will be printed per client. It also includes the -signature of the client.

-The output media recommended is the printer but a 3.5inches double sided/ high-density diskette capacity 1.44 MB (formatted) can also be used.

4.3 INPUT SPECIFICATION

The necessity for quick response from the system would determine the need for on-line type of input. Consideration will be given to: -

- ✓ Inputting of Data using Keyboard
- ✓ Using a storage media e.g. diskette, CDs

4.3.1 HOW THE PROGRAM WORKS

You need a password to be able to access the program as stated in section (4.2 FILE DESIGN). On entering the "Correct Password" it takes the user to the Data File main menu, where the user is prompted to key in a choice either 1 for Private Car, 2 for Commercial Vehicle, 3 for Motorbike or 4 to Exit the Program. Whichever policy you choose will open 3 further submenus: -

✓ PRESS {E} FOR RECORDS OR DATA ENTRY: - These file enables you to enter in your data for as many clients as possible, with a file command e.g. (open "private.dat" for output as #1), it then opens "private" a GOSUB for inputting records and if the user wants to Exit the file, the user press the "Enter Key" and then press [4] to exit the program.

✓ PRESS {P} FOR RECORDS PRINTING OPERATION: - These file enables you to prepare the file (open "private.dat" for output as #1), it then opens "prprivate" a GOSUB for printing records. The user also press [4] to Exit.

✓ PRESS {A} FOR RECORDS APPENDING OPERATION: - Same procedure as the ones above. It enables the user to add to a file already existing and if it does not exist it creates a new one

4.4 SYSTEM OPERATION REQUIREMENTS

4.4.1 HARDWARE REQUIREMENTS

The following are the Hardware requirements are recommended

-A PENTIUM II MICRO-PROCESSOR base computer and PENTIUM IV

can also be used although its expensive, it is the latest technology.

-At least 128 MB of RAM.

-A PRINTER (preferably line printer)

-Tape or disk backup device

-A mouse, joystick or track ball for easy use of system

4.4.2 SOFTWARE REQUIREMENTS

-MS-DOS (Microsoft Disk Operating System)

-PC-DOS (Personal Computer Disk Operating System)

-QUICK BASIC Software

4.4.3 PHERIPHERAL REQUIREMENTS

A UPS (for uninterrupted power supply)

An automatic power surge regulator

4.4.4 NETWORK REQUIREMENTS

A SERVER (preferable Pentium machine), CABLES AND
NETWORK ADAPTORS

CHAPTER FIVE

POST IMPLEMENTATION

5.1 SUMMARY

This project started in chapter one by tracing the history of computer from ancient times to the present day. Also in the opening chapter, we were able to state definitions of term of critical working processes as it to relate to insurance.

In chapter two, we looked critically at the general working process in NICON INSURANCE, their organizational set up, organogram and other working systems.

In chapter three, we were able to graphically show how premium computation is carry out in respect of Motor Insurance, Motor Cycle and Commercial Vehicles. Where possible all deduction allowable and discounts possible are shown.

In chapter four, the method of computerization hitherto manually carry out have been successfully computerized as the programming clearly enunciates. These processes saw us through from proposal form completion to premium computation and the final acceptance of the business.

In chapter five, we summarize the entire project thus far and where necessary, we highlighted inherent problems and proffer solutions where necessary.

5.2 RECOMMENDATION AND CONCLUSIONS

RECOMMENDATION:

First and foremost the staff must all be computer literate i.e. they should be trained to be computer literate. It will go a long way to improve the efficiency of the organization. Then the organization must research the impact computers will have on keeping track of their accounts. They must choose the right hardware and software to best suit their particular needs while at the same time making themselves familiar with the new enhancement that increase productivity. Finally the organization must be on the alert for virus infection always install an anti virus software to check and/or detect virus and clean them instantly, these should be done at least once a week for the hard disk and any time a storage media is used. To conclude these project I will like to end by saying “ I hope these project will go along way in solving problems on proposal form handling in future both in the motor department and other departments that wish to adopt the procedure in all NICON branches and head office. It is hoped that this work can serve as an important tool in the progress towards computer aided mathematical manipulations.

