

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND OF THE STUDY**

Before now, business Success was built on the ability to move goods and services with speed and accuracy. Today, information has become the fuel that powers business Success .In contemporary Cooperate world, information technology is deployed to gain competitive edge.

Information technology has been defined as the processing and distribution of data using computer hard ware, software, telecommunication, and digital electronic (Encarta Encyclopedia: 2004).

Therefore it is now obvious that computer component of information technology can no longer stand alone without the combination of other component. However, management planning and control responsibilities are also par amount to a successful enterprise and they represent a mandatory of an Organization to progress and survive in today highly unpredictable and competitive business environment. The projected plan of operation must be decisive and dynamic timely, intelligent planning must be predicated on current known fact and a thorough analysis and realistic approach to inevitable Feature probabilities .These key requirement for planning directions will lead to Business probability and an equitable return on investment, which are the objective of a successful management.

The techniques and mechanical tools required to accomplish the development of planning and control objective are now available, but in many instances, appropriate management organization, interest and progression in fully acknowledging their utilizations unfortunately lacking. This is a dilemma that must be overcome.

In addition, management control system must not be overlooked. It comprises; the plan of an organization and all of the Coordinates methods and measures adopted within a business safeguard its assets check the accuracy and reliability of its accounting data, promote operational efficiency and encourage adherence to prescribe managerial policy.

In other word, it could be regarded as whole system of control, financial and otherwise, establishment by the management in order to carry on the business of the company or organization in an orderly manner, safeguard its assets and secure as far as possible measures. The accuracy and reliability of its record for planning measurements for performance and control purpose .

Information technology is the technology used for study, understanding planning, design, construction, testing, distribution, support and operation of software, computers and computer related system that exist for the purpose of data, information and knowledge processing.

Another definition of the information technology (IT) is the industry has evolved include the study science solution set for all aspect of data, information and knowledge management, processing.

## **THE COMPANY UNDERSTUDY**

Unilever (formerly known as lever brother) Nigeria plc (Rc113) is the largest surviving manufacturing outfit in Nutria. The company in cooperated as a private company in 1923 (as lever brothers Nigeria plc) to manufacture soaps based on local palm oil. The company Strengthen it foot hold in the food and drink business by merging with Lipton Nigeria limited in July (1985) and also merged with chase brought products industry in December (1988) to become a giant in personal product business.

In accordance with Nigeria enterprises promotion degree of 1972 and 1977, 40% of the company equity is held by Nigeria citizens and institution, while the remaining 60% is held by Unilever overseas holding limited , Lipton tea company limited and chase borough product international limited.

Today Unilever Nigeria plc is a leading company in the industrial sector, engages in the manufacturing achere and marketing of wild range of household product.

## **1.2 STATEMENT OF PROBLEMS**

- Management will often worry about the cost(financial and social) of putting computer based system for processing accounting data and generating accounting information.
- incident of computer fraud.
- Problems that may be associated with real time online operations.
- Errors of input (garbage in garbage out) (GIGO)
- Problems of system errors.
- Problems that may be associated with the applications of computer based audit procedures.

## **1.3 OBJECTIVES OF THE STUDY**

Sequel to the problems highlighted above, the main objective of this research study is to determine whether information technology improves management effectiveness by affecting business strategies. The research study were identified as follows:

- To ascertain whether or not accountant efficiency contributes to organizational growth with the information technology deployed.
- Determine whether information technology improves management effectiveness by satisfying information needs or not.
- Prove that information technology improves competitiveness by affecting business.

- Determine the organization experience with the effect of information technology on accounting process.
- Access the role of training in charge management and justification as measured from the accounting perspective.
- Ascertain whether information technology improves business efficiency by automating basic information needs or not.
- To emphasizes on the current development of information technology and the challenges such pose to accountants in an organization

#### **1.4 RESEARCH QUESTION**

In any question to carry out this study towards finding out true position of accountants efficiency in conversant with the information technology deployed by an organization as an input to the business success. It is very important to delve into the following research question.

1. Is introduction of information technology in Unilever Nigeria plc improving accountant's performance?
2. How does information technology in Unilever Nigeria plc affect the profitability in financial reporting?
3. Does the organization embark on training the accountant in other to accommodate the change?
4. What are the peculiar problems faced by Unilever Nigeria plc in implementing information gathered from its information technology.

## **1.5 HYPOTHESIS OF THE STUDY**

With respect to the statement of the study, the hypothesis below can be deducted.

H0: there is no relationship between the introduction of information technology and the efficiency of the accountants on Unilever Nigeria plc.

H1: there is relationship between the introduction of information technology and the efficiency of the accountants on Unilever Nigeria plc.

H0: The Impact of Information Technology

## **1.6 SIGNIFICANCE OF THE STUDY**

The research study is primarily meant for accountants and multinational companies. Then the continent, will guide the organization manufacturing sector with large scale production of different home use product and how accountants can cope with current development in information technology and the importance in organization.

The research study is also significant to manager and the authorized personnel (accountant or IT professionals) to have the knowledge that the main threats to information technology in an organization are human beings.

Information technology facilities can be manipulated to commit fraud.etc. The human threats to information technology includes insiders, hackers and phone freaks etc. the detailed operating plan involves the

manipulation of a mass data in other to support a valid plan that will fulfill the requirements of managements appraisal task to determine operational directions, make resolutions decisions and assures adequate performance measurement criteria in light of the information system utilization.

Hence managers and accountants would be better equipped to handle various related problems.

### **1.7 SCOPE OF THE STUDY**

In the course of this research works, the researcher encountered some restriction which militates against the smooth execution of his work among these issues are :

- Unilever is a multinational companies with several subsidiaries under it which had incapacitated the researcher of getting some of their transactional data for the research methodology due to the secretiveness of the sampled population.
- The problem of retrieval of research instrument administered, finance, combining my official work which makes it always difficult for me to go out always not to do anything personal.
- Other limitation include time constraint, cost of carrying out research work and unsupportive nature of respondents.

### **1.8 LIMITATIONS OF THE STUDY**

In this study the impact of information technology on accounting system, the research is limited by time. Though this research ought to be very broad and all embracing the research is limited by time to go that far and treat this exhaustively. The study was also limited by secrecy of information in the company, which requires permission of the company higher authority hence most information was regarded as classified information. Despite these limitations, the project work will be useful to any person that wants to know about the impact of information technology on accounting system. This research though is expected to be very broad and all embracing, it is limited to the impact of information technology on accounting system and this is due to the fact that this is the researcher main concern at the moment.

## **1.9 DEFINITION OF TERMS**

1. Data :these are any non-random set of symbols they are also called raw files o facts, event, transaction, which have been recorded and they are the input raw materials from which information is produced

2. Information: in this research the use of information will signify data have been produced in such a way as to be useful to recipient.
3. Application package: this is a set of programs together with the appropriate system documentation. The package is designed to meet the needs of a number of users and is modular in construction so that a limited amount of modification can be carried out to cater for the needs of individual business.
4. MIS: management information system is the provision of information for all level of management in order to perform their routine functions such as planning, directing, organizing and controlling etc.
5. Database: data base is a stored collection of related data needed by organization and individual to meet their information processing and retrieval requirement.
6. Internet: internet is an international computer network made up of numerous networks, internet is also called “networks of networks”
7. Ethernet: Ethernet is a popular network protocol and cabling scheme that uses a bus topology and carrier sense multiple access/collision detection (CSMA/CD) to prevent network failure or collisions, when two devices try to access the network at the same time.
8. Intranet: this is a private network belonging to an organization (which was internet protocol) it is used in Unilever Nigeria plc .it is accessible

only by member of the organization require authorization to access such network (this is called an Extranet).

