



# Impact of E-Accounting on Accountants' Performance in the Nigerian Public Sector



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## Abstract

This study was undertaken to reveal the impact of e-accounting on the performance of accountants in the Nigerian Public Sector. The level of effectiveness and efficiency of accountants in the Nigerian Public Sector has not been encouraging in the past years due to their use of the outdated manual accounting system also known as the traditional accounting system. The e-accounting system is fast, saves time, and helps accountants to cover more work than before; thereby promoting their effectiveness. It has been fully implemented in the Office of the Accountant-General of the Federation. The questionnaire was used to collect data, and analysis was carried out through the use of simple percentages and chi-square. It was revealed that e-accounting helps to improve the performance of accountants in the Nigerian Public Sector, thereby boosting the economy of the country. It was discovered that the e-accounting system has helped to detect fraudulent activities and other financial management crimes in the Office of the Accountant-General of the Federation. Other organizations that are financially capable and that have a stable power supply have been encouraged to fully adopt the e-accounting system.

**Keywords:** E-Accounting, Accountants' Performance, Chi-Square, Sub-Sahara Africa, Questionnaire, Nigeria, Workload, and stress.

## 1. Introduction

It has been noticed that the efficiency of accountants is not fully managed in the public sector as a result of an outdated and backward state of affairs which includes: stalled national development, wastage of public funds, limited human development, inability to key into, benefit or contribute to the information society. Stone Age tools and concepts will not empower the people and further delay can be dangerous. And this has reduced the contributions of accountants in the public sector. In the accounting system, it has been noticed that fraud is part of the system and also in the activity of accounting. This is true because of the existence of some ghost workers (Obiaigwe, 2009). This is why this study aims at ascertaining the impact of e-accounting on accountants' performance in the Nigerian Public Sector. This study covers accountants in the office of the Accountant-General of the Federation. The duration of this study will span from 2008 – 2010, i.e. three years.

### 1.1. Background and General Overview of the Study

E-accounting is a term originally coined by Joanie Mann at Insynq one of the founders of the ASP industry and was introduced in 1998 along with Insynq's hosted quick books offering under the banner of Insynq Accounting solutions and later CPAASP. Technology plays a key role in today's business environment. Many companies greatly rely on computers and software to provide accurate information to effectively manage their business. It is becoming increasingly necessary for all businesses to incorporate information technology solutions to operate successfully (Benjamin and Paul, 2004). The researcher concurs with the above authors as the world is at the jet age where technology has taken the lead. Online accounting relates to accounting that can be done on the World Wide Web (www). It usually implies the use of a web application that works through a browser without buying or installing any software. It is typically based on a simple monthly charge and Zero-administration approach to help business concentrate on core activities and avoid the hidden costs associated with traditional accounting software such as installation, upgrades exchange of data files, backup, and disaster recovery. The impact of E-accounting on the

performance of accountants in the Nigerian public sector can never be under-estimated because it will go a long way in making accountants faster, saving a lot of time and energy that will be employed into other vital works and getting accurate results from their computations. E-accounting will help to boost the Nigerian economy by not miscomputation, misappropriation of resources, misapplication of funds, and other mistakes, etc. Papers on the desks of accountants will reduce to a great extent if not completely eradicated when e-accounting will be implemented fully. E-accounting will help all the accountants who are answerable to the Nigerian Public Sector and they have their different networks that will all boil down to the Nigerian Economy. All are indeed in level of agreement about the world getting computerized day by day. This is the major reason why most of the activities have become 'E' (i.e. electronic) such as e-accounting, e-banking, e-government, e-marketing, e-commerce, e-business, etc. Computer wizards are making attempts and seeing how to make computer devices to do some of the man's activities to reduce stress and workload, thereby promoting accuracy level and job satisfaction, etc.

## **2. Literature Review**

E-accounting simply means electronic accounting. There are many definitions of Accounting, but there is a captivating definition formulated by the American Accounting Association. It defines Accounting as “the process of identifying, measuring and communicating economic information to permit a firm judgment and decision by users of the information”. The accounting function had been defined as an organizational function responsible for extracting, processing, summarizing, reporting, and otherwise managing all forms of financial information about the organization. It was argued by [Tavakolian \(1995\)](#) that an accounting package is usually one of the first major computer packages that a company purchases and it is one of the two business applications often used, with word processing being the other. This is a normal scenario because accounting plays a very important role in the performance of organizations.

