IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON ACCOUNTING EDUCATION STUDENTS.(A CASE STUDY OF UNIVERSITY OF BENIN)

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UNIVERSITY OF BENIN

BENIN CITY

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION, FACULTY OF EDUCATION

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF B.Sc. (Ed) DEGREEE IN BUSINESS EDUCATION, (ACCOUNTING) OF THE UNIVERSITY OF BENIN, BENIN CITY

DECEMBER, 2024

APPROVAL

I, hereby certify that this study was carried out b**y Rachael Oghenenyerhovwo IGBAGBEKE EDU1904722** in partial fulfillment of the requirement for the award of the Bachelor of Science in Education B. Sc (Ed) in the Department of Vocational and Technical Education, Faculty of Education, University of Benin, Benin city.

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Dr. S. B. ABUSOMWAN

Project **S**upervisor

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Date

CERTIFICATION

We the undersigned hereby certify that this project was carried out by **Rachael Oghenenyerhovwo IGBAGBEKE** with matriculation no: **EDU1904722** in the Department of Vocational and Technical Education, Faculty of Education, University of Benin and it is approved as meeting the requirement in partial fulfillment for the award of B.Sc (Ed) degree in Business Education (Accounting)

Dr. S.B Abusomwan	**Dr. S.B Abusomwan**
(Project Supervisor)	(Project Coordinator)
Date	Date

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Head of Department

Date

DEDICATION

This project work is dedicated to God Almighty for his grace and mercies that saw me rough this academic pursuit. To my beloved Parents whose prayers, words of wisdom, and encouragements gave me zeal to keep pushing forward.

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My profound gratitude goes to God Almighty who has been my help spiritually, financially, academically and morally since the beginning of this course despite all discouragement.

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ABSTRACT

Information and communication technology (ICT) is a vital tool that is now becoming inevitable in all spheres of life and human endeavors. Its relevance cannot be over-emphasized and the challenges it poses to human endeavors require research to stamp the authority. This research revealed the relevance, importance and the effects of ICT on accounting education students. It also reveals their prospects of becoming employable and having an edge over other students and improving their educational performance.

Chapter one of this study gives a background of information and communication, the purpose of the study and research questions. Chapter two reviewed available tests, journals and online articles on information and communication technologies with emphasis on the importance of ICT on accounting education students. Chapter three deals with the methodology to be employed which were the simple arithmetic percentage and mean.

Chapter four analyzed the data from the questionnaire using the mean analysis. The study concluded that the introduction of ICT has helped the accounting education students to access information easily: It has also enhanced their job prospects and their learning and academic performance. It has been established that ICT helps in all spheres of life. To this end, it was recommended that; (I) government should give more concentration to the aspect of ICT on accounting education. (II) Laboratories should be provided for the students to access the internet (III) There should be training and retraining of lecturers for them to be acquainted with the knowledge of ICT.

CHAPTER ONE
INTRODUCTION

Background to the Study.

The oxford advanced learners dictionary current English of fifth edition, defined information technology as the study or use of electronic equipment, especially computers for storing, analyzing and distributing information of all kinds, including words, numbers and pictures.

Information and communication and technology (ICT) means those technologies that are used for accessing, gathering and manipulating and presenting information. These technologies could be said to include hardware (computers and other devices), software applications and connectivity such as access to the internet, local networking infrastructures, video conferencing and operating systems.

The recent changes in the world within nations have brought about changes in educational goals. Schools are not only to equip the learners with basic knowledge of accounting education content but with higher cognitive skills, such as problem-solving and thinking skills that allow for self-development and communication technology skill, which is indispensable in our modern society.The main purpose of ICT in education is the implementation of equipment and tools in

teaching learning process as a media and methodology. The idea of ICT in education is generally to familiarize students with the use and working of computers and other relative social and ethical issues. It also promotes meaningful communication, and this enhances teaching and learning.

According to Isaivwe (2002) technology is the systematic scientific method of achieving a practical purpose and the means employed to provide objects for human sustenance. Computer scientists saw it as the right tool to be used for transfer of information through the computer and gave birth to what is known as information and communication technology. Information and communication technology include all those computer-based activities that are derived from the convergent discipline of microelectronics, computing and telecommunication which have led to the re-organization of the processes of production and distribution in the society.

Information and communication technology (ICT) is used to create and keep track of document in office, seek out ways of marketing, control factors of production, design and create new product and enable service industries to function on a global scale. ICT has also enabled learning through simulation games; this enables active learning through all senses.

Accounting can be defined as the process of identifying, measuring and communicating economic information to permit informed judgment and decisions by users of the information. The introduction of ICT in the accounting profession brought about e-accounting which is the business Functions; It involves application of online and internet technologies to the business accounting function. It involves performing regular accounting functions, accounting research and the accounting training and education through various computer-based or internet-based accounting tools, such as digital tools kits, various internet resources, international web-based materials, institute and company data bases which are internet-based web links, internet -based accounting software and electronic financial spreadsheet tools to provide efficient decision-making. Accounting education students will therefore be taught or trained on how to use the e-accounting software effectively. Accounting education can offer a student solid foundation from which to enter a number of viable and varied accountancy related roles. Accounting students tend to specialize in particular areas of accountancy. Introductory accounting classes will generally cover most areas to allow students to get a better idea of what they might want to concentrate on at a later date. Courses may include instruction on finance information systems, international business, economics, managerial accounting, forecasting, regression analysis, financial statement, financial reporting, tax law, mergers and acquisitions, forensic accounting and bankruptcy.