9. E Business: this is the use of internet in the conduct of business.

10.Extranet: this is an intranet that allows non members of the organization to access the network.

11.Wireless network: wireless network are wide area network (WAN),that allows user to access information instantly via handheld wireless device.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

To understand the nature of the IT impact on firm performance, we must consider the fit between the characteristic of the IT and the user's tasks (Goodhue and Thompson, 1995). Since the primary responsibility of professionals in public accounting firms involves information intensive activities (Auditing concepts committee, ACC-1972). Such a gathering , organizing, processing, evaluating and presenting data, the use of IT I likely to improve the productivity of accounting professional (Pinonnealt and Rivard, 1998). Teamwork is critical in a public accounting firm as teams composed of professionals of different ranks perform audit engagements. Therefore, the use of group ware technology is also expected to improve work collaboration and communication within teams, and thus enhance their productivity (Ellis et al, 1991; Vandenbosch and Ginzberg 1996-1997).

Information system and technology principally involves electronic processing of transactions or data in order to achieve a specific purpose (Gates, 1996). Information systems are driven by information Technology (IT), which consists of hardware, software that perform data processing tasks, such as capturing, storing, retrieving manipulating and reporting data (Alter, 1996). It is recognised in (Laudon and Laudon, 2000) that until recently, information itself was not considered and important asset for a firm. The management process

was considered a face-to-face, inter personal art and a far-flung, global coordination process. Today, it is widely recognised that understating information technology is essential for managers because most organisations need information technology to survive and prosper. Information systems are very important in today's business because they affect how managers decide, how senior managers plan, and in many cases, what products are produced and how they are produced. They play a strategic role in the life of the firm. Laudon and Laudon (2000) recognise that there is a growing interdependent between business strategy, rules and procedures on hand, and information systems, software, databases and telecommunications on the other hand. Powerful computers, software and networks, including and internet, have helped organisations to become more flexible eliminate layers of management, separated work from location, and restructure workflows, giving new powers to both line workers and management. According to alter (1996), information systems enable new forms of organisation, new ways to work an new to compete. They can give new meaning to everyday things such as mony, books, offices, advertisement and entertainment.

According to Molan (1997), the evolution of IT can be broadly divided into a seven stage model, namely, initiation, integration, data administration, and maturity. This model was extended into three areas where objectives of IT were identified as follows;

- a. To improve business efficiency by automating basic information needs.
- b. To improve management effectiveness by satisfying information needs.
- c. To improve competitiveness by affecting business strategy.

It is recognised that most companies in Nigeria have embraced the use of information systems and technology as a means of improving Management of effectiveness and competitiveness. However, not enough research has been done on the effects of information systems on efficiency and profitability, as there are several concomitants that contribute to the efficiency and profitability of the multi-national companies.

## **2.2 A REVOLUTIONARY CONCEPT IN ACCOUNTING INFORMATION COMMUNICATION**

Financial Reporting through the electronic media or internet, termed “E-reporting” is a concept concerned with adopting information Technology (IT) by public companies to communicate accounting information disclosures in compliance with the requirements of various authoritative bodies: Corporate Affairs Commission (CAC); National and Foreign Stock Exchange; Securities and Exchange Commission (SEC); National and International Accounting Standards; regulatory Agencies; National and International bodies; and users generally.

Authors of accounting history generally agree that the rapid development of accounting was brought about by accelerated development in technology and the vigorous expansion of businesses across or so. Information Technology is

the merger of micro-electronics with Telecommunication and computing, giving rise to the novel possibility of developing on-line, real time, distance area networking systems, hooked unto a global system of networks called internet. It has revolutionised accounting.

The cutting edge in the accounting revolution in the last two decades or so, is the development of information super high way with accounting process and communication fully integrated for mainly internal information users operating within the system. The new significance in financial reporting on the web is underpinned by incidence of globalisation and the integration of nations into a global economy. The manifestations are multifarious: multinational and national companies listing their stocks in national and foreign stock exchange; widening foreign users expressing interest in the financial report of public companies and enterprises; the global scope of various financial information users as defined in the UK Corporate Report (1975). The impact of IT has given very serious recognition to the communication function of financial reports, and has broadened the global outlook of financial reports as eclectic and utilitarian. The increasing emphasis on timely and adequate disclosure of material information in financial reports of public companies has rendered the narrower traditional stewardship approach inappropriate for a global audience.

### **2.3 FINANCIAL REPORTS ON INTERNET**

IT has made possible the prospect of putting external financial report on the internet for public information of internal and external users. The prospect of 'E-Reporting' should not come as a great surprise. After all, it is only an extension of reality. The internal financial information is accessible to users through internet. Why not external reports to only those entitled to them? IT ensures the realisation of the communication objective of financial report in a broader sense. It is timely, faster, accurate, efficient, and reliable and perhaps cheaper, such financial report would be subjected normally to statutory audit scrutiny, by auditors who have experience and sue competence in the computer environment. The auditor will certify that the report is compliant with requirements including adequate disclosures.

In auditing financial reports for the internet, the auditor needs to fully understand the entire IT system sufficiently to enable him identify and evaluate the essential features of the system; the task undertaken at each stage of the computer process, and how the applicable software programmes operate. The auditor would need to assess the controls, the features and construction of the system.

He would assess the reliability of the system and evaluate the risks of misstatements occurring undetected. The auditor would examine the report before and after putting it on internet to ensure that the contents are not

inconsistent with the audited financial statements, and that viewed as a whole, the information presented is not misleading in any material.

The Audit Committee would then exercise its statutory duty and clear any query affecting the accounts. It may be impracticable to secure Audit Committee input for interim reports or quarterly reports. The management can however make internal arrangements to satisfy that aspects to complete the process. Coding financial information on the internet requires expertise. A number of packages may be available but they have to be examined specifically in the light of the underlying requirements. There may be need for custom-built programs to avert operational hitches. Or, a suitable package may be adapted or customised as may be necessary to suit the environment specification of each entity. Most companies would have already substantially computerised their accounting systems and may have gained some experience with the whole gamut of the accounting processing on computer. They would thus be reasonably familiar with preparing financial reports that are compliant with all of the disclosures requirements.

Finally, the report is presented to the board for approval. The board has responsibility under the company law, to ensure that the accounts are true and fair in material particular; that adequate information has been disclosed in compliance with standards and other mandatory requirements set by various authoritative bodies; that the reports are free of any intentional or unintentional misstatements in any form of fraud, errors or irregularities; that to the best of

their knowledge, the reports are not inconsistent with the records of events and transactions underlying the accounts; and , that taken together, the financial statements are not misleading in any material particular. Subject to any consideration of any relevant post balance sheet events, the board could then authorise the publishing of the approved accounts.

Internet financial reports involve technical communication of the approved financial statements, transmitted through the internet. The financial report should convey decision-relevant information to meet the expectations of the multifarious users. The information which prepares place on the internet, and what users expect to find in the web should be congruent; otherwise the whole exercise could become an expensive waste. The process of putting financial report on the web should ensure that the information content is preserved.

Transmitting financial information on internet requires computer expertise; which accountants should acquire without delay. Relying on computer professional to do that job would translate to eroding yet another vital aspect of the remaining job of the accountant and ceding to the computer and its masters. However, it should be the duty of the computer to install and maintain the operate the systems, at least as far as it concerns their functions as accountants.

Some companies may have their own dedicated wide area networks, hooked to the internet. Some may choose to go through Internet Service Providers (ISP). In the latter case, a decision will have to be made to choose a

reliable ISP that will guarantee reliable service. There are differences in fees charged by ISPs. Suitable agreements can be worked out with them.