APPENDIX
AND
THE PROGRAM (IN QUICK BASIC)

REFERENCE

- ❖ Further MATHEMATICS PROJECT REVISED EDITION (2) By Tuttuh Adegun M.E., SIVASUBRAMANIAM . S. AND ADEGOKE .R., IBADAN (2001)
- ❖ Further MATHEMATICS PROJECT REVISED EDITION (3) By Tuttuh Adegun M.E., SIVASUBRAMANIAM . S. AND ADEGOKE .R., IBADAN (2001)
- ❖ NICON INSURANCE CORPORATION Facts and FIGURES, Abuja (2004)
- ❖ FUNDAMENTALS OF COMPUTER SCIENCE AND TECHNOLOGY, BY EMUOYIBOFARHE, SUNDAY A. REJU, FASANYA .A. KOLA. (2004)
- ❖ DIFFERENTIAL EQUATIONS AND BOUNDARY VALUE PROBLEMS, COMPUTING AND MODELLING, C.H EDWARDS JNR AND DAVID E. PENNY, SADDLE RIVER NEW JERSEY. (1996)
- ❖ NICCON 25TH ANNIVERSARY, 1994

HANDOUTS USED

- ❖ LECTURE NOTES, HANDOUTS FROM DATATEK COMPUTER TRAINING CENTER.
- ❖ INTRODUCTION TO COMPUTER BY PRINCE R. O. BADMUS, MINNA, NIGER STATE (2004)
- ❖ DATABASE MANAGEMENT SYSTEM BY MALLAM HAKIMI DANLADI, MINNA NIGER STATE (2004)

```

CLS
COLOR 5, 15
SLEEP 4
PRINT : PRINT : PRINT : SLEEP 3
LOCATE 4, 23: COLOR 5, 15: PRINT "ENTER PASSWORD": LOCATE 4, 37
: INPUT PW
CLS
IF PW = 0 THEN
GOTO 200
ELSE GOTO 250
END IF

250 LOCATE 10, 30: COLOR 5: PRINT "YOU ARE NOT AN AUTHORIZED USER!": GOTO 100
200 LOCATE 10, 30: COLOR 1: PRINT "YOU ARE WELCOME TO"
PRINT : PRINT
LOCATE 13, 25: COLOR 1: PRINT "THE MOTOR DEPARTMENT OF THE"
LOCATE 16, 18: COLOR 1: PRINT "NICON INSURANCE CORPORATION MINNA BRANCH":
SLEEP 8: GOTO 1
1 CLS

BG:
CLS
LOCATE 8, 20: PRINT "1. PRIVATE CAR INSURANCE POLICY "; 1
LOCATE 10, 20: PRINT "2. COMMERCIAL VEHICLE INSURANCE POLICY"; 2
LOCATE 12, 20: PRINT "3. MOTORCYCLE INSURANCE POLICY"; 3
LOCATE 14, 20: PRINT "4. EXIT PROGRAM"; 4
LOCATE 6, 10: PRINT " MAKE YOUR CHOICE BY SELECTING 1,2,3 OR 4"
SLEEP
GOTO 4
4 CLS
PRINT
INPUT "CHOICE"; H
IF H = 1 THEN
GOTO PRIVATE
ELSEIF H = 2 THEN
GOTO COMMER
ELSEIF H = 3 THEN
GOTO BK
ELSE
H = 4
GOTO 100
END IF

SLEEP

GOTO 5
5 CLS
PRINT
PRIVATE:
LOCATE 5, 10: PRINT "PRIVATE CAR INSURANCE POLICY"
LOCATE 10, 15: PRINT "PRESS {E} FOR RECORDS OR DATA ENTRY OPERATION"
LOCATE 15, 15: PRINT "PRESS {P} FOR RECORDS PRINTING OPERATION"
LOCATE 20, 15: PRINT "PRESS {A} FOR APPENDING OF RECORDS OPERATION"

LOCATE 4, 15: INPUT "MAKE YOUR CHOICE"; CH$
IF UCASE$(CH$) = "E" THEN
OPEN "PRIVATE.DAT" FOR OUTPUT AS #1

```

```

GOSUB INPRIVATE
GOTO BG
ELSEIF UCASE$(CH$) = "P" THEN
OPEN "PRIVATE.DAT" FOR INPUT AS #1
GOSUB PRPRIVATE
GOTO BG
ELSEIF UCASE$(CH$) = "A" THEN
OPEN "PRIVATE.DAT" FOR APPEND AS #1
GOSUB INPRIVATE
GOTO BG
ELSE
GOTO 100
END IF