ICT allows accounting education students to access information through videos, podcasts, and a variety of other interactive media, which creates a more engaging learning experience for the students. ICT also allows accounting education students to have an access to the internet by obtaining their views of possible future application of the internet (e.g. for on-line teaching, tutorials and assessments). It reveals a significant increase in students reporting voluntary use of the internet and e-mail.

One of the most common influences of ICT on accounting education student is the use of software programs such as Microsoft word to produce otherwise traditionally written assignments. Students nowadays study accounting software and accounting concept in class. ICT has also increased the speed with which accounting information can be provided. This makes it easier for accounting to functions effectively. Accounting education students also have access to the internet which they may acquire current information on accounting. ICT greatly enhances the performance of teaching or any ICT in accounting education students as they return from some ICT programme with improved subject knowledge, understanding aid and skills. Accounting education students who have gone for any ICT program-based on his/her field of study mature more rapidly, working in an often competitive and professional environment, their ambition is stimulated and

they return to university more focused and determined to do well with the ICT knowledge they gained or had.

Statement of the Problem

The accounting education students are expected to have been introduced to the knowledge and skills of information and communication technology as they begin their studies in the university, but the students of accounting education are still struggling to stamp their feet on how to use information and communication technology properly in order to promote students academic performance and have good knowledge of ICT. Without this being done, they may not be able to acquire ICT knowledge that could influence relevant behavior as the world keeps changing everyday. Therefore, there is urgent need to give a rescue to this effect.The problem of this study is therefore to investigate to what extent ICT has influenced the academic performance of students in accounting education.

Research Questions

The following research questions were raised to guide the study

1. To what extent does ICT influenced the academic performance of accounting education students?

2. What are the challenges facing the use of ICT on accounting education students?

3. To what extent does accounting education students have knowledge of ICT.

Purpose of the Study

The major purpose of this study is to determine the influence of ICT on the performance of accounting education students. Specifically, the study will determine and investigate:

1. The extent to which ICT influence the academic performance of accounting education students.

2. Identify the challenges facing the use of ICT on accounting education students.

3. Determine to what extent accounting education students has the knowledge of ICT.

Significance of the Study

This study is basically to investigate the influence of ICT on the performance of accounting education students. It would therefore, be useful to students and teachers. It will be useful to education planners and policy makers. It will help them make adequate provision for ICT in schools, and were the competences of teachers are low in handling ICT, the administrators can arrange for on the-job training. It will help government school owners in making provision for ICT tools needed in schools, enabling environments and infrastructures needed for the use of ICT. This study will challenge students to live, learn and work successfully in an increasingly complex and information rich society as well as be able to use technology effectively, this will in turn enable the students derive these benefits:

- Use technology to locate, evaluate and collect information from a variety of sources.
- Use technological tools to process data and report result.
- Use technological tools to enhance learning increase productivity and promote creativity.
- Demonstrate a sound understanding of the nature and operation of technological systems.

- The study will enable the university put in place the right infrastructure and equipment that is capable of bringing the desired objective of ICT in accounting education.
- The government and other federal agencies that recognize the essential role of ICT in the 21st century education will see it that all necessary equipment for the effective use of ICT in education be put in place.

Scope of the Study

This study will cover students of accounting education in the department of vocational and technical education, University of Benin, Benin City. This study will also cover the influence of information and communication technology on accounting students at the University of Benin, Benin City.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

This chapter covers the review of literature to the study. The review is done under the following sub-headings.

- Concept of Information Communication Technology (ICT)
- Functions of Information Communication Technology (ICT)
- Integration of Information Communication Technology into the Universities.
- The computer
- Basic Types of Computer
- Computer Net Work
- The Internet
- Meaning and Importance of Accounting Education.
- Objectives of Accounting Education
- Accounting and Information Technology
- Advantages of Accounting Information System

Concept of Information and Communication Technology (ICT)

Collins (2002) described information and communication technology as an electronic-based system, reception, processing and retrieval, which has drastically changed the way we think and live. Alugi (2002), also described ICT as the acquisition, processing, storage and dissemination of vocal pictorial, textual and numerical information by micro-electronic based combination of computing and

telecommunication. ICT revolution is the central and driving force of the dynamic change in all aspect of human existence. ICT is rapidly changing all aspect of the economy, especially in education.

Information and Communication Technology can also be seen as those technologies that are used for assessing gathering, manipulating and presenting information.

Functions of Information Communication Technology (ICT)

The following are the functions of ICT in education as described in the literature of Plot (1998), Moonen and Konnes (1995).

- Information Communication Technology enables us to increase the capacity of flexibility and efficiency of channels of collecting information.
- It enables us to select the actual information we require at anytime from different sources after which we can select quickly from every large collection.
- It enables us to transform collected information. This means that information collected needs re-arrangement and re-ordering from presentation into different ways.