Some companies won their own equipment and may connect direct to Internet through ISP(s). Some have radio phone equipment, which may be expensive, through can be efficient; some have VSAT Equipment, but care must be taken on adequate maintenance; other forms of wireless connectivity are being developed and may not be competitive; Global System of Mobile Communication (GSM) is sin this category. Global Positioning System (GPS) is useful but its massive application is yet to be tested. The cheapest approach that many companies have been attracted to is the system of leased lines. Nigeria Telecommunications Plc (NITEL) provides these facilities, but it can be as problematic as the regular land phones lines; sometimes NITEL does not have lines to offer new subscribers. Generally, the technology for making internet work I fast developing. Accountants must prepare to use it as an effective tool to redeem their lost ground, Regaining lost grounds requires IT deskillling. It presents an opportunity as well as a threat. Without it, the labour market swing wide open to welcome accountant parading right skills for the wrong jobs.

### **2.3.1 FRAME WORK FOR INTERNET FINANCIAL REPORTING**

The Nigerian Stock Exchange/SEC; CAC; the Institute of Chartered Accountants of Nigeria; the various regulatory agencies; the standard setters; and government, may soon get down to addressing the issue of developing some

ground work for E-Reporting. The general and specific reporting issues engendered by the Internet must be addressed.

Accountants have played multiple roles as authors, editors and publishers of financial reports. The roles of the computer professionals have to be defined within the framework. The significance of this partnership is borne out of the fact that IT changes are beyond the scope of everybody; and can be frustrating. Before one gets used to a new system, some newer ones emerge! It seems like an endless race.

The basic objective of providing reliable, decision-relevant financial information, oriented to users' lies at the hub of E-Reporting. The more basic problems underlying the objectives to financial reports, considered by USA Robert Trueblood Report (1973); the UK corporate Report (1975); the UK Irving Goulding Working Party (1986) and the recent development of IT applications in accounting, have as the bottom line, the satisfaction of the information needs of users, irrespective of the channel of information communication system adopted. Successful communication is the ultimate goal.

### **2.3.2 EMPLOYMENT OF ACCOUNTANTS OR COMPUTER**

IT has positive impact on all profession but, perhaps the accounting profession has suffered it most insidious devastation. IT has training reorientation of accountants, to cope with the exploding revolution. The little monster is out and everything is at stake. The whole gamut of the accounting process is being gulped by the computer.

Computers are increasingly more accessible to accountants with the development of mini and micro computers. Much of the traditional bookkeeping and analytical functions of accounting are now computerised. In the early seventies, the adoption of computer systems wiped out the jobs of electronic data processing and mechanised accounting machine operators. The evolution of IT in the eighties and its extensive application has revolutionised accounting and is exerting intense pressures on accountants to reform. IT displacement in the eighties did not come as a great surprise. Indeed, Nora and Minc (1980) have addressed the president of France on the threat of 30% job loss in French banks and insurance companies on adopting computer. The German Siemens Corporation (1980), after extensive research warned that IT would touch every sector in Britain.

All fears have been justified in two decades of computer onslaught on jobs. In Nigeria, it is not uncommon in jobs vacancy adverts to invite non-accounting graduates for pure accounting functions, even at management levels! Many employers are probably adopting flexible postures about traditional accounting functions. They may be considering them as of very little significance, except in the context of computer. If unchecked, the posture of the labour market could snowball into something else. Already, some universities are seeing accounting degree as only relevant within the computer curricula and have thus designed degree programme combining accounting and computer! Core accounting courses may then be sacrifices.

In Nigeria, accounting training has not been matched with adequate computer mix. Unlike other professions such as Law, Medicine, Engineering, that have enjoyed massive government funding, accounting has largely survived on self-effort. The run of army regimes Nigerian politics for about three decades or so did not help much. They saw the accountants as no better than a group of restrictive trade practitioners; whose reports lawyers must sign or which need a second regulatory partner in the profession! The result is still with us today. The ANAN confusion! Researches in accounting are low so accounting responses bears this out. Accountants play three roles in the accounting process:

a. DATA PRODUCER

Accountants recognise, measure, record, accumulate, analyse and classify accounting data from the economic events and transactions that occur from day to day; complying with accounting principles and standards in the process. Much of this function is now computerised; for faster, more accurate, and wider range of analytical reports production.

b. FINANCIAL MESSAGE CONSTRUCTOR

Production of various financial reports, balance sheet, operating statements and cash flows, etc.; special software packages are now available for the production of financial statements from the data input. Thus, both the routine accounting functions have been computerised. It is

only the exercise of professional judgement at highest level of management that still ensures the accountant's relevance in organisations.

The accountant used to pride himself about the 20 distinct professional services demands of users, but the computer has rapidly whittled down the list. Standard software packages now exist for tax and consulting services and in most other areas of services which can be utilised directly by users without accountant's help.

### c. MESSAGE COMMUNICATOR

Financial message creation remains at the accountant's chest, making him master of the computer to be used as a mere tool. In creating financial messages for the internet, there could be special facilities in built for interactive feedback discourse! The package design should have ability to generate more detailed information than those contained in the regular financial statements. Users can then interrogate computer for specific information. This mode attempts to meet the special need of particular users, a task, which the general purpose financial is not designed to accomplish.

Some report that could be encoded include, but by no means restricted to: Segmental reporting; financial summaries for past five year; post balance sheet events, the going concern status of companies; changes in the structures, operation, acquisition, cessations, damages, contingent liabilities, major losses,

major business prospects, major work in progress, borrowing history, employees and management personnel, assets, liquidity, current assets, etc.

This two-way feedback mechanism distinguishes internet report from print media report. Professional skills, expertise on computer and IT knowledge, reasonable experience and proficiency are required to create internet reporting is best suited for global financial messages. The syntactical, lexical, and semantically mode for transmission on internet have yet to have a sizeable volume of literature. Accountants and computer experts should jointly work things out in this challenge. Edward Stamp (1973) notes that communication provides accountants “many problem, challenges, and opportunities,” but he advises that not much notice has been taken to welcome the challenges or seize the opportunities. Raymond Wilson (1973:114) perceived this revolution and warned that: “accountants must play a part with a whole new method of accounting to present and communicate relevant information”.

Accountant can down load, up-date and up load a set of information on Internet. Users have direct access to down load required information.

The system makes printed booklets of financial report alone as a medium of communicating with users, out of date, out of tune, out of shape, out of touch, and of fashion. In fact, a booklet for global user is out-moded. Internet communication of financial messages requires efforts to make it work. We all owe that obligation.

## **2.4 ACCOUNTING SYSTEM**

Accounting is the process of collecting, recording, classifying, presenting, analyzing and interpreting financial information for the users of accounting information. Once a business starts up, accounting expertise becomes almost inevitable. This is irrespective of the type and size of business; whether sole trade, partnership or limited liability company, accounting involves the maintenance of the organisation's financial records (revenue; expenditure) and accounting for the flow of funds into and out of the organisation. According to Soyode (1982:4), "accounting provides information which is vital to the economic decisions that have to be made by individual, the organisation and the government". Hence, at the individual level, accounting provides information that aids security and the maximization of value of investments while at the macro level, accounting facilitates the efficient allocation of resources.

Accounting covers two broad areas:- financial accounting and management accounting. Financial accounting is statutory, prepared on historical basis and reports to parties external to the organisation.

Management accounting, on the other hand, is non-statutory and is prepared to show current or future plans and reports to the management of the organisation.

Thus, Soyode (1982:5) and Igben (2001:1) argue.

A system is a group of interrelated components working together towards a common goal by accepting inputs and producing outputs in an organised

transformation process. Such a system can be described as dynamic and has three basic components or function, input, processing and output.

