

INFORMATION AND COMMUNICATION TECHNOLOGY AND THE DEVELOPMENT OF ACCOUNTING PROFESSION IN NIGERIA BEYOND 2020

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Abstract

The rapid development of Information and Communication Technologies (ICTs) will in doubt effectively facilitate the accounting profession in a way of streamlining the provision of its products and services in Nigeria beyond 2020. This study focused on the role of ICT in the development of accounting profession in Nigeria. In employing the survey research design, the opinions of 60 accountants was purposively drawn from the teaching and bursary staff of Delta State University, Abraka and the six banks operating in Abraka Metropolis using an instrument labelled role of ICT in Accounting Questionnaire (RIAQ). In analyzing the data collected, the chi-square statistic was used to test the extent to which ICT has benefited the accounting profession, while the regression analysis was used to test the relationship between ICT and job proficiency in the accounting profession. Summarily, the study found that there was a significant relationship ($P < 0.05$) between the use of ICT and accounting proficiency. The study concluded that ICT is of great importance towards the development and attainment of both vision 2020 and accounting in Nigeria. It was recommended that there should be a continuous training of accounting professionals towards the acceptance and integration of ICT in accounting practice.

Key Words: ICT, Development, Accounting

The rapid development of information and communication technologies (ICTs) has effectively facilitated reorganizing a firms business process and streamlining the provision of its products and services in today's dynamic business environment (Lientz and Laissen, 2008).such adoption helps modern organization develop and maintain their competitive advantage for ensuring their profitability and survivability in the market place (Ruddock, 2006).

The Vision 2020: By 2020 Nigeria will be one of the 20 largest economies in the world, able to consolidate its leadership role in Africa and establish itself as a significant player in the global economic and political arena (Newswatch, August 4 2008).

Pristine

Technological innovations are changing the professionals environment in which today's accountants work. The role of an accountant is moving from a normal financial accountant to a financial analyst and management accountant, requiring a broader set of knowledge, professional aptitude, critical thinking skills, and decision making capabilities than prior generations. Accounting plays a critical role in the success or failure of contemporary business institutions. Accounting system are responsible for recording, analyzing, monitoring and evaluating the financial condition of companies, preparation of document, necessary for tax purposes, providing information support to many other organizational functions and so on. Prior to the advent of personal computer, businesses were limited to manual method for keeping track of financial data. According to Tavakolian (1995), the manual accounting systems consisted of paper ledgers, typewriters and calculators. Typewriters were used to type invoices and cheques, and all calculations were performed using calculators. However, with this system it was possible for errors to be introduced into the data since they could go undetected for quite some time. Like many other industries, the accounting industry change with the arrival of personal computers. On this note, the study will examine the role of ICTs in developing accounting profession in obtaining vision 2020.

Brief Historical Development of Accounting Practice in Nigeria

According to Chaffield (2007), the history of accounting in Nigeria can be traced prior to the establishment of professional accounting bodies in the country. The first indigenous professional accounting body in Nigeria is the Institute of Chartered Accountants of Nigeria (ICAN), which was established in 1965 by an act of parliament. ICAN was and is still responsible for the training and certification of professional accountants in Nigeria. The Institute is also saddled with the responsibility of issuing out guidelines on the practice of accountant in Nigeria. It also participates in the regulation of general accounting practice in Nigeria. In 1993, however, another professional accounting body was formed via a decree. The body is called Association of National Accountants of Nigeria (ANAN). The association is also responsible for ensuring the best practices in the profession and also participates in the general regulation of accounting practice in Nigeria. The two recognized accounting bodies in Nigeria, ICAN and ANAN, in most cases do not work together. They spend much time arguing on unnecessary issues relating to superiority and who is legally responsible for what and who is not (Uche, 2012). The level of cohesion between the two bodies is weak though it is improving over the recent years. This cannot be said about other professional accounting bodies in the United Kingdom, United States, and other western countries.

Theoretical Framework: Technology Acceptance Model (TAM) Ajzen and Fishbein's (1980)

The origins of the TAM came from Ajzen and Fishbein's (1980) theory of Reasoned Actions (TRA). It posits that beliefs and attitudes are related to individual's intentions to perform. According to TRA, attitude toward behaviour is determined by behavioural beliefs about the consequences of the behaviour (based on the information available or presented to the individual) and the effective evaluation of those consequences on the part of the individual. Introduced and developed by Davis (1989)

the TAM is a model that addresses the issue of how users come to accept and use a technology. There are two specific variables, perceived usefulness and perceived ease of use, which are hypothesized to be fundamental determinants of user acceptance. The TAM posits that user's behavioural intentions determine actual technology acceptance. Behavioural intentions will be influenced by the user's attitude towards technology. Davis (1989) stated that perceived usefulness and perceived ease of use are beliefs that lead to favourable attitudes and intentions to accept and use technology.