- The use of productivity tools like word processors, desktop publishers and spread sheet application software for use in projects and other school activities.
- Access to the internet and thousands of on-line databases.
- Access to remote learning resources teachers and learners no longer have to rely solely on printed books and other materials in physical media housed in libraries (and available in limited quantities) for their educational needs. With the internet and the world wide web, a wealth of learning materials in almost every subject and in a variety of media can now be assess from anywhere at any time of the day and by an unlimited number of people. This is particularly significant for many schools in developing countries, and even some in developed countries, that have limited and out dated library resources.
- ICT also facilitates access to resource person's mentors, experts, researchers, professionals, business leaders and peers - all over the world (Collins, 2004).

The Integration of ICT in Universities

To face such issues and challenges linked to the on-going change in contemporary societies, the presence and role of ICT appears as a recurring and probably unavailable component, which higher education institutions have to deal with. Universities are challenges to integrate those technologies into their strategies,

their organizations and educational processes. But their answers can hardly be efficient. If delivered only at the level of a single institution policy; responses are better if devised at national and international levels the major aims being the improvement of quality and flexibility, the widening access to the field of tuition, the possibility of reaching populations as yet unreached by higher education.

Such missions and skill are those of the "mega" - Universities", those large distance education institutions that have done so much to enlarge the field of higher education in several countries. As a relay, many universities are now opening distance education facilities and ICT services, sometime by creating net works, through mutual partnership, even in developing countries where technologies are less available. In that context, ICT (adapted to local technological conditions) is a major tool both for on campus students, and for teaching outwards new target groups engaging in lifelong learning processes or on-professional markets. (Tino, 2005).

The computer

The word computer originally referred to a machine or electronic device that could compute or carry or some complex calculations. Anderson (1979) defines a computers as a machine which accepts data from an input device,. Performs arithmetical and logical operations in accordance with predefined programmed and

finally transfers the processed data into an output device either for further processing or in final printed form as the hard copy, such as business document schedule or project.

The British computer society (1998) described computer as a machine which under the control of a stored program automatically accepts and processes data, and supplies the results of that processing in addition, Oliver and Chapman (1993), defined computer as device that works under the control of stored program, automatically accepting, storing processing data to produce information that is the result of the processing. The form in which data is accepted, produced by the computer vary enormously from simple words or numbers to signal sent from or received by either item on technology. Therefore, when the computer processed data, it actually performs a number of separate functions as follows:

- **Inputs:** Most computers cannot accept data in forms customary to human communication as such speech or hard written documents. It is necessary therefore to present data to the computer in any way that provide easy conversion into its own electronic pulse-based forms. This is commonly achieved by typing the data into keyboard device that concerts into machine sensible forms. A keyboard device is just one of the many kinds of input device. The mouse can also be an input device.

- **Storage:** Data and instructions enter main storage, and they are kept until they need to be worked on. The instructions dictate action to be taken as the data. The resulted action will be held until they are required for output.
- **Control:** Each computer has a control unit that fetches instructions from main storage, interprets them and issues the necessary signals to the components making up the system. It directs all hardware operations necessary in obeying instructions.
- **Processing:** Instructions are obeyed and necessary arithmetic logic unit (ALU). In addition to the arithmetic, it also performs so called logic operation. This operation takes place on credibly at a high-speed example million numbers may be totaled in one second.
- **Output:** Results are taken from main storage and fed to an output device. This may be a printer, in which case information is automatically converted to a printed form called hard copy. Alternatively, data may be displayed on the monitor screen, similar to that used in the television.

Basic Types of Computers

Egbokhare and Ukaoha (2006) classified the computers by signal. There are three broad classes of computing devices: digital, analogue and hybrid.

- **Digital Computers:** These are called digital because they process data that is represented in the form of discrete value (for example0,1,2.3.4.) by operating on it in steps. Discrete values occur at each step in the operation. It can further be explained as a computer that store and processes information in the form of numerical form; it circuits perform directly the mathematical operations of addition, subtraction, multiplication and division. Everything that a digital computer does is based on one operation.

- **Analogue Computer:** This kind works with analogue valves, It makes calculations based on measurement and they are made on real-time. Analogue computers can be used for controlling machinery or chasing information on a dial chart or graph. It is limited to specialized tasks. It is designed to process data in which the variable quantities vary continually; it translates the relationship between the variables of a problem into analogous relationships between electrical and voltage and analogue that is set up in its electrical circuits.

- **Hybrid Computers:** As the name suggests a computer that has the combined features of digital and analogue computers. Hybrid computers are rare. They combine the measuring capacity of analogue computer with the logic and control of digital computers to process both discrete and continuous data. They

are sometimes used for weather forecasting. The modern micro-computers system is an example of a hybrid device.

Computer Network

Odagbo (2001) defined computer network as a system of inter connecting or linking two or more computers together or several computers to a hardware such as printer, using coaxial suitable devices like modem, for the purpose of data communication or information exchange. In a computer network system, computers can "talk" to each other, share the same information or benefits from the knowledge of other computers attached or connected to it.

The computer network works exactly like the way a smaller university for example is linked up to or affiliated to a bigger university elsewhere. Consequently, the smaller university would have unhindered access to the web of information of the bigger university. The NTA is another example of the work ability of computer networks. The main NTA station is located in Abuja, but at nine O'clock, the NTSA network news is watched all over the states of the federation, because the television stations are linked to the main station at Abuja, (Ugbe, 2005). The effectiveness of information and communication technology is very possible, because of the inter connectivity of computer known as the net work structure or topologies (Odagbo 2001).

There are different types of network prominent: among them are Local Area Network (LAN) and Wide Area Network (WAN).