### **2.1. Factor to Be Considered in Implementing E-Accounting in Governmental Systems**

Before establishing or setting up anything, certain factors have to be considered which will go a long way in encouraging the existence of that product, item, or service. Below are some of the factors to consider:

- 1) Up-to-date information is available in real time.
- 2) No payroll-related costs, FICA, workers' compensation, unemployment, vacation/sick benefits, health insurance benefits, and many other expenses.
- 3) Check and monitor office supplies (check stock, paper stock, envelopes, and toner).
- 4) No additional bank charges.
- 5) Cost saving on office space (rent for additional offices).
- 6) No need to upgrade software and annual updates from the client side.
- 7) The accounting function receives attention only when a critical need arises.
- 8) No time wastage.
- 9) No need for living/ training accounting and payroll staff.

When it refers to the term public sector accountant, attention will be focused on the functional definition of an accountant i.e. on all officers who perform or are responsible for the discharge of accounting functions in the public sector, irrespective of whether they are chartered/certified, provided they received training in the accounting discipline and/or obtained degrees or diplomas in accounting from the institutions of higher learning. The public sector encompasses organizations established on behalf of the public, which are usually established without the motive of making a profit. Accounting systems are responsible for recording, analyzing, monitoring, and evaluating the financial condition of companies. Financial condition refers to an assessment of the viability, stability, and profitability of a business. It is performed by preparing reports using ratios such as earnings per share (EPS), return on equity (ROE), price-earnings ratio (PE), return on asset (ROA), return on investment (ROI), and TOBIN'S Q that make use of financial information taken from accounting systems in financial statement parts to paint a more comprehensive picture of the firm's performance ([Ashwath, 2007](#); [Nwokwu et al., 2018](#); [Nwokwu, 2018](#); [Nwokwu et al., 2019](#)).

### **2.2. Benefits of Using a Computerized Accounting System**

There are many benefits to using a computerized accounting system. Overall, probably the greatest benefit comes from the fact that a computerized accounting system can do the same things as a manual system, but it does them better. Thus all the features in a manual system, such as the one shown in [figure 1](#), can be replicated in a computerized accounting system which not only does them quicker but more accurately, 100 percent consistently, more frequently, and other things as well [Wood and Sangster \(2002\)](#).

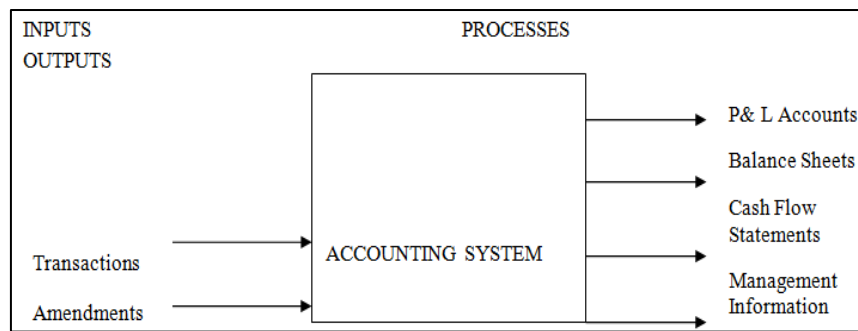


Figure-1.

### 2.3. Research Hypothesis

The hypothesis is an assumption, belief, or opinion which gives us some direction of where the study is to go. In this study, the following hypotheses will be tested.

Where:

**H<sub>0</sub>:** E-Accounting has influenced performance.

**H<sub>a</sub>:** E-Accounting has not influenced performance.

### 2.4. Implementation of E - Accounting in Governmental Systems

There are challenges solved by E-Accounting in the Nigerian Public Sector. The researcher described them in this section by paying attention to the literature as well. The advent of the information technology era has radically changed the way the accounting process provides efficient decision making and it forced companies to react to the new changes to remain competitive (Siamak, 2013). Good governance is central to the development and constitutes the primary means for social transformation. The environment in that governments operate is increasing in complexity and with growing challenges of delivering increased services with shrinking resources. The effective implementation of information technology in government, also known as electronic government (E-government), will improve efficiency, effectiveness, transparency, and accountability in governance. Over the years, some countries began practicing the act of using technology to drive government activities with success stories in Singapore, and China. USA, UK, and others, with examples of various ways countries, apply elements of technology to serve their specific governance challenges. It is a fact that the public and government sectors in Nigeria cannot continue with outdated concepts of organization and information in today's digital age. The effects of a backward state of affairs include stalled national development, wastage of public funds, limited human development, and inability to key into benefit or contribute to the Information society. Stone Age tools and concepts will not empower the people and further delay can be dangerous. Technology plays a key role in today's business environment. Many companies greatly rely on computers and software to provide accurate information to effectively manage their business (Siamak, 2013). To help governments curb these challenges in governance and replace the traditional bureaucratic bottlenecks in the public sector with governance equipped with timely and up-to-date information for decision-making. Progenies Corp Limited, an indigenous Information and Communication Technology provider designed and developed for the government in particular, and a comprehensive and innovative e-government solution that is in line with the IT policy requirements of the Federal and State governments in Nigeria. GovAc a term that represents the difference in Government accounting as against that of the private sector is an e-government application designed to address the requirements in all levels of government in Nigeria with diverse applicability within the sector. GovAc provides government agencies, Parastatals, units, and officers with improved access to information thereby streamlining their decision-making process. With GovAc, the deficiencies of accessing government information by unauthorized persons can be effectively checked. The system has an industry-leading technology that ensures that all data are kept safe and secure while providing access to only those who are authorized to access the information. The concern of all branches of government agencies at the federal, state, and local levels is how to enhance their operations within their budget provisions. The challenge for them, therefore, is how to come up with an up-to-date report of the financial position of the government at the end of each fiscal year. Another problem is in the area of revenue collection and disbursement of financial resources. With the GovAc e-government solution, budgeting is done with ease. Money is accurately allocated to different departments with adequate monitoring of how they are spent. Accordingly, auditing can be executed anytime and it does not have to wait till the end of the fiscal year.

In clear terms, the GovAc system collates the cashbooks of all the departments of government over a given period and reconciles them to ensure that proper accounting records are kept. There is no chance of cutting corners or chances of falsifying records when using such an integrated platform. The GovAc technology only gives access to changes to a few people (like the chief executive of the State) who are authorized to effect changes. The establishment module of GovAc completely manages the payroll functions of the government and eliminates the issue of ghost workers syndrome. The system monitors and keeps records of personnel from recruitment to retirement. It shows the picture, age, record, and salary as well as generates payroll for each staff at the touch of a button. The issue of staff having access to their files with which to affect changes will also be eliminated. The system will also give alerts of those who are due for retirement on a day-to-day basis. The pension administration module manages retired employees from retirement till death. It captures all relevant details of pensioners and enforces periodic verification of pensioners to eliminate ghost pensioners. It also provides an automated pension

claims processing methodology such as to eliminate fraud. With GovAc, the allocation of projects and contracts can also be monitored effectively and efficiently. The system provides the government with the ability to plan and manage projects by pre-planning the various elements of the project and estimating the time and resources required to complete any project. For each portion of the project executed, the supervisor generates an electronic certificate, which he tenders, and the details are entered into the system, after the appropriate verifications by the Chief Executive. This then becomes the basis to generate payment claims for such projects for the contractor. The solution will also help the government keep a record of all its assets with the storage of all relevant information about assets including the identification number and the department or even the individual to which a particular asset is assigned. It also allows the transfer of assets from one department to the other. It can realistically be said that, with GovAc, the chief executive while away from the office can continue governance, though progress is being made in improving governance as some components of e-government have already commenced in Nigeria. There is still a need for government to use solutions that will meet their needs and not become a drain on their resources. In addition, such solutions must also be designed to suit the Nigerian public sector environment, and not conventional profit-oriented accounting and management solutions modified to serve such a significant purpose as e-governance. Currently, several e-government solutions are emerging both locally and internationally but despite these advances; practical experience has shown that the acquisition of a suitable solution is not simple. For the effective implementation of e-government in Nigeria, it is cost-effective and imperative that government adopts and deploys local software that will meet their e-government needs (Obiaigwe, 2009).

### **3. Research Methodology**

#### **3.1. Introduction**

The main purpose of this section is to show the data collection method, sources of data, Population and sample, and analytical techniques.