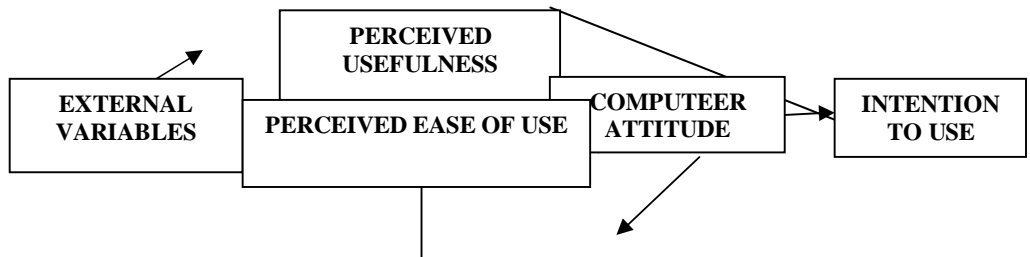


Figure I: The Technology Acceptance Model

Accounting as a Professional Field of Research

As a professional field, accounting encompasses a wide range of activities, practices and concepts with accounting professionals acting in various capacities such as auditors, financial controllers and financial executives just to mention but a few. Hence, in their efforts to understand how and why accountants make decisions as well as the impact of these decisions, accounting researchers or accountants in the academics rely on a broad set of theoretical and methodological tools that are drawn from various disciplines (Chaffield, 2007).

The main objective of the academics accountants to achieve vision 2020 and beyond is to conduct researches and expose students to theoretical and methodological accounting research tools. The accountants in the academics undertake researches that are accounting in nature or related to the field of accounting. (Lernout and Hauspie, 2006).

The Concept of ICT

Information and Communication Technology (ICT) is a wide range of activities and equipment including all the tools, application and information, which are available and accessible through computers. It encompasses various forms of information delivery system such as televisions, radios, newspapers, computer, the internet (Unchidiuno, 2006). The advancement in technology has created so many information and communication tools that are necessary and useful in the development process.

Utilizing ICT in Accounting Education via Education Blogging

In accounting education, blogs facilitate ongoing discussion that may take place between an accountant and their client or vice versa. In accounting, a problem may be

Pristine

presented, analyzed, discussed and then a viable solution developed. Thus blogs becomes the facilitator of this discourse. An educational blog will help in developing knowledge, skills, and attitude that will be used by the student throughout their professional and personal lives. In the past students have been required to write journals or diaries that allowed them to reflect on their learning but online edublogs have extended this experience to allow for interactivity with their peers and external commentators too. In the word of Lowe and Williams (2006) “with the teacher no longer the overly predominant active reader and responder of students texts, students, as a community, take more ownership of their writing”

Accounting as an Information and Communication System

We had earlier define accounting broadly as the process of identifying, measuring and communicating economic information to permit informed judgment and decisions by users of the information. It is clear from the foregoing definition that accounting is an information and communications system in most organizations. In view of the landmark technological breakthrough of the present age which include the computer and the convergence of information and communication technology (ICT) in the information super highway, it is obvious that the traditional method and procedures of accounting will not be workable in an electronic commerce environment. It is necessary to underscore the fact that an accountant whether in private or public practice in the academia ought to be current with the high technology communications capabilities which have reduced the world into a global village (Umeh 2010).

According to Umeh (2010), Computerization for effective financial reporting is a part of professional management. The explosion of information technology, particularly the computers have brought about far-reaching changes in effective reporting system. With the computerization of accounting methods in many sectors of the economy, the idea of resisting innovation within an organization may no longer be the case in the context of effective reporting in an enterprise.

Statement of the Research Problem

ICT affects all processes associated with modern day banking. From the daily routines of preparing payroll and order entry, to strategic activities such as the acquisition of a company, ICT surfaces as a key element. Despite the significance of information and communication technologies (ICT) in accounting practice, and its widespread use, there has been relatively little research in the area. Stefanou (2006) noted that a number of authors in various countries share similar views on the lack of research in the area of AIS. It is against this backdrop therefore, that the present study is focused on the role of ICT in the development and improvement of accounting profession in Nigeria.