Local Area Network (LAN)

A LAN is a network that covers a limited distance casually a single site or faculty and allows sharing of information and resources. A LAN can be as simple as two computers or as complicated as large connecting computers. Aregbesola (2003) opined that this type of network is very popular because it allows individual computers to provide processing power and utilize their own memory, programme, and data can be stored in any computer in the network.

It allows for sharing of data files that reside in a common location, makes multiple user access possible and data integrity is much easier to maintain making it ideal for customer's data-bases and accounting data.

Wide Area Network (WAN)

WAN spans relatively large geographical area connections for those sites require the use of ordinary telephone lines ISDN (Integrated Service Digital Network) lines, radio waves and cable or satellite links. WAN can be assessed through dial up connections, using a modem or leased line direct connection. The leased line method is more expensive but can be cost effective for high volumes of data (Aregbesola, 2008).

WAN can provide communication for a larger area for example, city, a country or the entire world.

Internet

According to Lagos (2003), the internet is a worldwide system of linked computer networks. The system can link computers that have different operation systems and storage technique. There is main source of information or commands as the system was designed to operate even if part of the networks were destroyed. Awake (1997) gave a good description of the internet service as a room filled with spiders; each spinning its own web, the web is so interconnected that the spiders can travel freely within the maze. Stating that, the internet is global connection of different types of computers and computer network that are linked together.

The Nigeria-internet group in Lagos (internet Expo 1995) defined internet as "a vast information super highway that facilities communication between computer users both nationally and internationally. It enables computers of all kinds as if they are a part of giant global computing machine supporting this assertion, Awake (1997) stated that internet enables a person to sit at his computer and exchange information with other computer users in any place in the world, just as a telephone enable one to talk to another person on the other side of the earth who also has a phone.

Meaning and Importance of Accounting Education

The meaning of accounting education:

Accounting is the act of recording, classifying and summarizing in a significant manner and terms of money transaction and event, which are part of or at least of financial character and interpreting the result. (AICPA 1961). It is also the process of identifying, measuring and communicating economic information to permit informed judgment and decision by user of the information (AAA 1966). In addition it is also seen as the art and science of recording business transaction in a methodological manner to show the true status of affairs of a business at a particular time.

The surplus or deficiency, which has accrued during a specified period (Anao 1989), looked at the sub-element of accounting thus:

Identifying

Accounting as an activity begins with identifying what is to be accounted for. The transaction must have economic or financial implication and it must be capable of being quantified in monetary value.

Measuring

Measuring appears to be the central function of accounting, it is concerned largely with measuring income and asset values as well as its derivatives. Although accounting was once primarily concerned with classifying, and marshaling information, the myriad demands now made upon it have encouraged the discipline to evolve complex rules, analysis and computation thus yielding various kinds of supplicated information.

Communication

This is the process of reporting what is measured in accounting practice guided by various laws and standard which all provide for the disclosure of material information in the accounting. Anoa (1989) opined that the fact that accounting itself is a service function designed to inform management on financial implications and as well as communicated to absentee owners or shareholders about the loyalty and diligence of service of the accountant who have a cost budget on how the business could get money to function its projections. There are diverse user of financial information which is the end product of the accounting function and they range from manager, lenders, employees share holders, government, general public Anao (1989).

Accounting education is a fundamental programme that has to do with acquisition, conversion and how to record business transaction. It is a type of education for self-reliance. The basic knowledge of accounting education will help the students to develop manipulative skills. It will also help to achieve and develop in the student the attitude of using the acquired skill to solve problems of his business community Adelogun (2002).

Objectives of Accounting Education

Boynton (1970), outline the following four major objectives of Accounting Education:

Vocational Objective: Those who plan their live hood in business may derive it from accounting activities in business.

Related Vocational Objectives: Those students know that knowledge of some accounting skill may be helpful to them in carrying out their occupation.

Personal Objectives: Those students who do not need knowledge of the job but will apply it to everyday living for instance, they will plan and budget wisely, keep helpful and necessary financial records and follow good business practice.

General Education: Where the teacher aims at improving such traits as inability to get along well with others in correct use of English, poor habit of cleanliness,

health, dressing, as well as tardiness, laziness, careless/dishonest etc. in accounting class.

Accounting and Information Technology

Given the immense changes all over the world as a result of information technology today, it is likely that technologies have shaped the future. In a report, the AICPA identified top technologies arising from development in ICT that will have most impact on the work of the professional accountant. They are:

- Security
- Electronic commerce.
- Private networks
- Work technology
- Year 2000 problem
- Internet and online services
- Image processing and document management
- Training and technology competency
- Communicate technologies
- Electronic data interchange (EDI)

These technologies have implication for chartered accountants and their work because they affect how and when information is created, processed, stores, communicated, acquired, refined and interpreted. They will channel the way accountant work. (AICPA, 1997) to add positively to the value chain in our modern organization and society, we need to retool ourselves as accountant and keep up with the rapidly advancing technologies and the changes in the needs of changing the organization chart and value change relationship (Martin, 1989).

This means that the role of technology will change the nature, timing and location of our roles in the value creation process. We will do less of the historical number punching (which computer will take over) and become information system consultant, information analyzer and interpreters of data overload. Making effective use of information n technology has come to stay may mean that the environment in which it operated has changed. It has changed from the days of ledgers and filling cabinet to diskettes and compact computer systems. Management can now prepare financial statement using special program such as Microsoft Excel and Access and prepare database for its information. The accountant recording and even communicating functions have truly been revitalized by ICT.