```

INPRIVATE:

```

CLS
DO
INPUT "FULL NAME :--"; NAM$
INPUT "POSTAL ADDRESS:--"; AD$
INPUT "DATE OF BIRTH:--"; D$
INPUT "PRECISE OCCUPATION OR TRADE:--"; T$
INPUT "INSURANCE TO COMMENCE FROM:--"; C$
INPUT "INSURANCE TO EXPIRE ON:--"; EXP$
INPUT " REG. NO.:--"; R$
INPUT "MAKE:--"; M$
INPUT "ENGINENO.:--"; E$
INPUT "CHASISNO.:--"; CH$
INPUT "CUBIC CAPACITY:--"; CC$
INPUT "YEAR OF PURCHASE:--"; YP
INPUT "YEAR OF MAKE:--"; YM
INPUT "NO. OF CARS:--"; N
INPUT "PREM FOR RIOT&CIVIL COM.(Y OR N):--"; F$
INPUT "TPPD, PA & SID (PRESS Y OR N):--"; G$
INPUT "ANY CLAIM MADE IN THE PREVIOUS POLICY (Y OR N):--"; ANS$
WRITE #1, NAM$, AD$, D$, T$, C$, EXP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$,
G$, ANS$
INPUT "DO YOU WANT TO ADD MORE RECORDS"; YON$
LOOP WHILE UCASE$(YON$) = "Y"
CLOSE #1
RETURN

```

PRPRIVATE:

```

DO WHILE NOT EOF(1)
CLS
INPUT #1, NAM$, AD$, D$, T$, C$, EXP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$, G$,
ANS$
INPUT "ENTER VALUE OF CAR"; V
SPREM = V * 10 / 100
IF N < 2 THEN
LOCATE 25, 6: PRINT "YOU ARE NOT ENTITLED TO A FLEET DISCOUNT"
NETP = SPREM
ELSE
FLE = SPREM * 10 / 100
NETP = SPREM - FLE
END IF

```



```

IF ANS$ = "Y" THEN
LOCATE 26, 6: PRINT "YOU ARE NOT ENTITLED TO A NO CLAIM DISCOUNT (NCD)"
NETPR = NETP

ELSEIF ANS$ = "N" THEN
NCD = NETP * 15 / 100
NETPR = NETP - NCD
END IF

OPT = V * 1 / 100
OPT2 = SPREM * 10 / 100
IF F$ = "Y" THEN
NETPRE = NETPR + OPT
GOTO 40
ELSEIF F$ = "N" THEN
NETPRE = NETPR
GOTO 40
ELSE
PRINT "NOT INTERESTED"
END IF
40 IF G$ = "Y" THEN
NETPREM = NETPRE + OPT2
ELSEIF G$ = "N" THEN
NETPREM = NETPRE
ELSE
PRINT "NOT INTERESTED"
END IF
SUM = 0
FOR J = 1 TO N
SUM = SUM + NETPREM
NEXT

LOCATE 3, 6: PRINT "FULL NAME:___"; NAM$
LOCATE 4, 6: PRINT "POSTAL ADDRESS:----"; AD$
LOCATE 5, 6: PRINT "DATE OF BIRTH:---"; D$
LOCATE 6, 6: PRINT "PRECISE OCCUPATION OR TRADE:---"; T$
LOCATE 7, 6: PRINT "INSURANCE TO COMMENCE FROM:---"; C$
LOCATE 8, 6: PRINT "INSURANCE TO EXPIRE ON:---"; EXP$
LOCATE 9, 6: PRINT " REG. NO.:---"; R$
LOCATE 10, 6: PRINT "MAKE OF VEHICLE:---"; M$
LOCATE 11, 6: PRINT "ENGINENO.:---"; E$
LOCATE 12, 6: PRINT "CHASISNO.:---"; CH$
LOCATE 13, 6: PRINT "C.C.:---"; CC$
LOCATE 14, 6: PRINT "YEAR OF PURCHASE:---"; YP
LOCATE 15, 6: PRINT "YEAR OF MAKE:---"; YM
LOCATE 16, 6: PRINT "NO. OF CARS TO INSURE:---"; N
LOCATE 17, 6: PRINT "PREM FOR RIOT&CIVIL COM. (PRESS Y FOR YES OR N FOR NO) :--
- "; F$
LOCATE 18, 6: PRINT "TPPD, PA & SID (PRESS Y OR N) :---"; G$
LOCATE 19, 6: PRINT "ANY CLAIM MADE IN THE PREVIOUS POLICY (PRESS 'Y' FOR YES
AND 'N' FOR NO) :--"; ANS$
LOCATE 20, 6: PRINT "TOTAL NET PREMIUM:---"; SUM

LOCATE 22, 6: PRINT "SIGNATURE----- DATE-----"
LOCATE 21, 6: PRINT "POLICY NUMBER-----"