Objectives of the Study

The objectives of the study are:

1. To identify the relationship between accounting job proficiency and the use of ICT tools.

Samuel Rukevwe Akpokiniowo And Christopher Toweh Oyovwe

2. To identify the benefit of ICT use on the advancement of accounting profession.

Research Questions

The following research questions were raised in the study.

- Is there any relationship between job proficiency and the utilization of ICT tools?
- What are the benefits of ICT adoption in the practices of accounting in Nigeria?

Research Hypotheses

To achieve the objective of this study, the following null hypotheses were formulated to guide the study and were tested at .05 level of confidence.

1. There is no significant relationship between job proficiency and the use of ICT tools
2. There is no significant benefit of ICT adoption in the practicing of accounting profession in Nigeria

Methodology

The study adopted the survey design. The population of the study includes all practicing accountants in Delta State University and banks operating in Abraka metropolis. The Purposive sampling technique was used. The sample size comprises of 60 accountants purposively drawn from the teaching and bursary staff of Delta State University Abraka and the six banks operating in Abraka Metropolis. To guide this study, an instrument labeled Role of ICT in Accounting Questionnaire (RIAQ) was developed. This was used to elicit information from the subjects of the study. The questionnaire was four point modified likert scale that was scored in a continuum of strongly agree, agree, disagree and strongly disagree. Respondents were free to agree or disagree to any of the statement in the questionnaire. To validate the instrument, the assistance of two research expert was solicited who helped to validate the instrument constructed to make sure it covered the face validity. Thus, after necessary corrections, the final copy was drafted. The reliability of the instrument was determined by the application of test-retest method to ensure its stability. The response/score of both score when compared and correlated using Pearson Product Moment Correlation coefficient. The coefficient yield .65 level of confidence, which the researcher considered high enough for the study. To ensure high percentage return of the research instrument, the researchers administered the questionnaire personally to the respondents. However, out of the 60 questionnaires that was administered, 56 were returned which was in turn used for the analysis.

Method of Data Analysis

The chi-square statistic was used to test the extent to which ICT has benefited the accounting profession while the regression analysis was used to test the relationship between ICT and job proficiency in the accounting profession.

Pristine

Results

The analysis and presentation of results are organized around the research questions and null hypotheses formulated in this study.

Research Question 1: Is there any relationship between job proficiency and the utilization of ICT tools?

Table 1: ICT and Accounting Proficiency

S/N	ITEM	Agreed		Disagreed	
		F	%	F	%
1	ICT is not relevant to Accounting profession	-	-	56	100
2	I use ICT for Professional Purposes only	15	27	41	73
3	I do not feel threatened with the use of ICT in my Job	6	11	50	89
4	I seek out new Ideas about the accounting profession through the use of ICT tools	51	91	5	9
5	There are ICT packages that I use to ease my Job	52	93	4	7
6	I use ICT in the enhancement of accounting practice based on the recommendation of another professional colleague.	48	86	8	14
7	ICT is an enhancement tool for my job delivery	56	100	-	-

The table above, showed the relationship between ICT and accounting proficiency. Thus, in item one all the respondents disagreed to the statement that ICT is not relevant to Accounting profession, in item 2, 41(73%), on item three, 50(89%) of the respondent disagreed that they do not feel threatened with the use of ICT on their job. On item four, 51(91%) of the respondents agreed to fact that they seek out new Ideas about the accounting profession through the use of ICT tools. On item five, 52(93%) of the respondent agreed that There are ICT packages that they use to ease their job. Thus, in item six, 48(86%) of the respondents agreed that they use ICT in the enhancement of accounting practice based on the recommendation of another professional colleague. Finally, item seven on the instrument all the respondents agreed that ICT is an enhancement tool for their job delivery. This therefore showed a high level of ICT contribution to the delivery of job and proficiency in the practice of accounting by practicing accountants.

Research Question 2: What are the benefits of ICT adoption in the practices of accounting in Nigeria?

The answer to this question was evaluated by responses to items on questions 8, 9 and 10 of the research Instrument that evaluated the contributions of ICT to accounting profession in Nigeria

Table 2: Benefits of ICT in Accounting Practice

S/N	ITEM	Agreed		Disagreed	
		F	%	F	%
8	I seek out new Ideas about the accounting profession through the use of ICT tools	51	91	5	9
9	There are ICT packages that I use to ease my Job	52	93	4	7
10	ICT is an enhancement tool for my job delivery	56	100	-	-

From the table above, it can be inferred that the benefits of ICT in accounting profession in Nigeria includes easy access to new ideas and innovations and Speedy/fast tracking of job delivery.