Even the internal auditing function can be performed using ICT, traditional audit techniques will not do when you want to capture audit evidence or electronic audit evidence or electronic audit evidence that the system does not maintain permanently.

Ekeigwe (1998) opined that new technique such as system embedded audit procedure will have to be developed; these techniques perform auditing continuously without human intervention.

Advantages of Accounting Information System

1. Efficiency

The use of computerized information system has led to increased efficiency in accounting function of organization. The accounting functionhave been successfully reduced to an operating system. It has eliminated the time log usually experienced in manual systems where files are transferred to and from one desk to another. Even the audit function has been made efficient as supervisory efficiency is increased because audit supervisors and managers from remote location whenever needed (Lucy, 1997).

2. Speed and Accuracy

Hunts and Shelly (1990) opined that accuracy in computers is consistently high and errors in computing are due to human rather than technologies weakness (imprecise thinking programmer, inaccurate data or poorly designed system) Real-time computing which produces an almost immediate response because of imputing data and the information in a computer system travels at the speed of electronic impulse. Financial statements are ready on time when the accounting information system is used in contrast with the manual accounting system. The fact that there is only one input point also

reduces error that could arise from transferring balance from that of the manual accounting system.

3. Globalization

The increasing emphasis on globalization, the world all over has special implications on the job of the accountant in the organization. The accounting information system is a more global friendly environment as it permits the file sharing, group software, instant communication through e-mail and video conferencing, group decision can be made in a little time as possible and for group companies, information can be transferred easily (Okhigbochie, 2004).

CHAPTER THREE

METHODOLOGY

This chapter describes the methodology used in this study. It is arranged in the following order:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Instrumentation
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

This study will make use of survey design. This is considered appropriate because the researcher will collect and analyze data from only a few people considered to be representative of the entire group (Nworgu, 1991).

Population of the Study

The population of the study comprises of all Accounting Education students that is from year 1-4 of the 2022/2023 session of the University of Benin. The total population of one hundred level (100L) is one hundred and seven (107), the total

population of two hundred level (200L) is seventy two (72), total population of three hundred level(300L) is fifty seven (57) students and the total population of four hundred level(400L) is one hundred and twenty-five (125) students, making a total population of three hundred and sixty one (361) students.

Sample and Sampling Technique

The random sampling techniques will be used for this research to select samples from the population. One Hundred students will be used as sample from the population.

Instrumentation

The instrument used in this research work was the questionnaire. It was designed by the researcher and approved by the supervisor. The questionnaire had two sections.

The first section consists of five questions.

Validity of the Instrument

The instrument for the study was developed based on the research questions. The project supervisor scrutinized the items on the questionnaire to ensure that only relevant and reliable information needed for the study are contained in it. The

final draft of the questionnaire reflected all the corrections made by the supervisor to ensure both face and content validity.

Reliability of the Study

In order to determine the reliability of the instrument, the test re-test reliability method was used. A total of 30 respondents were used. Cronbach Alpha Statistical tool was used to analyze the collected data and a reliability co-efficient of 0.72 was obtained.

Method of Data Collection

The researcher personally administered the questionnaire to the respondents. This was done by the researcher introducing herself to the respondents and shared the questionnaires to the respondents, this gave the researchers opportunity to explain and clarify areas that are not cleared to the respondents. All questionnaires were collected immediately after completion.

Method of Data Analysis

In analyzing the data collected for this study, simple percentage was used. Also, the mean and grand mean of each item were calculated.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

This chapter gives an analysis of data collected through questionnaire that was administered for the purpose of this project. The aim of this is to show the responses of the respondents on the effects of information and communication technology (ICT) on accounting education students.

One hundred (100) questionnaires were given to the students of accounting education students of the University of Benin from 100-400 levels. The aim of the researcher here is to enable her ensure the reliability and validity of results, so as to be able to reject and uphold the research questions.

A simple percentage and means score are the techniques used in analyzing data in this study.

Part A

This part consists of the simple percentage used in analyzing the responses. The formula is:

$$\frac{Number\ of\ Respondents}{Total\ Number\ of\ Respondents} \times \frac{100}{1}$$

Table 1: Characteristics of Respondents

SEX	Number of Respondents	Percentage%
Male	38	38
Female	62	62
Total	**100**	**100**

Table 1 showed the sex of the respondents, it shows that 35% of the respondents are male and 62% are females.

Table 2: Age of Respondents

AGE	Number of Respondents	Percentage%
17 - 20	16	16
21 - 25	48	48
26 – 30	36	36
Total	**100**	**100**

Table 2 showed the ages of the respondents (students). It reveals that 16% are between 17 and 20, 48% are between 21 and 25 and 36% are between 26 and 30.

Table 3: Level of Respondents

LEVEL	Number of Respondents	Percentage%
100	11	11
200	11	11
300	12	12
400	54	54
Total	**100**	**100**

Table 3 reveals that 11% are 100 level students, 11% are 200 level students, 12% are 300 level students and the remaining 54% are 400 level students.

PART B

This part shows the data, that is, the response to the questions in the questionnaire which is related to the research questions. The mean score is used in analyzing this response. A standard judgement (that is, a criterion mean) for deciding if an item is accepted or rejected is got thus:

$$\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$$

Therefore, a criterion mean of 2.50 and above is positive and a criterion mean below 2.50 is negative.