Based on the above definition, inputting involves capturing and assembling elements that enter the system for processing. For example, raw materials, data and energy must be secured and organised for processing; processing involve the transformation process that converts inputs into output. For example, the manufacturing process, and human breathing process etc; and outputting involves transferring elements that have been produced by the transformation process to their ultimate destination. For example, finished products, management information etc must be transmitted to their human users.

A system becomes more useful when two additional components/functions are added. These according to Lee (1999:6) are: feedback and control. Feedback is data about the performance of a system. E.g Data about sales performance is feedback to the sales manger while control involves monitoring and evaluating feedback to determine whether a system is moving towards the achievement of its goal. The control function then makes necessary adjustments to a system's input and processing components to ensure that it produces proper output. Generally speaking, however, when a system has feedback and control components, it is described as a cybernetic system. That is a self-monitoring system or self-regulating system.

In addition, a system does not exist in a vacuum, but functions as it exist in an environment containing other systems. Thus, if a system is one of the

components of a larger system, then it is a subsystem and the larger system is the environment (Fingar, kumar and Sharma, 2000:25).

Several systems may share the same environment. Some of them may be connected to other systems by means of a boundary or interface. Thus, an open system is one that interacts with the other systems in its environment by input and output interfaces such that it exchanges inputs and outputs with its environment. Finally, system is said to be adaptive when it is capable of changing itself or its environment in order to survive (Radcliff; 2000:16).

#### **2.4.1 ACCOUNTING INFORMATION SYSTEMS**

These are the offset and most widely used information systems in business; they record and report business transactions and other economic events. According information systems are based on the double-entry book-keeping concept, which is hundreds of years old, and other more recent accounting concepts such as responsibility accounting and activity based costing.

Thus, computer-based accounting systems record and report the flow of funds through the organisation on a historical basis and produce important financial statements such as balance sheets, and income statements. Such systems also produce forecasts of future conditions like projected financial statements and financial budget. A firm's financial performance is measured against such forecasts by other analytical accounting reports. Hamel and Sandler (1998:15) and El Sawy (2001:24) review the issue of computerised accounting system and conclude that operational accounting systems emphasize legal and historical

record keeping and the production of accurate financial statements. Typically, these systems include such transaction processing, inventory control accounts receivables, account payable, payroll and general ledger systems focus on the planning and control of business operations. They emphasize cost accounting reporting, the development of financial statements, analytical reports comparing actual to expected performance.

#### **2.4.2 ON-LINE ACCOUNTING SYSTEMS**

Today, accounting information systems are being affected by internet technologies. Using the internet, intranets, extranets, and other networks changes how accounting information systems monitor and track business activities. According to El Sawy (1999:10).

The on-line, interactive nature of such networks calls for new forms of transaction documents, procedures and controls. Particularly in the areas of order processing, inventory control, accounts receivable, and accounts payable. These systems are directly involved in the processing of transactions between a business and its numerous customers and supplies. It is therefore natural for businesses/companies to use the internet and other networks to link their trading partners for such online transaction processing systems.

### **2.4.3 COMPONENTS OF ACCOUNTING INFORMATION SYSTEMS**

O'Brien (2000:148-151) identifies six common, but important accounting information systems that are commonly computerised by both large and small businesses. These systems support the operation and management of a business firm. These are;

#### **1. Order Processing:**

This is also known as sales order processing. It is an important transaction processing system that captures and processes customer's orders and produces data needed for sales analysis and inventory control. In many firms, it keeps track of the status of customer's orders until goods are delivered. Computer-based order processing systems provide a fast, accurate, and efficient method of recording and screening customer orders and sales transactions. They also provide inventory control systems with information on accepted orders so they can be filled as quickly as possible.

#### **2. Inventory Control:**

These systems process data reflecting changes to item in inventory. Once data about customer orders are received from an order processing system, a computer-based inventory control system records changes to inventory levels and prepares appropriate shipping documents. It may also notify managers of items that need re-ordering and provided them with a variety of inventory status reports. Thus, a computer-based inventory control system helps to

provide high quality service to customer while minimising investment in inventory and inventory carrying costs.

### 3. Accounts Receivable:

These systems keep the records of amount owed by customers from data generated by customer purchases and payments. They provide invoice to customers, monthly customer statements and credit management reports. Computer-based accounts receivable systems stimulate prompt customer payments by preparing accurate and timely invoices and monthly statements to credit customer. They also provide managers with reports to help them control the amount of credit extended, and collection of money owed. They thus help to maximize profitable credit sales while minimising losses from bad-debts.

### 4. Accounts Payable:

These systems keep track of data concerning purchases from and payment to supplies. They prepare cheques in payment of outstanding invoices and produce cash management reports. Thus, computer-based accounts payable systems help ensure prompt and accurate payment of suppliers to maintain good relationships, good credit standing and secure any discounts offered for prompt payment. They provide tight financial controls over all cash disbursements of the business. They also provide management with

information needed for the analyses of payments, expenses, purchases, and employee expenses accounts and cash requirements.

#### 5. Payroll:

These systems receive and maintain data from employee time cards and other documents such as pay slips, payroll reports, and labour analysis reports. Other reports also prepared included those meant for management and government agencies. However, computer-based payroll systems help businesses make prompt and accurate payments to their employees as well as reports to management, employees and government agencies concerning earnings, taxes and other deductions. They are also capable of providing management with reports analyzing labour costs and productivity.

#### 6. General Ledger:

These systems consolidate data received from accounts receivable, accounts payable, payroll and other accounting information systems. At the end of each accounting period, the books are closed and they produce a general ledger trial balance, the income statement and the balance sheet of the firm and various other reports for management. A computer-based general ledger system, however, will help the business to accomplish these accounting tasks in an accurate and timely manner. They typically provide better financial controls and management reports and involve fewer personnel and lower costs than manual accounting methods.

#### **2.4.4 RATIONALE FOR COMPUTER-BASED ACCOUNTING SYSTEMS**

Changing from a manual accounting to a computer-based accounting system may have its justification in one or more of the following reasons: volume of data to be processed; accuracy of processing required; complexity of computerization required; speed of processing, integration of a number of applications; technical feasibility; cost-effectiveness; and social acceptability.

#### **2.4.5 REQUIREMENTS OF ACCOUNTING INFORMATION SYSTEMS**

A business organization is a type of organisational system where economic resources are transformed by various business processes into goods and services. All information systems have their own requirements that are what they need to convert data resources to information products. These requirements according to Diese, Nowikow, King and Wright (2000:49), Donabue (2000:15) and Geoff (2000:26) are:

**People Resources:**

People are required for the operation of accounting information systems. These may be end users or information system specialists. Users may be accountants, clerks or managers whereas specialists may include systems analyst or software developers.

### Hardware Resources:

These include all physical devices and materials used in the information processing. It includes machines-computers and other equipments and all data media that is tangible objects on which data are recorded e.g. sheets of paper, other storage devices.

### Software Resources:

These include all sets of information processing instructions that are programmes which direct and control computer hardware and procedures, that is, the sets of processing instructions that people need. Examples of software resources are:

- a. Systems software: such as operating system which controls and supports the operations of a computer system.
- b. Application Software: These are programs that direct processing or a particular use by the end users e.g. a payroll program; stores control program. Application packages are classified into two broad classes which are:
  - i. Horizontal Application Packages:

These are application packages designed for use by the generality of the people who may find them useful for more or less the same

purpose; E.g. Excel, Quattro-pro, Lotus etc. They are very readily available and are only useful for limited accounting purposes.

ii. Vertical application packages:

These are application packages designed to suit the specific users. A typical vertical application package is specially designed for a particular organization and tailored to meet specific needs of that organisation. Unlike the horizontal packages, they are not readily available in the market. The user will have to contact a programming specialist to do this for him. A good example is the power plus development by UNIX computer services limited, a wholly indigenous computer software firm based in Kaduna. The software is applicable to virtually any type of business operations especially accounting systems of financial reporting, stores management, fixed assets management, payroll management systems, personnel management systems and budget management systems. The advantage here is that, the user is regular contact with the programmer who is always available to modify the program suit the user at any given point in time.

iii. Intermediate Application Packages:

These are accounting packages already designed for use in firms who may acquire them off shelf and install them on their computer. The greatest disadvantage of such packages is the writer or developer of

the package is not on ground to assist whenever there is problem. Examples of these types include Dac Easy, Peachtree, QuickBooks, sun Accounting, PASTEL, Accounting System, Manage Your Own Business etc and recently, Microsoft Corporation introduced Microsoft Accounting suite. The disadvantage here is that the user can neither modify nor alter the program whenever there is need to do so. Other examples of software include sales analysis programs, payroll programs, or a word processing programs.