```

```
LOCATE 2, 6: COLOR 4, 15: PRINT "NICON INSURANCE CORPORATION, MINNA BRANCH.  
ORIGINAL COPY"  
SLEEP  
LOOP  
CLOSE #1  
RETURN
```

COMMER:

```
LOCATE 5, 10: PRINT "COMMERCIAL VEHICLE INSURANCE POLICY"  
LOCATE 10, 15: PRINT "PRESS {E} FOR RECORDS OR DATA ENTRY OPERATION"  
LOCATE 15, 15: PRINT "PRESS {P} FOR RECORDS PRINTING OPERATION"  
LOCATE 20, 15: PRINT "PRESS {A} FOR APPENDING OF RECORDS OPERATION"  
LOCATE 7, 10: INPUT "MAKE YOUR CHOICE"; CH$  
IF UCASE$(CH$) = "E" THEN  
OPEN "COMMER.DAT" FOR OUTPUT AS #1  
GOSUB INCOMMER  
GOTO BG  
ELSEIF UCASE$(CH$) = "P" THEN  
OPEN "COMMER.DAT" FOR INPUT AS #1  
GOSUB PRCOMMER  
GOTO BG  
ELSEIF UCASE$(CH$) = "A" THEN  
OPEN "COMMER.DAT" FOR APPEND AS #1  
GOSUB INCOMMER  
GOTO BG  
ELSE  
GOTO 100  
END IF
```

INCOMMER:

```
CLS  
DO  
INPUT "FULL NAME :--"; NAM$  
INPUT "POSTAL ADDRESS:--"; AD$  
INPUT "DATE OF BIRTH:--"; D$  
INPUT "PRECISE OCCUPATION OR TRADE:--"; T$  
INPUT "INSURANCE TO COMMENCE FROM:--"; C$  
INPUT "INSURANCE TO EXPIRE ON:--"; EXP$  
INPUT " REG. NO.:--"; R$  
INPUT "MAKE:--"; M$  
INPUT "ENGINENO.:--"; E$  
INPUT "CHASISNO.:--"; CH$  
INPUT "CUBIC CAPACITY:--"; CC$  
INPUT "YEAROF PURCHASE:--"; YP  
INPUT "YEAROF MAKE:--"; YM  
INPUT "NO. OF VEHICLES:--"; N  
INPUT "PREM FOR RIOT&CIVIL COM.(Y OR N):--"; F$  
INPUT "TPPD, PA & SID (Y OR N):--"; G$  
INPUT "ANY CLAIM MADE IN THE PREVIOUS POLICY (Y OR N):--"; ANS$  
  
WRITE #1, NAM$, AD$, D$, T$, C$, EXP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$,  
G$, ANS$  
INPUT "DO YOU WANT TO ADD MORE RECORDS"; YON$
```

```
LOOP WHILE UCASE$(YON$) = "Y"  
CLOSE #1  
RETURN
```