The average mean score is computed by adding all the scores assigned to the number degree of agreement "Yes" and disagreement "No" to item and dividing it by the number of responses as follows:

$$\frac{Total\ score}{Number\ of\ Responses\ (N)}$$

A grand mean score is calculated and used as a standard of judgement for evaluating the criterion mean. The addition of all the total scores divided by the addition of all the number of responses gives a grand mean.

RESEARCH QUESTION 1

TO WHAT EXTENT HAS THE INTRODUCTION OF ICT HELPED ACCOUNTING EDUCATION STUDENTS?

Table 4: The help provided by the introduction of ICT amongst accounting students.

S/N	ITEMS	YES	NO	NO. OF RESPONSES (N)	TOTAL SCORES	MEAN (X)	DECISION
1.	Is ICT helpful when sourcing materials?	86	14	100	346	3.46	Agree
2.	Is ICT helpful in carrying out your daily educational activities?	72	28	100	284	2.84	Agree
3.	Has ICT been of great help to you in gaining access to information from different	84	16	100	318	3.18	Agree

	sources?						
4.	Has the use of ICT made your course more interesting?	76	24	100	322	3.22	Agree
Total				**400**	**1270**		

Therefore, grand mean = $\frac{1270}{400}$ = 3.2

Table 4 indicated how the introduction of ICT has helped Accounting Education Students. It showed that ICT has been helpful when sourcing for materials with a mean of 3.46 which is above the criterion mean of 2.50. it has also been helpful in carrying out students' daily educational activities with the mean of 2.84. Also, it has been of great help in gaining access to information from different sources with the mean of 3.18 and the use of ICT has made the course more interesting to the students with the mean of 3.22.

A grand mean of 3.1 which is above the criterion mean of 2.50 indicates that the introduction of ICT has helped the Accounting Education Students in greater way to develop them in the course of their study. This means that the introduction of ICT to Accounting Education Students has a high influence in helping them access information.

RESEARCH QUESTION2:

Has the introduction of ICT enhanced the job prospect of the Accounting Education Students?

Table 5: ICT Enhancement of job prospects of Accounting Education Students.

S/N	QUESTIONNAIRE ITEMS	YES	NO	NO. OF RESPONSES (N)	TOTAL SCORES	MEAN (x)	DECISION
5	Has the knowledge of ICT enhanced your job prospects?	84	16	100	322	3.22	Accepted
6	Do you need the knowledge of ICT to fit into the labour market in the present world of technology?	98	2	100	366	3.66	Accepted
7	Is the current level of ICT application in Accounting Education enough to prepare you for future employment?	60	40	100	278	2.78	Accepted
8	Will your knowledge of ICT help you perform well in your job?	90	10	100	342	3.42	Accepted
	Total			**400**	**1,308**		

Grand mean = $\frac{1308}{400} = 3.3$

Table 5 indicated how the introduction of ICT has enhanced the job prospects of the Accounting Education Students. It showed that the knowledge of ICT has a high influence in determining the job prospect of the student with the mean of 3.22, the students to fit into the labour market in the present world of technology with the mean of 3.66. It also shows that the knowledge of ICT will help the students to perform well in the future job with the mean of 3.42.

A grand mean of 3.3 which is above the criterion of 2.50, indicates that the introduction of ICT has a high influence in enhancing the job prospect of Accounting Education students.

RESEARCH QUESTION 3

Has the introduction of ICT increased the knowledge and skill needed in Accounting Education?

Table 6: The provided knowledge and skills by ICT in Accounting Education

S/N	QUESTIONNAIRE ITEMS	YES	NO	NO. OF RESPONSES (N)	TOTAL SCORES	MEAN (X)	DECISION
9	Has the introduction of ICT increased your knowledge of Accounting Education?	64	36	100	286	2.86	Accepted
10	Has ICT helped you in acquiring the skills needed in Accounting Education?	42	58	100	170	1.7	Rejected
11	Accounting Education is a practical course, so, do you need the knowledge of ICT to do well in it?	8	92	100	152	1.52	Rejected
12	Has ICT helped you in preparing financial statements and posting ledgers?	36	64	100	232	2.32	Rejected
	Total			**400**	**840**		

Grand mean $\frac{840}{400} = 2.1$

Table 6 showed the practical knowledge and skills by ICT in Accounting Education. It indicated that students have not yet acquired the needed skills in accounting education with the mean of 1.7, so this is rejected. Also, being that accounting is a practical course, the students that think they need the knowledge of ICT to do well is very low, with the mean of 1.52, therefore it is also rejected. ICT has not yet enhanced the learning of students in accounting education (Faculty of Education, University of Benin) in many ways and this receives a low mean of 2.32 while the introduction of ICT has increased the knowledge of accounting education students with the mean of 2.85 which is accepted.

The grand mean of 2.1 which is below the criterion mean of 2.50 showed that the introduction of ICT to Accounting Education Students in the University of Benin, so far has not increased their knowledge and skills in accounting education.

RESEARCH QUESTION 4

Has the introduction of ICT enhanced the academic performance of students?

Table 7: learning and academic performance of Accounting Education students.