- c. Procedures: These are operating instructions for the people who will use the information system. Examples are instructions on how will to fill specific forms or the use the software package.

#### Data Resources:

Data are more than the raw materials of the accounting information system. Since data constitute valuable organisational resources, they should view data as resources that must be managed effectively to benefit all end-users in the organisational. For this purpose data can take many forms including the traditional alphanumeric data composed of numbers, alphabetical and other characters that describe business transactions and other events and entities, Text data; image data, such as graphic shapes and figures; and audio data, the human voice and other sounds are also importance forms of data.

### Network Resources:

Telecommunications technologies and networks like the internet, Intranets and extranets have become essential to the success of electronic business and commerce of all types in organisation and their computer based information systems. Telecommunications networks consist of computers, communication processors and other devices interconnected by communication media and controlled by communication software. Thus, network resources emphasize the fact that information and communication technologies and networks are a fundamental resource component of accounting information systems. Generally speaking network resources include:

- a. Communication Media: Twisted pair wire, coaxial cable, and fibre optic cable; and microwave, cellular and satellite wireless technologies.
- b. Network Support: the people and all of the hardware, software and data technologies that directly support the operation and use of a communications network.

## **2.5 ACTIVITIES WITHIN A COMPUTER-BASED ACCOUNTING SYSTEM**

At this point, we will take a closer look at each of the basic information processing activities that occur in a computer-based accounting system.

These are: Input involving optical scanning of bar-coded tags, direct entry of data via the keyboard and other input devices, processing, which involves the calculation of employee pay, taxes, other payroll deductions, ledger balances etc; Output involving the producing reports e.g. financial statements, pay slips, inventory levels, tax remittances, accounting schedules etc; Storage involving the maintenance or keeping of records on customers, employees, products, expenditures, revenues etc of the organisation; and control, which involves the generation of audible signals to indicate the proper entry of data coming into the system and the general security of entire system

## **2.6 BENEFITS OF COMPUTER-BASED ACCOUNTING SYSTEMS**

The successful installation and implementation of a computer-based accounting system has some benefits to the organisation and the entire society. Laudon and Laudon (1998:409-418) and Williams, Sawyer and Hutchinson (1999:426) discuss these benefits as follows: it is very important to the success of the organisation especially, the accounting and finance; it contributes to the operational efficiency of the accountants, employee productivity and morale, and customer services and satisfaction; it is a major source of information and support needed to promote effective decision-making by managers and business

professionals; it is a dynamic, rewarding and challenging career opportunity for millions of young men and women; finally, it is key component of the resources, infrastructures and capabilities today's e-business enterprises.

## **2.7 ETHICAL CONSIDERATION AND POTENTIAL HARMS/RISKS**

In this section, we look at the potential harms and risks of a computer-based accounting system with a view to making appropriate recommendations.

- a. Potential Harms: According to Amor (2000:96) the potential harms of computerized systems include those activities which affect customers, employees, business partners and competitors. Examples are: Infringement on privacy; in accurate information; collusion by members of staff and outsiders; and exclusion from essential business resources.
- b. Potential Risks: These are the consequences of all those activities that have negative impacts on the social systems. According to Tapscott, Ticoll, and Lowy (2000:22) and Norris, Hartley, Dimleavy and Balls (2000:48), potential risks include legal actions from affected parties; consumer boycotts; work stoppages; government intervention; or and other threats that arise from total environment.

## **2.8 HUMAN THREATS TO INFORMATION TECHNOLOGY**

Fraudulent practices are usually perpetrated by human beings. Therefore, the main threats to information technology are human beings. Information technology facilities can be manipulated to commit fraud. Human threat to information technology includes insiders, hackers and phone freaks. Insiders are those who have legitimate access to information technology facilities, and they constitute the greatest threat. Hackers are people who break into computer system for which they have no authority or internationally overstep their bounds on systems which they do have legitimate access. On the other hand, phone phreaks are those fraudsters who use telephone to deceive people into fake overseas business transactions.

Methods used by fraudsters to gain unauthorised access to IT facilities include:

### **A. Password Cracking**

This is a technique used to gain access into a system by unlawfully using the password of an authorised user.

### **B. Social engineering**

This is the use personal knowledge or human nature and social skills to steal vital system-related information such as physical or electronic keys, access

codes and cards, electric tokens, and toll calls. It involves impersonation, tricking or coercing members of staff to divulge information about a system.

#### C. Wire Tapping

This involves eavesdropping on information being transmitted over telecommunication lines. It also involves the use of legal telecommunication line for illegal purpose by tapping the line.

#### D. Piggy backing

This is the act of following an authorised person through a secured door, or electronically attaching to an authorised telecommunications line to gain access to a system.

#### E. Brute Force Attack

This is the use of all tactics available by a fraudster to gain access to a system. These tactics include burglary, theft and a host of other illegal acts.

#### F. Data Diddling

This is the changing of data before or during input or output from a computer system. The manipulation of petrol. Pump price by petrol attendants as well as manipulation of other measuring systems is a type of data diddling.

#### G. Terminal Spoofing

This is the use of an illegitimate program (called spoofing application program) to trap the authorised user's ID and password in the hacker's file. This fake program is left running at a specific terminal. The hacker can thus get into the computer system using this program. Most viruses use this type of program.

#### H. Scavenging

Scavenging is a method of obtaining information that may be left in or around a computer system after the execution of a job. Example of this includes searching of trashcans for copies of discarded computer listings or carbon papers or searching the recycle bin in the desktop of a computer.

#### I. Shoulder Surfing

This is an attempt to obtain information illegally by looking across the shoulders of a computer operator. Other threats to IT include natural disasters, viruses, theft, and paucity of information system and IT knowledge.

#### Measures against Information Technology Fraud

Proactively employing the following logical and physical access control measures can minimise the nefarious activities of IT savvy fraudsters. On the logical steps should be taken:

##### i. Firewall Systems

Firewall systems should be installed. A firewall is a device that forms a barrier between a secured and open environment. Usually, the open environment is considered hostile. The most notable hostile environment is the internet. Generally, the types of firewalls available today fall into three categories; Router Packet filtering; Application firewall system; and Stateful inspection.

## ii. Password

Passwords should be used to protect logical asset. However, passwords should be change frequently. When an employee leaves the organisation. His/her password/s should be deactivated immediately. Determine ahead of time what a person should do if he/she discovers that his/her passwords is compromised. Reasonable senior officers should handle the management and administration of passwords in the organisation. The following password rules should be obeyed:

1. Passwords should be five to eight characters in length. Anything shorter ill be too easy to guess. Anything longer will be too hard to remember.
2. Passwords should allow for a combination of alpha, numeric, upper and lower case as well as special characters;
3. Passwords should not be particularly identifiable with the user (such as first name, last name, spouse name, pet's name, etc)
4. Previous passwords should not be allowed to be used after being changed.
5. Logon IDs not used after a number of days should be deactivated to prevent possible misuse.