Test of Hypothesis

Ho1: There is no significant relationship between job proficiency and the use ICT tools. In testing this hypothesis, the regression analysis of responses to ICT knowledge and use was done against accounting job proficiency.

Table: 3a: ANOVA^b Summary of Relationship Between Use of ICT tools and Accounting Job Proficiency

Model	Sum of Squares	Df	Mean Square	F	Sig.
1. Regression	85.345	1	85.345	5.578	.19 ^a
Residual	3029.535	54	15.301		
Total	3114.880	55			

a. Predictors: (Constant, Use of ICT Tools)

Table 3b: Coefficients of Relationship Between Use of ICT Tools and Accounting Job Proficiency

Model		Unstandardized	Standardized	Beta	T	Sig
		Coefficients	Coefficients			
1.	(Constant)	16.188	.952		16.997	.000
	Use of ICT tools	.227	0.96	.166	2.362	-.019

a. Dependent Variable: Accounting Job Proficiency

b. t-crit = 2.005

Tables 3a and 3b above showed that the calculated F and t of 5.578 and 2.362 is greater than the tabulated F and t of 5.34 and 2.005 respectively leading to a rejection of the null hypothesis that there is no significant relationship between the use of ICT tools and Accounting proficiency. This therefore signifies that there is a significant relationship between the use of ICT and accounting proficiency.

Pristine

HO₂: There is no significant benefit of ICT adoption in the practicing of accounting profession in Nigeria.

Table 4: Test of Significant benefits of ICT in Accounting Practice

S/N	ITEM	Agree	Disagree	DF	X ² _{Cal.}	X ² _{Crit.}	P-value	Decision
9	I seek out new Ideas about the accounting profession through the use of ICT tools	51	5	2	99.3	5.991	0.05	Reject Null Hypothesis
10	There are ICT packages that I use to ease my Job	52	4					
12	ICT is an enhancement tool for my job delivery	56	-					
EXPECTED FREQUENCIES		34	22					

The table above showed that the calculated Chi squared is greater than the table chi-squared value, which led to the rejection of the null hypothesis. This therefore shows that there is a significant benefit in the adoption of ICT in accounting profession in Nigeria.

Discussion of Results

This study investigated the role of ICT in the development of accounting profession in Nigeria beyond 2020. The first research question sought to know the relationship between job proficiency and the utilization of ICT tools. Results presented in table 1 showed a high level of ICT contribution to the delivery of job and proficiency in the practice of accounting by practicing accountants. In testing the hypothesis, the regression analysis of relationships between attitude and knowledge of ICT tools and contribution of ICT to job proficiency as shown in tables 3a and 3b above showed that the calculated F and t of 5.578 and 2.362 is greater than the tabulated F and t of 5.34 and 2.005 respectively leading to a rejection of the null hypothesis that there is no significant relationship between The use of ICT tools and Accounting proficiency and the acceptance of the alternative hypothesis that there is a significant relationship between the use of ICT and accounting proficiency. These observations are in line with that of Umeh (2010) who opined that with respect to the ICT revolution and its challenges to the accountancy profession in the 21st century for the Nigerian accountant, he must appreciate information and communications technology as an unavoidable tool rather than a mystery.

The second research question also sought to investigate the Benefits of ICT utilization to the Nigerian accountant in practice. from the result presented in table 5 above it can be inferred that the benefits of ICT in accounting profession in Nigeria includes easy access to new ideas and innovations and Speedy/fast tracking of job delivery the chi-squared analysis also showed that these benefits were significant thus confirming the earlier claims made in this study by the first Hypothesis testing. The

implication of this therefore, is that the continuous utilization of ICT tools will continuously improve job delivery while contributing to Job proficiency.

Conclusion/ Recommendations

This study concludes that ICT is of great importance towards the development and attainment of accounting profession beyond vision 2020 in Nigeria as a first class profession. From the findings summarized above, the following are recommended:

1. There should be a continuous training of accounting professionals towards the acceptance and integration of ICT into accounting practice.
2. ICT related courses should be integrated into the course curriculum of all accountants in training at the tertiary school level so as to keep them at breast with recent trends in ICT development to achieve the vision 2020.

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Pristine

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