Electronic accounting system: A tool for checkmating corruption in the Nigerian public sector and a panacea for the nation’s poor economic development status

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The 2013 world corruption index ranked Nigeria the 144th corrupt country out of the 177 countries studied. Corruption has been adjudged the core cause of the colossal poverty and poor standard of living of the Nigerian populace. This is fuelled by lack of accountability and transparency in the businesses of the public sector, mostly aided by manual accounting system and mere paper documentation approach in the system of operation of the sector. This paper focuses on underscoring the significance of electronic accounting information system in the operations of the Nigerian public sector, and highlights the inevitability of e-accounting system in checkmating corruption in the sector. It views e-accounting approach as a catalyst to the nation’s economic development. An empirical survey was conducted on the government ministries. Data collected were analyzed using 5-point Likert Scale tool. Findings show, among other things, that the Nigerian public sector has not clearly operationalized e-accounting system and that it is of necessity that this system be activated in the sector’s operational structures because corruption in the sector has been partly credited to its absence. The paper thus recommends the activation of the ideals of electronic accounting system in the structure of the nation’s public sector.

Key words: Pragmatizing, electronic accounting system, Nigeria public sector, corruption, development and economy.

INTRODUCTION

Background of the study

The dawn of electronic accounting, otherwise known as E-accounting system in the businesses and operations of the major players in the private sector: the organized private sector – like the banks, multinational corporations, limited liability companies, etc. is no longer news. This has been inevitably necessitated by the evolution and advancement in the modern technology which has reduced the entire world to just one global village. As Onyenwigwe (2009) asserts, globalization is the integration of national economies through trade and financial interaction with the international economy, made possible through the increasing linkages among countries and the direct investment, technological development and advancement in telecommunication, which has increased global welfare and transformed the world into a global village.

Zakaria et al. (2011), posit that the introduction of advanced information technology (IT) has changed the way that businesses or organizations conduct their businesses. IT as a key resource in accounting and financial information processing has enabled the tedious task of manual bookkeeping to be substantially eliminated through the implementation of computerized accounting information system. Thus, to remain adamant and less-concerned of the development and the need to embrace the advancement in the current mode of global business operations by any acclaimed big business venture or even government agencies is simply a careful attempt to get drowned and overlapped in the modern business world and politics.

In the public sector agencies (PSAs), the computerized system has been widely adopted and utilized in some
developed counties over the years to help the government agencies become as competitive as private sectors.

Traditionally, government in any society is basically for maintaining law and order; but contemporarily, with changes and the emerging nature of the society, government's responsibility has automatically stretched from the role of just maintaining law and order to business-like nature in our nowadays modern era. The enormous activities of government equally call for an improved government accounting system/approach in combating the dynamic developments. Consequently, the traditional manual accounting procedures can hardly checkmate the ever-increasing devilish ambitions of embezzling public funds by corrupt and greedy public office holders in Sub-Saharan Africa especially in Nigeria. Also, this archaic approach is unfit for modern day information dissemination and communication among the numerous stakeholders in the economy. Suffice it to say that the emergence of the freedom of information law in the country should warrant free access to the final accounts of the various government agencies by the citizens who are all stakeholders. The implication of this is that someone can log-in and be able to access the performance of the government agency for a given period say quarterly, semi-annually or annually. This can only be if the accounts are transferred to electronic type.

Government accounting generally, is the process of recording, analyzing, classifying, summarizing, communicating and interpreting financial information about government in aggregate and in detail, reflecting all transactions involving the receipts, transfer and disposition of government funds and property. The purpose is to demonstrate the propriety of transactions and their conformity with established rules to give evidence of accountability for the stewardship of government resources and to provide useful information for the good control and efficient management of government operation (Nnamani, 2010).

It is however unprecedented that the public sector of many economies in Africa and particularly the Nigerian public sector has remain uncommitted to the course of the present global mode of operations which rallies round the adoption of electronic accounting approach in the general operations of the government's business. The traditional paper/manual accounting system is still prevalent in the various sections of the sector, and the inherent loopholes characterized by such system is become overridden in the fabrics of our nation's public sector; hence, the incidences of corruptions perpetrated by the operators of the sector, poor standard of living and general underdevelopment of the economy even in the face of abundant natural resources at the disposal of the nation. In fact, financial management in our public services as can be observed has failed to encourage and promote the efficient utilization of public funds or serve as effective basis for planning and decision making as well as to ensure proper accountability.