6. The system should be able to disconnect a logon session automatically after unsuccessful attempts to apply a password.
7. Don't use default passwords or vendor-installed passwords

### iii. Encryption

Use encryption techniques during data/program storage and transmission. Encryption is a technique used to protect a plain text by coding the data so that it is unintelligible to the reader.

### iv. Intrusion Detection Systems

Install intrusion detection systems (IDS). These systems work in conjunction with routers and firewalls by monitoring network usage anomalies. It protects an organisation's information system resources from external as well as internal misuse. An IDS operates continuously on the systems, running in the background and notifying administrators when it detects a perceived threat.

### v. Biometrics

Personal attributes for identity verification can be used to determine or not a person should be allowed to gain access to an information technology facility. This entails the use of biometrics such as fingerprints, voice, eye, colour, iris and a host of other personal features to verify the identity of an

individual. The shape of a person's hand i.e. hand geometry has also been found to exhibit sufficient interpersonal variability to serve as a basis for distinguishing one individual from another. Equipments have been developed that automatically measures one aspects of the hand, namely the lengths of the fingers, and used this information as a means of verifying a person's identity. In addition to all the above, Access Control List (ACL) should be maintained. This list specifies various users and what they have access to. Furthermore, access rules in the organisation should indicate who can access what. Access rights are usually at four levels (create, update or delete) only; and a combination of the above.

On the physical level, the following steps should be taken to check the activities of fraudsters:

a. Personal Computer

Determine whether office computer could be used for other purposes such as games, etc. Determine also who is authorised to use which PC or should everyone have unrestricted access to all available computers. There should be a clear instruction as to which software are allowed on the systems, which types of antivirus should be used, what operating systems are allowed on PCs should not be located in such a way that the information displayed on the VDU can be read through the wind or door.

b. Web Access

Rules must be set as to which websites are restricted from being accessed. It should also be spelt out whether employees can access the web at all times or will there be web logon hours. Also determine which PC would have access to the internet. There should be rules as to the use of e-mails.

c. Remote Access Facilities

There should be clear instruction as to whether remote access to the Organisation network and how the access is to be controlled. Determine whether remote access is for all officers. List the devices (hardware and software) as well as media through which remote access is allowed e.g. State whether access through internet cafes is allowed or not.

d. Infrastructures

Adequate infrastructures should be made available with serious security considerations. In essence, proper climatic condition, adequate power supply, communications, burglary and fire fighting facilities should be maintained.

## **2.9 THE ROLES OF ACCOUNTANTS IN AN ORGANISATION**

The roles of accountant in this study must not be overlooked. It is very necessary here to mention who accountants are? The type of accountants we have in an organisation and their respective duties and the potential roles they play in an organisation.

## 1. Who is an Accountant?

An accountant is a person who has undergone a formal or professional training in the process of accounting and who belongs to at least one of the recognised professional accountancy bodies such as the Institute of Chartered Accountants of Nigerian (ICAN).

## 2. Responsibilities of Accountants in an Organisation

- i. Preparation and presentation of timely and accurate financial/accounting reports to management.
- ii. Identification of areas of inefficiency and wastage of resources.
- iii. Treasury functions-raising finance, cash management and so on.
- iv. Setting up effective system of internal and accounting controls.
- v. Preparation of feasibility reports- these reports assist management in assessing the viability/ profitability or otherwise of proposed capital expenditure such as the opening of a new factory or branch.
- vi. Investigation of the performance/operations of competing business in policy formulation.
- vii. Investigation of fraud within the organisation.
- viii. Assisting the organisation to avoid-rather than –tax by using his knowledge of the tax laws

## 2.10 TYPES OF ACCOUNTANTS

### i. Financial accountant

This is an accountant who records financial transactions of a business organisation, analyses the financial information and presents reports/statements to the users of financial information, such as management, to enable them assess the financial performance of the organisation.

### ii. Cost Accountant

This is an accountant who determines cost of goods or services produced or sold. The availability of accurate information on cost of goods/services will enable management to fix appropriate selling prices. The cost accountant also helps the organisation to effectively control costs thereby maximising profits.

### iii. Management Accountant

This is an accountant who uses his professional know-how and skill to prepare and present accounting information to assist management in decision-making for the purpose of formulating policies for the organisation. In the performance of his duties, the management accountant largely compiles futuristic accounting information as opposed to the financial accountant who records and presents historical accounting information.

iv. Tax Accountant

This is accountant knowledge in tax laws. In view of the complexities in the law and practice of taxation, a firm requires a tax accountant who will use his knowledge to advice management on how to avoid tax rather than evade tax. It must be mentioned that tax avoidance is legal whereas tax evasion is illegal.

v. Auditor

This is an accountant who examines the accounts and underlying financial records and expresses an opinion on the truthfulness and fairness or otherwise of the accounts. The auditor is required to be independent of the person(s) whose work he is scrutinising. Where the auditor is appointed by management to examine and report on the work of the various officials/sections/department in the organisation, he is known as Internal Auditor. Where the auditor is appointed by the shareholders to report on the financial statement prepared by management, he is known as External Auditor.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 RESEARCH DESIGN**

The research design used for the study is survey design that is cross-sectional method, which will help in the process of explaining each of the research questions under study shall and exploring the hypothesis. The research study shall set out to determine the impact of IT on accountant performance in an organization. The descriptive research design shall also be used. This method shall enable the researcher to obtain clear understanding of the role of accountant in an organization.

#### **3.2 SOURCES OF DATA**

In every research work, there must be a reliable resource from which data are collected, the sources of data available to the researcher are listed and explained below.

##### **3.2:1 PRIMARY DATA**

The subject matter of this research, is for the purpose of this study gathered data primarily with the use of questionnaires to save time and finance. The questionnaire was designed to allow for easy comprehension by respondents and also to reduce bias and allow anonymity, which promotes high response rate. The questionnaires contain fifteen (15) questions consisted of two parts:

- A) It deals with the bio data of the respondents
- B) It focuses on the study topic in particular.

### **3.2:2 SECONDARY DATA**

Secondary data were collected from published materials such as journals, conference, workshop papers, text books, and newspapers on the impact of information technology on accountant's performance in an organization.

### **3.3 AREA OF THE STUDY**

Most of the nations and countries experience the impact of IT on accounting system, but our focus area of interest is Nigeria, which is a developing stage of economy.

### **3.4 POPULATION OF THE STUDY**

A population is a collection of all conceivable element subjects or observation relating to a particular phenomenon of which the researcher is interested in, Asika (2006:38).the population covered by this research study was taken from one of the multinational companies in Nigeria: Unilever Nigeria plc, the accounting department of the companies head office located in Lagos would be studied and the staff of this department formed the population study. The population of the tax system for the research is made up of 70 employees and management staff. The population of the study is compose and selected from various department and presented below.

## DISTRIBUTION AND POPULATION OF THE SECTORS

DEPARTMENT	No of staff	Percentage(%)
ICT	30	43
ACCOUNT	20	29
FINANCE	20	29
Total	70	100%

### 3.5 DETERMINATION OF SAMPLE SIZE AND TECHNIQUES

The sample size was chosen using convenience sampling techniques. It focuses on the staff of the account department so as to be sure that every representative of the population is available for inclusion in the sample and have equal opportunity for selection and to avoid section bias. In all, a size of 65 was used due to its representation as a little more than 10% of the total population. Questionnaires were distributed to the staff of the organization for quick response. Effort were made to encourage the respondents to return the answered questionnaires on time. The sample size is determined using the yaro Yamane formula of finite proportion.

$$\text{Formula } n = \frac{N}{1+N(e)^2}$$

Where n = sample

$$1 = \text{constant}$$

Therefore:

$$n = \frac{70}{1 + 70(0.05)^2}$$

$$n = \frac{70}{1 + 70(0.0025)}$$

$$n = \frac{70}{1.175}$$

$$n = 60$$

### **3.6 RELIABILITY OF THE RESEARCH INSTRUMENT**

This research instrument used is reliable because the information obtained has been tested over and over again and almost the same result was got hence reliability.