#### **3.2. Research Method**

Research method means a way of studying a subject in detail so that it can discover new facts about it. The survey research method is the type of research adopted in this study. It has made a survey that was carefully developed to show the methods used in the collection of the data used in the work. Information used was collected from the staff of the Office of the Accountant-General of the Federation. The methods used in data collection were the use of a questionnaire. Siamak (2013) noted that "By adopting the e-accounting system we are aiming to gain international recognition for our accounting systems as well as strengthen our management reporting, resulting in an overall improvement in planning and control, while providing decision makers with crucial financial data" (www.ameinfo.com).

#### **3.3. Population and Sample**

The research population is the totality of items, objects, persons, issues, or observations that share at least a common attribute on which the research is centered. The accountants in the Office of the Accountant-General of the Federation are three thousand. Staffs at the management level, intermediate, and junior staff represent the sample.

#### **3.4. Sample Size**

The sample size will be selected judgmentally to avoid selection bias. A judgmental sampling technique was adopted to have a true representative of the population. Fifty staff of the office of the Accountant General of the Federation was chosen.

#### **3.5. Method of Data Collection**

This is the avenue through which data will be collected. Data may be defined as information or facts. There are two major types of data. They are:

- (a) Primary data, and
- (b) Secondary data.

##### **3.5.1. Primary Data**

This is known as the data expressly collected for a specific purpose by the researcher. There are various methods of collecting primary data but for this study, a questionnaire will be used. A questionnaire as a technique for collecting data is an assemblage of questions and it will be a mixture of both opened and closed questions. The questionnaire is a primary data collection method used in social research. It is usually based on a set of questions drawn and directed to the person(s) concerned in the questionnaire(s). This will enable the researcher to draw a reasonable conclusion on the subject under review. It is the most widely used method of data gathering. They are mostly designed to elect information from people either about themselves, others, or about objects or events within their social, economic and physical environment, no matter how simple or complex it is. The types of questionnaires used for this study are both structured or closed questionnaires and unstructured or opened questionnaires. A structured questionnaire requires yes or no answers, while an unstructured questionnaire requires opinion(s) concerning the question(s).

### 3.6. Techniques of Data Analysis and Justification of Method Used

In this study, the researcher has decided to make use of percentage and Chi-square analysis to test the hypothesis. Tables have been organized individually to give an insight into the level of responses to the questionnaire forms distributed. The occupational attainment of the respondent and their degree of awareness of the impact of e-accounting on the performance of accountants in the Nigerian Public Sector were also highlighted. To investigate the agreement between observed and expected frequency, the statistics are computed using the Chi-Square technique. The formula is given in equation 1.

$$\chi^2 = \frac{\sum(F_o - F_e)^2}{F_e} \text{-----Eq. 1}$$

Where:

- F<sub>o</sub> = Observation Frequency
- F<sub>e</sub> = Expected Frequency
- χ<sup>2</sup> = Chi-square

The working assumptions are:

- (a) Level of significance =5% or 5/100 or 0.05
- (b) Degree of freedom =(R-1)(C-1)=1

The decision criterion is that the null hypothesis is accepted if the critical value (from Chi-square) is higher than the calculated value of Chi-square and otherwise accept the alternate hypothesis, i.e.:

If χ<sup>2</sup><sub>calculated</sub> > χ<sup>2</sup><sub>tabulated</sub> Reject Ho

If χ<sup>2</sup><sub>calculated</sub> < χ<sup>2</sup><sub>tabulated</sub> Accept Ho.

The statistical model to be employed for this study is Chi-square (χ<sup>2</sup>) test statistics which is used to test the hypothesis. The choice chi-square analysis for this study is based on statistics as a test of goodness of fit. It is a measure of the discrepancy existing between observed and expected frequency.

The formula to use in calculating the percentages of the frequencies is stated below:

$$\text{Percentage (\%)} = \frac{\text{Available Outcome} \times 100}{\text{Total Outcome}}$$

## 4. Data Presentation and Analysis

### 4.1. Introduction

In this section, the researcher made effort to analyze and interprets the results. The analysis is made in an explanatory paragraph based on the answers to questions on the sample selected. Answers to questions were in tabular form hence the analysis and presentation are in the simplest form to be understood as per the responses.