S/N	QUESTIONNAIRE ITEMS	YES	NO	NO. OF RESPONSES (N)	TOTAL SCORES	MEAN (X)	DECISION
13	Has ICT enhanced your learning in any way?	96	4	100	346	3.46	Accepted
14	Has your knowledge of ICT improved your academic performance?	70	30	100	302	3.02	Accepted
15	Has your knowledge of ICT helped you in interacting with other students through the internet?	60	40	100	266	2.66	Accepted
16	Has ICT enabled you to increase the capacity, flexibility and efficiency of collecting information for learning?	62	18	100	312	3.12	Accepted
	Total			**400**	**1220**		

Grand mean = $\frac{1220}{400} = 3.0$

Table 7 indicated how the introduction of ICT has enhanced the learning and academic performance of the students. It showed that ICT has enhanced their learning in many ways with the mean of 3.46. Also, the knowledge of ICT has improved their academic performance with the mean of 3.0. The knowledge of ICT has also helped the students in interacting with other students with the mean of 2.66. Also, ICT has enabled them to increase their capacity, flexibility and efficiency in collecting information for learning with the mean of 3.12.

A grand mean of 3.0 which is above the criterion mean of 2.50 showed that the introduction of ICT has a high influence on the learning and academic performance of students in Accounting Education. This interprets that the introduction and knowledge of ICT has enhanced the learning and academic performance of Accounting Education Students.

RESEARCH QUESTION 5

IS ICT RELEVANT TO ACCOUNTING EDUCATION?

Table 8: The relevance of ICT to Accounting Education

S/N	QUESTIONNAIRE ITEMS	YES	NO	NO. OF RESPONSES (N)	TOTAL SCORES	MEAN (X)	DECISION
17.	Is ICT relevant to Accounting Education?	90	10	100	328	3.28	Accepted
18.	Do you have all the information you need from your lecturers and do not need the knowledge of ICT?	12	88	100	146	1.46	Rejected
19.	Using ICT is time consuming, hence, would you rather read only your textbooks?	4	96	100	146	1.46	Rejected
20.	Getting information from ICT is expensive, can you not afford it?	20	80	100	178	1.78	Rejected
	Total			**400**	**798**		

Grand mean total $= \frac{798}{400} = 1.99$

Table 8 indicated the relevance of ICT to accounting education. It showed that ICT is relevant to accounting education with the mean of 3.28 which is above the criterion mean of 2.50.

The grand mean of 1.99 which is below the criterion mean of 2.50 indicated the negative response of some of the items that are not in agreement with the research question. Hence, ICT is relevant to accounting education.

Discussion of the Finding/Results

The data collected for the study is based on the effects of ICT on Accounting Education students. The result of the study presented in table 4 showed that the introduction of ICT has helped the Accounting Education students to access information easily. This is with the help of the internet and networking. This is in answer to the research question on "to what extent has the introduction of ICT helped the Accounting Education students". Item 1 in table 4 showed an accepted mean value of 3.46 in response 1o the question "Is ICT helpful when sourcing materials?" Item 2 showed an accepted mean value of 2.84 in response to "Is ICT helpful in carrying out your daily educational

activities? Item 3 also showed an accepted mean value of 3.18 in response to the question "Has ICT been of great help to me in gaining access to information from different sources?" Item 4 reveals an accepted mean value of 3.22 in response to

"Has the use of ICT made my course more interesting?" with the help of the internet, accounting education students can easily access information.

This is indicated by an accepted mean value of 3.22 in item 5. Also, an accepted mean value of 3.66 in item 6, 2.78 in item 7 and 3.22 in item 8. In offices, manual typewriters have been replaced with computers. This is because office automation enhances a high level of accuracy. Also, accounting packages which can capture economic events process the data and produce financial statements have been computerized. With ICT, accounting education students can easily get jobs/employments in the labour market in this present world of technology.

Table 6 showed that the introduction of ICT provides the knowledge and skill needed in accounting education. Accounting Education is a skilled course that involves working with hands. Accounting application packages like Peachtree, Dark Easy, Just Accounting, Sage etc. have helped to simplify the work of the accountant to a reasonable extent. The Accounting Education students are not taught these packages practically, in other words, they are not taught ICT practically. As a result, the needed skill required has not been achieved by the accounting education students.

Table 7 showed that the introduction of ICT has enhanced the learning and academic performance of the students. This is shown in item 13 of table 7 with an accepted mean value of 3.46. The mean value of item 14, 15 and 16 were accepted.

This buttresses the point that ICT has made it possible to access different public and private libraries at little cost. With e-learning, students can learn from distance. Also, computerized accounting applications like payroll applications, computer assisted audit techniques (CAAT) etc. can be taught practically to students with the use of computers.

The result of the study presented in table 8 indicated that ICT is relevant to accounting education. ICT has permeated almost all spheres of human endeavor.

ICT is applied in four broad areas which are business application, scientific application, research application and engineering application. Accounting education falls under the business application which makes ICT relevant to the accounting education students.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

The research was designed to seek out the effects of ICT on Accounting Education students, showing its relevance and how it had helped in all spheres of life.

Chapter one of this study started with background which briefly discussed ICT, computers, the Internet and its introduction to various courses of studies. In education, it has helped in distance learning or e-learning, the use of productivity tools like processors, access to the internet and thousands of on-line databases, link with other schools or colleges or with industries or business organizations. Also, through ICT, students are engaged in various research works which would involve the use of internet and computers. Some problems like the poor teaching of ICT to the accounting education students were also noted, which called for the study.