### **3.7 VALIDITY OF RESEARCH INSTRUMENT**

Validity on instrument is the process of finding out the degree to which a researcher or a text in deed measure what it intends to measures. This research work has been accorded with a close supervision as the supervisor has read, made all necessary correction in the areas where lapses occurred and after which the correction have been made.

### **3.8 TECHNIQUES FOR PROCESSING COLLECTED DATA**

The processing of the generated data would be done through simple frequency count since we have a small sample .this simplifies the process of

analyzing the collected data and presenting it in orderly manner, statistical analysis of chi-square was employed in respect of test of hypothesis.

## CHAPTER FOUR

### PRESENTATION AND ANALYSIS OF DATA

#### 4.1 INTRODUCTION

The chapter will be used to analyze the questionnaires that were distributed to the respondents who are staff of Unilever Nigeria plc .during the course of the research work in chapter 3, a total 65 questionnaires within fifteen (15)questions each, covering both bio-data and critical aspects of the subject of research were issued to the staff using a simple random techniques, which was eventually returned to the staff. A total of 60 out 65 questionnaires issued were received from which the analysis below were based on:

**TABLE 4.1 Classification of respondents according to sex**

<b>Options</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Males	42	70%
Females	18	30%
<b>Total</b>	<b>60</b>	<b>100</b>

From the above, 42 respondents represent 70 percent of males while the remaining 18 respondents representing 30 percent of females.

**TABLE4.2 Classification of respondents according to age**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
20-30	30	50%
31-40	21	35%
41-above	9	15%
<b>Total</b>	<b>60</b>	<b>100</b>

Source: survey 2013

The above table shows that 30 respondents represent 50 percent are between 20-30 years old, while 21 respondent are 40 yrs and 9 respondent are aged 41yrs and above representing 35 percent and 15 percent respectively.

**TABLE4.4 Classification based on educational qualification**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
SSCE/WAEC	–	-
OND/AL	21	35%
HND/B.SC	27	45%
M.SC/MBA	12	20%
<b>TOTAL</b>	<b>60</b>	<b>100%</b>

Source: Field survey2013

The above analysis shows that 21 respondents representing 35 percent are OND and 'A' level holders mainly composed of junior staff while 27

respondent representing 45 percent having HND/B.sc and the remaining 12 respondents representing 20 percent have obtained M.sc or MBA these categories are composed of middle to top management level.

**TABLE4.5 Classification based on professional qualification**

<b>Options</b>	<b>Frequency</b>	<b>Percentage (%)</b>
GMA/ACA/ACH	15	25%
ACIB/PCIB	–	–
<b>Total</b>	<b>60</b>	<b>100</b>

The above shows that only 15 respondents representing 25 percent have professional qualifications of either ICAN or the institute of Chartered Bankers. The data relating to the views and perceptions on the study topics as gathered from the questionnaires can be analyzed below:

**TABLE 4.6 Have IT and IS (Information system) tune with the current trends in the industry in terms of global market?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	41	$41/60 \times 100/1$	68.3%
Agreed	12	$12/60 \times 100/1$	20%
Indifferent	7	$7/60 \times 100/1$	11.7%

Disagree	–	–	–
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: Field survey 2013

The table above shows that there is general agreement as to the application of IT and IS in the organization except respondents representing 11.7 percent who felt indifferent.

**TABLE 4.7 Did organization(Unilever plc)spends a lot of its budget in updating its information system?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	9	$9/60 \times 100/1$	15%
Agreed	15	$15/60 \times 100/1$	25%
Indifferent			
Disagree	36	$36/60 \times 100/1$	60%
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: Field survey 2013

The response to the question above shows that 30%respondens representing 60 percent disagree with the fact that there is massive budgetary spending on

it 15 respondents representing 25 percent and 9 respondent representing 15 percent agree respectively.

**TABLE 4.8 Employees of the organization encouraged to contribute in the design and implementation of the information system?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	42	$42/60 \times 100/1$	70%
Agreed	12	$12/60 \times 100/1$	20%
Iindifferent	6	$6/60 \times 100/1$	10%
Disagree	–	–	–
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

The table shows that 42 respondents representing 70 percent strongly agree with the statement and 12 respondent representing 20 percent also agree while 6 respondents representing 10 percent are neutral.

**TABLE 4.9 Does information technology (IT) has a role in the future of the accounting profession?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	18	$18/60 \times 100/1$	30%
Agreed	15	$15/60 \times 100/1$	25%
Indifferent	12	$12/60 \times 100/1$	20%
Disagree	9	$9/60 \times 100/1$	15%
Disagree strongly	6	$6/60 \times 100/1$	10%
<b>Total</b>	<b>60</b>	–	<b>100%</b>

**Source: field survey 2013**

Analysis as to question above can be seen thus, those that generally agreed are 18 plus 15 making 33 respondents covering 55 percent. Although

12 respondent representing 20% are indifferent, 9 respondent and 6 respondents representing 15 and 10 percent respectively disagree.

**TABLE 4.10 How is the impact of information technology training increase the accounting knowledge in order to accommodate the change?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
---------------	------------------	--------------------	-----------------------

Agree Strongly	45	$45/60 \times 100/1$	75%
Agreed	10	$10/60 \times 100/1$	16.7%
Indifferent	–	–	–
Disagree	5	$5/60 \times 100/1$	8.3%
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: Field survey 2013

The table shows 45 respondents representing 75 percent of the population strongly agree, and 10 respondents representing 16.7 percent also agree but 5 respondents representing 8.3 percent disagree.

**TABLE 4.11 Is there need for the accountant and IT professional to work jointly in developing business solution in Unilever plc?**

Option	Frequency	Computation	Percentage (%)
Agree Strongly	12	$12/60 \times 100/1$	20%
Agreed	30	$30/60 \times 100/1$	50%
Indifferent	9	$9/60 \times 100/1$	15%
Disagree	9	$9/60 \times 100/1$	15%
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: field survey 2013

From the above data most of the respondents attests to the fact that the accountants and IT professionals need to work together, with 9 respondents representing 15 percent being indifferent and another 15 percent disagree.

**TABLE 4.12 Will management and security control work effectively if staff are not part of the designing stage?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	6	$6/60 \times 100/1$	10%
Agreed	27	$27/60 \times 100/1$	45%
Indifferent	15	$15/60 \times 100/1$	25%
Disagree	9	$9/60 \times 100/1$	15%
Disagree strongly	3	$3/60 \times 100/1$	5%
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: field survey 2012

As can be seen from the table even though majority of staff believe there should cooperation during system design, 15 respondents representing 25 percent are indifferent, 9 respondents disagree while 3 respondents disagree strongly.

**Table 4.13 do you agree that the use of information technology has increase the market structure of the organization?**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>
Agree Strongly	15	$15/60 \times 100/1$	25%
Agreed	30	$30/60 \times 100/1$	50%
Indifferent	12	$15/60 \times 100/1$	20%
Disagree	3	$3/60 \times 100/1$	5%
Disagree strongly			
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: field survey 2012

in the above table 15 respondents representing 25 percent strongly agree as to the market growth due to the introduction of IT also in agreement are 30 respondents representing 50 percent while 12 respondent are indifferent and 3 respondent disagree representing 20 and 5 percent respectively.