### 4.2. Analysis of Responses from Questionnaires

Fifty questionnaire forms containing eighteen questions each (attached in appendix B) were administered to seven different departments or units, namely:

- (a) Finance and Accounts – Budget Department
- (b) Finance and Accounts – Advances Department
- (c) Finance and Accounts – Salary Department
- (d) Finance and Accounts – Checking Department
- (e) Finance and Accounts – Other charges Department
- (f) Revenue and Investment Department
- (g) Consolidated Accounts Department

The staff in the above departments falls within this level- Level 06 to level 17. The staff is both males and females of which some are married and some are single. There was no under-aged among them because their ages span from 18 years and above. Out of fifty copies of questionnaire forms distributed, forty copies were returned; of which thirty-four were answered while six copies were returned unanswered and ten copies were not returned. A total of 34 respondents were covered by the project. This shows a positive response to the questionnaire. And samples of thirty-four responses are representative enough for this study. For the research to be effective, one has to be sure that the respondent was actively involved in adopting the e-accounting system in their respective departments. This is to ensure that the respondent adequately represents accountants in the Nigerian Public Sector. In the study researcher selected the sample as given in table 1.

Table-1. Gender Profile

ITEMS	FREQUENCY	PERCENTAGE (%)
Male	17	50
Female	16	47.06
Unanswered	1	2.94
<b>TOTAL</b>	34	100

Source: Questionnaires Administered.

The table shows that both males and females are given almost equal chances to respond to the questionnaire forms. This proves that the answers fin filled one-sided sided and sentimental. In this study, the respondents' ages fall within 18 years and above. The levels of respondents ranked from level 06 - to level 17 of which DD (FA) is a



respondent in level 17. To analyze the main objective of the study, several questions were asked of the respondents. The first sought to know if e-accounting is really in existence and the second, its impact on the performance of accountants in the Nigerian Public Sector. Table 2 below shows the breakdown of their responses.

Table-2. Breakdown of the responses

Items	Yes		No		Not Sure		Unanswered	
	F	% of F	F	% of F	F	% of F	F	% of F
Awareness of e-accounting	32	94.12	1	2.94	1	2.94	-	-
Usage of e-accounting	30	88.24	3	8.82	1	2.94	-	-
E-accounting makes one to cover more work than before	26	76.47	4	11.76	2	5.88	2	5.88
Detection of fraud through e-accounting	26	76.47	3	8.82	3	8.82	2	5.88
E-accounting yielding much effectiveness	30	88.24	2	5.88	2	5.88	-	-
E-accounting reduces the stress and workload of accountants	30	88.24	2	5.88	2	5.88	-	-
Ineffectiveness of e-accounting in the absence of a power supply	3	8.82	29	85.29	2	5.88	-	-
Accountants as benefactors of e-accounting	25	73.53	1	2.94	7	20.59	1	2.94
Other benefactors of e-accounting	30	88.24	1	2.94	3	8.82	-	-
Expenses incurred in setting up e-accounting	22	64.71	7	20.59	4	11.76	1	2.94
Effectiveness of e-accounting in Nigeria	22	64.71	3	8.82	9	26.47	-	-
Paperless offices with the use of e-accounting	8	23.53	21	61.76	5	14.71	-	-
Transacting businesses through e-accounting	22	64.71	6	17.65	4	11.76	2	5.88
E-accounting improving the performance of accountants	31	91.18	-	-	3	8.82	-	-
E-accounting improving the public sector	26	76.47	1	2.94	7	20.59	-	-
E-accounting boosts the economy of the country	27	79.41	-	-	6	17.65	1	2.94

Source: Questionnaires Administered.

Almost all the respondents (94.12% out of 100%) are aware of e-accounting. While 2.94% are not aware of e-accounting. And the remaining 2.94% are not sure. With these, the respondents used are effective as the sample in the study. Regarding the usage of e-accounting, the majority of the respondent (88.24%) attested that their organization makes use of e-accounting. This will help the researcher to get the necessary information. Out of the total, 8.82% said that their organizations do not use e-accounting. While 2.94% are not sure. The statistics above, show that e-accounting has been fully in existence in organizations. About E-accounting making one cover more work than before, the majority of the respondents (i.e. 26 persons) agreed that e-accounting makes you cover more work than before. This makes them more effective. The researcher selected the respondents who have given the agreed responses and the duration of e-accounting usage has been analyzed in table 3.