PRCOMMER:

```
DO WHILE NOT EOF(1)
```

```
CLS
```

```
INPUT #1, NAM$, AD$, D$, T$, C$, EXP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$, G$,  
ANS$
```

```
INPUT "ENTER VALUE OF CAR"; V
```

```
SPREM = V * 11.5 / 100
```

```
IF N < 2 THEN
```

```
PRINT "YOU ARE NOT ENTITLED TO A FLEET DISCOUNT"
```

```
NETP = SPREM
```

```
ELSE
```

```
FLE = SPREM * 5 / 100
```

```
NETP = SPREM - FLE
```

```
END IF
```

```
IF ANS$ = "Y" THEN
```

```
PRINT "YOU ARE NOT ENTITLED TO A NO CLAIM DISCOUNT (NCD) "
```

```
NETPR = NETP
```

```
ELSEIF ANS$ = "N" THEN
```

```
NCD = NETP * 15 / 100
```

```
NETPR = NETP - NCD
```

```
END IF
```

```
OPT = V * 1 / 100
```

```
OPT2 = SPREM * 5 / 100
```

```
IF F$ = "Y" THEN
```

```
NETPRE = NETPR + OPT
```

```
GOTO 60
```

```
ELSEIF F$ = "N" THEN
```

```
NETPRE = NETPR
```

```
GOTO 60
```

```
ELSE
```

```
PRINT "NOT INTERESTED"
```

```
END IF
```

```
60 IF G$ = "Y" THEN
```

```
NETPREM = NETPRE + OPT2
```

```
ELSEIF G$ = "N" THEN
```

```
NETPREM = NETPRE
```

```
ELSE
```

```
PRINT "NOT INTERESTED"
```

```
END IF
```

```
SUM = 0
```

```
FOR J = 1 TO N
```

```
SUM = SUM + NETPREM
```

```
NEXT
```

```
PRINT "COMMERCIAL VEHICLE PROPOSAL FORM"
```

```
PRINT
```

```
PRINT "FULL NAME :--"; NAM$
```

```
PRINT "POSTAL ADDRESS:--"; AD$
```

```
PRINT "DATE OF BIRTH:--"; D$
```

```
PRINT "PRECISE OCCUPATION OR TRADE:--"; T$
```

```

PRINT "INSURANCE TO COMMENCE FROM:--"; C$
PRINT "INSURANCE TO EXPIRE ON:--"; EXP$
PRINT " REG. NO.:--"; R$
PRINT "MAKE OF VEHICLE:--"; M$
PRINT "ENGINENO.:--"; E$
PRINT "CHASISNO.:--"; CH$
PRINT "CUBIC CAPACITY:--"; CC$
PRINT "YEAROF PURCHASE:--"; YP
PRINT "YEAROF MAKE:--"; YM
PRINT "NO. OF VEHICLES:--"; N
PRINT "PREM FOR RIOT&CIVIL COM.(Y OR N):--"; F$
PRINT "TPPD, PA & SID (Y OR N):--"; G$
PRINT "ANY CLAIM MADE IN THE PREVIOUS POLICY (Y OR N):--"; ANS$
PRINT "TOTAL NET PREMIUM:--"; SUM
PRINT
PRINT "SIGNATURE----- DATE-----"
PRINT "NICON INSURANCE CORPORATION, MINNA BRANCH. ORIGINAL COPY"
SLEEP
LOOP
CLOSE #1
RETURN

```

```

BK:
LOCATE 5, 15: PRINT "MOTORCYCLE INSURANCE POLICY"
LOCATE 10, 15: PRINT "PRESS {E} FOR RECORDS OR DATA ENTRY OPERATION"
LOCATE 15, 15: PRINT "PRESS {P} FOR RECORDS PRINTING OPERATION"
LOCATE 20, 15: PRINT "PRESS {A} FOR APPENDING OF RECORDS OPERATION"
INPUT "MAKE YOUR CHOICE"; CH$
IF UCASE$(CH$) = "E" THEN
OPEN "BK.DAT" FOR OUTPUT AS #1
GOSUB INBK
GOTO BG
ELSEIF UCASE$(CH$) = "P" THEN

```

```

OPEN "BK.DAT" FOR INPUT AS #1
GOSUB PRBK
GOTO BG
ELSEIF UCASE$(CH$) = "A" THEN
OPEN "BK.DAT" FOR APPEND AS #1
GOSUB INBK
GOTO BG
ELSE
GOTO 100
END IF

```

```

INBK:
CLS
DO
INPUT "FULL NAME :--"; NAM$
INPUT "POSTAL ADDRESS:--"; AD$
INPUT "DATE OF BIRTH:--"; D$
INPUT "PRECISE OCCUPATION OR TRADE:--"; T$