This paper is developed to add credence to the fact that e-accounting system is an inevitable tool required in the operations of the Nigerian government sector to stamp out corruption and facilitates development in the economy.

**Statement of the problem**

Despite the applauded crusade against corruption via the formation of anti-graft agencies like the Economic and Financial Crimes Commission (EFCC), the Independent Corrupt Practices and Commission (ICPC), etc and the recent emergence of e-governance system by the Nigerian government, the place of Nigeria in the world's corruption ranking has continued to be unaccepted in the light of the global ethical standards. This therefore calls for holistic overhaul in the structure of operations of the Nigerian public sector which is the agent that drives the government programmes and policies, if the nation's bid of becoming one of the 20 top economies of the world by the year 2020 would not be a mirage.

The operations of the Nigerian public sector still flow in the course of the archaic manual accounting and mere paper documentation approach despite the obvious flaws and limitations associated with such approach in the modern era. This has obviously fuelled the corruption rate prevalent in the sector as this manual/paper accounting approach is vulnerable to manipulations and misrepresentation. In fact, the overridden scenario of lack of proper accountability and transparency by the public office holders is not unconnected to this uncelebrated approach.

This paper therefore tries to throw light on the inevitability of electronic accounting information system in all segment of the nation’s public sector (both at the state and national levels) in curbing corruption which is the main canker that is eating deep in the socio-political and economic wellbeing of the nation and calls for ‘pragmatizing’ the main ideals of e-accounting information system in the activities of the sector. Incidentally, this area of research appears obscure as specific studies in this subject area have remained inaccessible; hence, this study seeks to bridge this apparent hitherto research gap. Specifically, the study targets to:

i.) Find out whether electronic accounting system is a necessity in the operations of government activities in this modern era.

ii.) Ascertain whether the present operation of the Nigerian public sector has ‘operationalized’ or ‘pragmatized’ electronic accounting information dissemination approach in the entire system.

iii.) Find out whether the apparent lack of accountability and corruption perpetrated by some public office holders is linked to the partial or full absence of electronic
accounting system in the operational structure of the nation’s public sector.
iv.) Discover if the activation of a well-designed e-accounting information system in the nation’s public sector can checkmate corruption in the economy.

LITERATURE REVIEW

Conceptual framework and theoretical review

Conventionally, accounting has been looked at as the collecting, recording, classifying, presenting, analyzing, interpreting and communicating financial information for informed decision making by the various users of accounting information. This definition is so pronounced from the private sector point of view where operations are basically for profit making purposes, hence, as Kalawole (2009) observes, once a business starts up, accounting expertise becomes almost inevitable.

The dawn of electronic accounting, otherwise known as E-accounting system in the businesses and operations of the major players in the private sector: the organized private sector – like the banks, multinational corporations, Limited liability companies, etc. is no longer news. This has been inevitably necessitated by the evolution and advancement in the modern technology which has reduced the entire world to just one global village. As Onyenwigwe (2009) asserts, globalization is the integration of national economies through trade and financial interaction with the international economy. This is made possible through the increasing linkages among countries and the direct investment, technological development and advancement in telecommunication, which has increased global welfare and transformed the world into a global village.

Zakaria et al. (2011), posit that the introduction of advanced information technology (IT) has changed the way that businesses or organisations conduct their businesses. The capabilities of IT have led to the introduction of various information systems, such as, accounting information system (AIS), manufacturing resource planning system (MRP) and human resource system (HRM) to manage the various aspects of a business. The proper use of this technology may create competitive advantage for most businesses and organisations in all fields, including accounting. As a single largest user of IT and purveyor of information for the organisation, the evolution of IT in accounting has transformed the accounting information flow within and outside the organisations. Previous inefficient traditional paper-based manual accounting methods caused some problems, such as, wrong data entry, slow and inefficient task performance and massive utilization of paper products. Lack of data security was also a major issue. But, the emergence of computer based IT, according to Kharuddin et al. (2010) cited in Zakaria et al. (2011), has changed not only the accounting profession itself, but also the accounting information systems and practices. IT as a key resource in accounting and financial information processing according to Salehi et al. (2010) in Zakaria et al. (2011), has enabled the tedious task of manual bookkeeping to be substantially eliminated through the implementation of computerized accounting information system.