Table-3. Duration of e-accounting usage

ITEMS	FREQUENCY		PERCENTAGE (%)	
0-5years	25	25	73.53	73.53
5-10years	5	5	14.71	14.71
10-15years	1	1	2.94	
Unanswered	3		8.82	
<b>TOTAL</b>	<b>34</b>	<b>34</b>	<b>100</b>	

Source: Questionnaires Administered.

In the detection of fraud through e-accounting, for 'yes' to be the respondent's answer, that shows that e-accounting is highly operational in the office of the Accountant General of the federation. This also implies that fraud activities have been reduced to a great extent in the organization as 'yes' answers are 76.47%. In E-accounting yielding much effectiveness, the answer 'yes' consists of. 88.24% and that is the highest percentage figure. It sure proves that e-accounting yields much effectiveness. Of the respondents, 30 out of 34 agreed that e-accounting goes a very long way to reducing the stress and workload of accountants. E-accounting cannot be functional in an environment or highly functional in an environment where there is poor or no power supply. The reason is that 85.29% of the respondents say the answer is 'NO'. As 73.3% say that e-accounting provides benefits to accountants researchers determined there are positive responses about the use of e-accounting.

Table 2 further shows that 88.24% of the respondents affirmed that not only the accountants but also others. With their responses, they equally backed up their 'yes' answers with the names who use the e-accounting system. The names are stated as follows: Contractors/Suppliers, Business Men and Women, Education about the process of

the non-accountants, Private sector, Administrators, Owner of accounts (Account Holders), Other stakeholders, Banks, Government, ICT, Administrative officers, The artisan, Users of financial statement, Customers, Managers of business, Users of an accounting statement, Investors, Tax Administrators. Some of the respondents summed it up by saying that all organizations and all professions benefit from e-accounting. About e-accounting to be set up, there must be a constant and consistent power supply. The great engineers who will set it will be paid a high amount of money. It is clear from the response that the answer is yes. Concerning e-accounting to be used or utilized effectively in a place like Nigeria, no activity does not involve accounting. In Nigeria where the population is much and many activities are being carried out, the e-accounting system will be highly needed. This will make the work easier and faster. The responses from the table are true and fair confirmation. In the analysis of paperless offices with the use of e-accounting 'NO' is the answer because emergency information might come up whereby there might not be time to visit the e-accounting or there might be a poor network or no power supply at that moment. The best thing to do at that moment is to document the information on paper, and later transfer them to the system at the appropriate time when all things are equal. This act is practically seen in the banking hall. as n the results, vividly show that transaction(s) can be carried out through e-accounting without the movement of cash or goods. Some of the transactions are practicable true, through the use of an e-payment system (i.e. through ATM – Automated Teller Machine) which all boils down to an e-accounting system.

Since e-accounting can help accountants cover more work than before, at the same time makes them more effective. It (e-accounting) has no choice but to go further in improving the performance of accountants in the Nigerian Public Sector. Yes, the answer in the table indicates that response. For e-accounting to improve the performance of accountants in the Nigerian Public Sector, it automatically means that e-accounting has improved the Public Sector. The use of e-accounting to boost the economy of the country, the public sector is to be improved by e-accounting and it is a sure signal that the economy of the country will be boosted. The reason is that when e-accounting reduces the stress and workload of accountants thereby making the accountants cover more work than before and bringing out their effective performance at the same time. They (the accountants) have no excuse but to boost the economy of the country through their performances.

### 4.3. Test of Hypothesis

To determine whether e-accounting has an impact on the performance of accountants in the Nigerian Public Sector, the following hypothesis as stated in section 2.8 will be tested with the use of chi-square.

**H<sub>0</sub>:** E-Accounting has influenced performance.

**H<sub>a</sub>:** E-Accounting has not influenced performance.

To test the hypothesis, table 4 has been used.

**Table-4.** Contingency table with observed counts for the test of independence

ITEM	YES	NO	NOT SURE	TOTAL
YES	28	0	2	30
NO	2	0	0	2
NOT SURE	1	0	1	2
<b>TOTAL</b>	31	0	3	34

Source: Questionnaires Administered.

Columns comprise "Yes", "No" and "Not Sure" which have been taken in terms of performance and rows represent "Yes", "No" and "Not Sure". They indicate the reduced stress and workload of accountants. If the performance and reducing stress and workload are independent e-accounting does not have any effect on the performance.