**TABLE 4.14 How does information technology IT as a function of competency and employees literacy level in the organization.**

<b>Option</b>	<b>Frequency</b>	<b>Computation</b>	<b>Percentage (%)</b>

Agree Strongly	9	9/60x100/1	15%
Agreed	45	45/60x100/1	75%
Indifferent	6	6/60x100/1	10%
Disagree	–	–	–
Disagree strongly	–	–	–
<b>Total</b>	<b>60</b>	–	<b>100%</b>

Source: field survey 2013

As depicted in the table above 90 percent of respondents agree in the staff literacy level while only 6 respondents representing 10 percent neutral.

#### 4.2 TESTING OF HYPOTHESIS

Finally using chi –square test of hypothesis will be carried out thus:

Ho: There is no relationship between the introduction of information technology and the efficiency of the accountants in Unilever Nigeria plc

H1: There is relationship between the introduction of information technology and the efficiency of the accountants in Unilever Nigeria plc

Using the following formula:

$$\text{Formulae} : \chi^2 = \frac{(O_i - E_i)^2}{E_i}$$

where  $O_i$  = observed frequency

$E_i$  = expected frequency

R= ROW

C=COLUMN

X = calculated chi-square value

df = degree of freedom.

Decision rule of any level of significant is that:

- I) The null hypothesis is rejected if the calculated chi-square ( $\chi^2$ ) is greater than or equal to the critical value from the chi-square table.
- II) The null hypothesis is accepted if the calculated chi-square ( $\chi^2$ ) is less than the critical value from the chi-square table, implying that there is no significant difference between the observed and expected.

**TABLE 4.15 CHI- Square expected frequency table**

<b>Option</b>	<b>Observation 'O'</b>	<b>Expected 'E'</b>	<b>O - E</b>	<b>(O-E)<sup>2</sup></b>	<b><u>(O-E)<sup>2</sup></u> E</b>
Agree Strongly	5	12	-7	49	4.08
Agreed	25	12	13	169	14.08
Indifferent	19	12	7	49	4.08
Disagree	11	12	-1	1	0.08
Disagree	–	12	-12	144	12

strongly					
				<b>SUM</b>	34.32

### **INTERPRETATION OF THE RESULT**

Thus  $TS=34.32$  Therefore  $k=5$  categories hence the corresponding  $X^2$  has  $k-1=4$  degrees of freedom .the upper 5% point  $q(0.05)$  of this  $X^2$  is  $q(0.05)=9.49$ ,the result of the chi square calculated is as shown in the table 4.15 above. The chi square calculated is 34.32 with 4 as its degree of freedom (DF=4) and Asymp.sig.of 0.000. the level of significance  $=0.005$ .the tabulated chi-square ( $X^2_t$ ) is 9.49.since  $x^2_c > x^2_t$ ,therefore,the null hypothesis is rejected and alternative hypothesis is hereby accepted that there is relationship between the introduction of information technology and the efficiency of the accountants of Unilever Nigeria plc.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 SUMMARY OF FINDINGS**

This research has examined the impact of information technology on accountants' performance in an organization using Unilever Nigeria plc as a case study. The component of this research work were broken down and the study focused on measuring the efficiency of accounting section of the organization in relation with IT .prior to the introduction of information technology the manual system was the other of the day which not only slow down the decision making process but involves high cost of operation in terms of personnel, printing of stationeries and the time wasted on entering into particular transaction into several ledgers. The application of information technology and information system(IS } actually transformed the accounting environment by making it possible for data to be entered into system once thereby facilitating timely reports for decision making process and reducing the overhead cost of the organization. As observed in this research, the future of accounting in any organization cannot do without the application of IT, and these leads to the conclusion reached.

## 5.2

## CONCLUSION

Information technology has a role in the future of accountants, for them to be proficient in their work as shown by the survey result .based on the analysis of the data, it is concluded from this study that the organization does not spend most of its budget in updating the information system,Unilever Nigeria plc, encourages her employees to contribute in the design and implementation system is, as agreed by the majority of the staff.

The market shares has grown In recent times due to the use of (it),and information technology and information system is in tune with current trend in the industry in terms of global market. This is shown by the wide range from respondents proving to the statement.

Finally the introduction of information technology (IT)Leads to the efficiency of the accountants.

From my conclusion in this study it is seen that the obstacles or challenges confronting or facing the progress of it in an organization are behavioral rather than technical, in other words, it is the human system rather than the technical system which has resisted change.

### **5.3 RECOMMENDATIONS**

From the research carried out by previous researched on this issue and also the present achieved from this research, the researcher made the following recommendations.

- That regular training should be organized for accounting staff on new technique in accounting software.
- That Government should improve the electricity supply in the country; they should support local IT firms by providing loans, and lowering tariffs with a view to encouraging them in carrying out their activities.
- That accountants in every organization should be encouraged to work with IT professionals of the organization in building new programme and formats to aids more computerization of the accounting practices and applications for overall cost saving on time and improve performance on productivity.
- The researcher recommends that a post graduate diploma in business computing and financial modeling should be set up as one of the series of qualifying examinations for the level of the accounting profession.

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**APPENDIX**

Department of Accountancy,  
Caritas University,  
P.M.B 01784,  
Amorji-Nike,  
Enugu State.

Dear respondent,

I am a final year student of accountancy department of the above mentioned university. presently, i am carrying out a research on the topic'' the impact of information technology in accounting system ,'' a case study of Unilver Nigeria plc Lagos state. This research work is required by the university is partial fulfilment for the award of bachelors of scince degree [bsc]. please fill the questionnaires' by ticking the options that you select for your response.the responses will be handled with highest confidentiality.

Thanks for your co-operation.

Yours faithfully

Manafa .P.Uche.

Researcher

**SECTION A**

**PERSONAL DATA**

- 1) Sex: male [ ] female [ ]
- 2) Age: 20-30 [ ] 31-40 [ ] 41 and above
- 3) Marital status: married [ ] single [ ]
- 4) Qualification: WASCE/GCE [ ] HND/B.SC [ ] MSC/PHD [ ]
- 5) Post held: manager [ ] Accountant [ ] Cashier other  
(specify).....  
.....
- 6) Religion: Muslim [ ] Traditional religion [ ] Christianity none [ ]
- 7) How long have you been with the company: 1-6 years [ ] 7-11 [ ] 12  
years and above [ ]

## SECTION B

### OTHER INFORMATION

- 8) Does information technology (IT) has a role in the future of the accounting profession in Unilever Nigeria plc, Lagos?  
Strongly agree [ ] agree [ ] disagree [ ] disagree strongly [ ]
- 9) To what extent does the need for accounting and to professionals to work jointly in developing business solution in Unilever plc  
Strongly agree [ ] agree [ ] disagree [ ] disagree strongly [ ]
- 10) How is the impact of information technology training increase the accounting knowledge I other to accommodate the changes?  
Highly satisfied [ ] satisfied [ ] disagree [ ] highly disagree [ ]
- 11) Do you agree that the use of information technology has increase the market structure of organization?  
Strongly agree [ ] agree [ ] disagree [ ] disagree strongly [ ]
- 12) Have IT and T'S (Information system) tune with the current trend in industry in terms of global market?  
Strongly agree [ ] agree [ ] disagree [ ] disagree strongly [ ]
- 13) Did organization (Unilever plc) speeds a list of its budget in updating information system? Strongly agree [ ] agree [ ] disagree [ ] disagree strongly [ ]

- 14) What extent has employees of the organization encouraged to contribute in the design and implementation of information system? Very high [ ] moderate [ ] low [ ] very low [ ]
- 15) Will IT management and security control work effectively if staff are not part of the designing stage?  
Very high [ ] high [ ] low [ ] so low [ ]