```

```
INPUT "INSURANCE TO COMMENCE FROM:--"; C$
INPUT "INSURANCE TO EXPIRE ON:--"; EXP$
INPUT " REG. NO.:--"; R$

INPUT "MAKE OF MOTORBIKE:--"; M$
INPUT "ENGINENO.:--"; E$
INPUT "CHASISNO.:--"; CH$
INPUT "CUBIC CAPACITY:--"; CC$
INPUT "YEAR OF PURCHASE:--"; YP
INPUT "YEAR OF MAKE:--"; YM
INPUT "NO. OF MOTORBIKES:--"; N
INPUT "PREM FOR RIOT&CIVIL COM. (Y OR N) :__"; F$
INPUT "TPPD, PA & SID (Y OR N) :--"; G$
INPUT "ANY CLAIM MADE IN THE PREVIOUS POLICY (Y OR N) :--"; ANS$
```

```
WRITE #1, NAM$, AD$, D$, T$, C$, EP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$,
G$, ANS$
```

```
INPUT "DO YOU WANT TO ADD MORE RECORDS"; YON$
LOOP WHILE UCASE$(YON$) = "Y"
CLOSE #1
RETURN
```

PRBK:

```
DO WHILE NOT EOF(1)
```

```
CLS
```

```
INPUT #1, NAM$, AD$, D$, T$, C$, EP$, N, R$, M$, E$, CH$, CC$, YP, YM, F$, G$,
ANS$
```

```
INPUT "ENTER VALUE OF MOTORBIKE"; V
SPREM = V * 10 / 100
```

```
IF N < 2 THEN
PRINT "YOU ARE NOT ENTITLED TO A FLEET DISCOUNT"
NETP = SPREM
ELSE
FLE = SPREM * 10 / 100
NETP = SPREM - FLE
END IF
```

```
IF ANS$ = "Y" THEN
PRINT "YOU ARE NOT ENTITLED TO A NO CLAIM DISCOUNT (NCD)"
NETPR = NETP
```

```
ELSEIF ANS$ = "N" THEN
NCD = NETP * 15 / 100
NETPR = NETP - NCD
END IF
```

```
OPT = V * 1 / 100
OPT2 = SPREM * 5 / 100
IF F$ = "Y" THEN
NETPRE = NETPR + OPT
GOTO 70
ELSEIF F$ = "N" THEN
NETPRE = NETPR
```

```

GOTO 70
ELSE
PRINT "NOT INTERESTED"
END IF
70 IF G$ = "Y" THEN
NETPREM = NETPRE + OPT2
ELSEIF G$ = "N" THEN
NETPREM = NETPRE
ELSE
PRINT "NOT INTERESTED"
END IF

SUM = 0
FOR J = 1 TO N
SUM = SUM + NETPREM
NEXT

PRINT "MOTORBIKE PROPOSAL FORM"
PRINT "FULL NAME :--"; NAM$
PRINT "POSTAL ADDRESS:--"; AD$
PRINT "DATE OF BIRTH:--"; D$
PRINT "PRECISE OCCUPATION OR TRADE:--"; T$
PRINT "INSURANCE TO COMMENCE FROM:--"; C$
PRINT "INSURANCE TO EXPIRE ON:--"; EXP$
PRINT "REG. NO.:--"; R$
PRINT "MAKE OF MOTORBIKE:--"; M$
PRINT "ENGINENO.:--"; E$
PRINT "CHASISNO.:--"; CH$
PRINT "CUBIC CAPACITY:--"; CC$
PRINT "YEAROF PURCHASE:--"; YP
PRINT "YEAROF MAKE:--"; YM
PRINT "NO. OF VEHICLES:--"; N
PRINT "PREM FOR RIOT&CIVIL COM.(Y OR N):--"; F$
PRINT "TPPD, PA & SID (Y OR N):--"; G$
PRINT "ANY CLAIM MADE IN THE PREVIOUS POLICY (Y OR N):--"; ANS$
PRINT "TOTAL NET PREMIUM:--"; SUM
PRINT
PRINT "SIGNATURE----- DATE-----"
PRINT "NICON INSURANCE CORPORATION, MINNA BRANCH. ORIGINAL COPY"

SLEEP
LOOP
CLOSE #1
RETURN

```

100 : END