Since 'r' denotes the number of rows and 'c' is the number of columns. Then, there are R x C cells in the body of the R x C contingency table; there are R = 3 rows and C = 3 columns. Therefore, there are 3 x 3 = 9 cells. Observed counts have been organized through the responses given to the questionnaire. They are provided in the contingency table. For testing the hypothesis, the researcher has used table 5 including observed and expected counts.

**Table-5.** Chi-Square result for independence

RESPONSES	<i>F<sub>o</sub></i>	<i>F<sub>e</sub></i>	<i>(F<sub>o</sub> - F<sub>e</sub>)</i>	<i>(F<sub>o</sub> - F<sub>e</sub>)<sup>2</sup></i>	$\chi^2 = \frac{\sum(F_o - F_e)^2}{F_e}$
Yes Yes	28	27.35	0.65	0.42	0.02
Yes No	0	0	0	0	Undefined
Yes Not Sure	2	2.65	-0.65	0.42	0.16
No Yes	2	1.82	0.18	0.03	0.02
No No	0	0	0	0	Undefined
No Not Sure	0	0.18	-0.18	0.03	0.17
Not Sure Yes	1	1.82	-0.82	0.67	0.37
Not Sure No	0	0	0	0	Undefined
Not Sure Not Sure	1	0.18	0.82	0.67	3.72
<b>TOTAL</b>	34	34			4.46

Expected counts are computed concerning the ratio given by equation 2.

$$\text{Expected Count} = \frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}} \text{ --- Eq 2}$$

According to the chi-square analysis, the test statistic is 4.46. The critical value of the acceptance and rejection regions is 9.49 at a 5% level of significance at 4 degrees of freedom. This indicates that the calculated chi-square value belongs to the acceptance region and the null hypothesis is accepted. Accordingly, reducing workload and stress is independent of increasing performance. This says that performance will depend on e-accounting but not workload and stress. This happened as the workload and performance are independent; they do not have any effect on each other. But the workload has come down and performance has gone up according to the frequency tables. If so, performance has gone up because of E-Accounting.

## 5. Conclusion and Recommendations

### 5.1. Conclusion

From the analysis of data, it can be concluded that e-accounting is faster and saves time thereby helping accountants to cover more work than before. It serves as a vital instrument used in detecting fraud in an organization where it is used. Hence, the reason why the organization is the case study, i.e. the Office of the Accountant-General of the Federation has adopted the e-accounting system. Even though e-accounting has improved the performance of accountants in the Nigerian Public Sector, it also has various challenges that militate against the success of its work. Such challenges are; poor power supply and insufficient funds. It can also be concluded here that the e-accounting system has reduced the stress and workload of accountants to a great extent, thereby, helping the accountants to yield much effectiveness in their duties. Finally, reducing workload and stress is independent of increasing performance. Further, performance will depend on e-accounting but not workload and stress.

### 5.2. Recommendations

- a) Having discovered through finding in this work that e-accounting is faster, saves time, and reduces the stress and workload of accountants in an organization. It is recommended that enterprises should adopt the e-accounting system. The organizations which have not put such in place should try as much as possible to implement the system.
- b) E-accounting needs a stable and steady power supply for its purpose to be fully utilized and actualized. Any organization planning on adopting the e-accounting system must be ready to have a constant and consistent power supply. If not, the enterprise should avoid using the e-accounting system.
- c) Setting up an e-accounting system is an expensive task. It is therefore recommended that any organization adopting the e-accounting system must be financially capable of handling the task it entails.
- d) It was observed in this work that e-accounting helps to boost the economy of a country. It is highly recommended that the Nigerian Public Sector should lay more emphasis on the implementation of the e-accounting system fully.
- e) Since it was also observed in this work that through the use of e-accounting, a complete transaction can be carried out without the movement of cash or goods. It is strongly recommended that all businesses and business-related activities should fully adopt the system of e-accounting.
- f) Finally, it was discovered that through the use of an e-accounting system, fraud mismanagement and many other forms of financial crime committed by accounting personnel have been detected and reduced to a greater extent. It is therefore recommended strongly that every management of an organization should fully embrace the e-accounting (i.e. electronic accounting) system in designing their internal control system.

### 5.3. Limitations

The things that were limited in this study that could have made this work unbaked or half-baked are: Unavailability of other vital resources has spiced up this research work. Irrespective of that limitation, the researcher was able to manage and achieve success in the study.

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