In chapter two, the researcher revealed literature which explored the meaning and the concept of information and communication technology and accounting. ICT was defined as the study designed, development, implementation, support or management of computer-based information system, particularly software application and computer hardware. ICT is applied in four broad areas

which are business application, scientific application, research application and engineering application.

Accounting as a course of study and its relationship with information and communication technology (ICT) was discussed. Accounting can be defined as the process of identifying, measuring and communicating economic information to permit informed judgement and decisions by users of information (AAA, 1996). It is the art and science of recording business transactions in methodological manner. Since accounting deals with communicating economic information and recording business transactions, ICT is needed. Technologies like e-commerce, internet and online services, image processing and document management, communication technologies etc. These technologies affect how and when information is created, processed, stored, communicated, acquired, refined and interpreted. They change the way accountants work.

The ways and manner in which the research was carried out were explained in chapter three. Lastly, to give a true fair view about these aspects of information and communication technology, the researcher visited Four levels (100-400 level students) of the accounting education students, faculty of education, University of Benin.

100 questionnaires were administered to randomly selected 100 students. The students returned their questions completed.

Conclusion

After analyzing the results of the study, the following conclusions can be made:

1. That the introduction of information and communication technology has helped students to a great extent and has a positive effect on them.
2. That the introduction of ICT has enhanced the job prospects of the students and has a positive effect on them.
3. That ICT has enhanced their learning and academic performance. > That the introduction of ICT has not yet increased the knowledge and skill that is needed in Accounting Education.
4. That ICT is relevant to accounting education. Finally, it has been established that ICT helps in all spheres of life.

Recommendations

Based on the findings of this study, the researcher has put forth some recommendations for the effects of information and technology on accounting education students. The recommendation include.

1. Government and authorities involved should look into this aspect of education that is yearning for better implementation of policy after its introduction. They should give more concentration to this aspect of ICT on accounting education since it is a vocational course
2. Laboratory should be provided for the students for easy and quick access to internet and material needed for equipping themselves to acquire the needed skills for accounting education.
3. Adequate computers and facilities should be provided by the authorities so that the students can practice the acquired skills properly for better acquaintance to information technology.
4. Assignment should be given often by the lecturers to the students, to keep them informed always of what is happening in their course of study.
5. It is important that teaching practitioners acquire practical knowledge of ICT to enable them to properly pass it down.
6. Training and retraining of the lecturers should be kept intact to ensure they do not become obsolete in the knowledge and skills of ICT.
7. More courses on ICT and its applications should be introduced into the curriculum.

8. For students to appreciate ICT better, the government should subsidize the cost of computers and accessories to enable the middle-class students have access to the device.

Limitation of the Study

During the course of the study, the researcher encountered some constraints such as: students' unwillingness to answer questions due to stress and the thought that their view will make no difference.

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APPENDIX

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY

QUESTIONNAIRE

Dear Respondent,

This questionnaire is to assist the researcher carry out a study on the Impact of Information and Communication Technology (ICT) on the Accounting Education Students of the University of Benin, Benin city.

Please, you are requested to give honest responses that may lead to the improvement of ICT in Accounting Education.

Thank you.

Rachael Oghenenyerhovwo IGBAGBEKE
Researcher

Section A.

Please tick the box that is appropriate.

Sex: (a)Male ( ) (b)Female ( )

Age: (a)15 – 20 ( ) (b)21 -25 ( ) (c)26 – 30 ( ) (d) 31 and above ( )

Level:(a) 100 ( ) (b) 200 ( ) (C) 300 ( ) (d) 400 ( )

Marital status: (a) Single ( ) (b) Married ( )

Religion: (a) Christianity ( ) (b) Islam ( )

Section B:

Please tick the appropriate box for your response.

S/N	ITEMS	RESPONSE	
		YES	NO
1.	Is ICT helpful when sourcing materials?		
2.	Is ICT helpful in carrying out your daily educational activities?		
3.	Has ICT been of great help to you in gaining access to information from different sources?		
4.	Has the use of ICT made your course more interesting?		
5.	Has the knowledge of ICT enhanced your job prospects?		
6.	Do you need the knowledge of ICT to fit into the labour market in the present world of technology?		
7.	Is the current level of ICT application in Accounting Education enough to prepare you for future employment?		

8.	Will your knowledge of ICT help you perform well in your job?		
9.	Has the introduction of ICT increased your knowledge of Accounting Education?		
10.	Has ICT helped you in acquiring the skills needed in Accounting Education?		
11.	Accounting Education is a practical course, so, do you need the knowledge of ICT to do well in it?		
12.	Has ICT helped you in preparing financial statements and posting ledgers?		
13.	Has ICT enhanced your learning in any way?		
14.	Has your knowledge of ICT improved your academic performance?		
15.	Has your knowledge of ICT helped you in interacting with other students through the internet?		
16.	Has ICT enabled you to increase the capacity, flexibility and efficiency of collecting information for learning?		
17.	Is ICT relevant to Accounting Education?		
18.	Do you have all the information you need from your lecturers and do not need the knowledge of ICT?		
19.	Using ICT is time consuming, hence, would you rather read only your textbooks?		
20.	Getting information from ICT is expensive, can you not afford it?		