However, the implication of the above definition and concept of accounting also holds in the public sector in that the operations of government agencies within a given period of time need to be articulated, analyzed and communicated to the citizenry (whom the government represents) as required by the doctrine of accountability in governance.

Also, in the public sector agencies (PSAs), the computerized system has been widely adopted and utilized in some developed counties over the years to help the government agencies become as competitive as private sectors. For instance, the computerized accounting information system (AIS) in public sector agencies was developed to provide an important benchmark to improve budget planning and execution and to increase the efficiency of the financial management system. Using governmental computerized accounting systems, the public sector agencies may manage the public resources efficiently and provide more reliable and timely financial information to the various stakeholders including the Auditor General, the Federal and state parliaments, the general public and to external parties.

Nnamani (2010) observes that there has been a significant awareness in the developed world of the need to pay greater attention to the development of government accounting and financial control systems and methods. The reason is obvious, government, in most, if not all nations constitute the largest single business entity in many places, the core of the economy. Thus, with a poor accounting system invoke, government agencies may experience serious problems in managing public resources, such as, excessive costs, significant downturn, lost employee morale, inaccurate and inconsistent data generation, confusion, and blame shifting within the organisation.

Traditionally, government in any society is basically for maintaining law and order; but contemporarily, with changes and the emerging nature of the society, government’s responsibility has automatically stretched from the role of just maintaining law and order to business-like nature in our nowadays modern era. The enormous activities of government equally call for an improved government accounting system/approach in combating the dynamic developments. Consequently, the traditional manual accounting procedures can hardly checkmate the ever-increasing devilish ambitions of embezzeing public funds by corrupt and greedy public
office holders. Also, this archaic approach is unfit for modern day information dissemination and communication among the numerous stakeholders in the economy. Suffice it to say that the emergence of the freedom of information law in the country should warrant free access to the final accounts of the various government agencies by the citizens who are all stakeholders. The implication of this is that someone can log-in and be able to access the performance of the government agency for a given period say quarterly, semi-annually or annually. This can only be if the accounts are transferred to electronic type. Hence, liberal and corrupt-free minded governments are beginning to appreciate the need for E-accounting system in their operations. Government accounting generally, is the process of recording, analyzing, classifying, summarizing, communicating and interpreting financial information about government in aggregate and in detail, reflecting all transactions involving the receipts, transfer and disposition of government funds and property. The purpose is to demonstrate the propriety of transactions and their conformity with established rules to give evidence of accountability for the stewardship of government resources and to provide useful information for the good control and efficient management of government operation (Nnamani, 2010).

In the recent times, Nigeria government has embraced e-governance approach as a measure to covering holes through which incidences of corruption are being perpetrated. Danfulani (2013) observes that E-governance has helped the country's most active anti-graft body Economic and Financial Crimes Commission (EFCC) in tracking financial fraudsters and international money launderers. EFCC partnered with other global crime fighting bodies and law enforcement agencies of other countries to trace inflow and outflow of monies and the possible sources. Through their eagle eye operations, many top government functionaries and captain of industries were caught in money laundering and other financially related crimes at home and abroad.

E-governance and e-accounting look synonymous with respect to the medium and process (the use of computers and internet facilities), but the former is broader in that it targets every aspect of governance while the later is narrowed to the government's accounting and documentation approach. According to UN e-government survey of 2004, 2005, and 2008 in Danfulani (2013), e-government is the use of internet technology as a means of exchanging information, providing services and transacting with citizens, businesses, and other arms of government. Akunyili, (2010) in Danfulani (2013), defined e-government as the use of information and communication technology to enhance access to, and delivery of government services for the benefit of all. E-accounting on the other hand is the use of electronic device (like the computer) to carry out all the accounting and financial activities of an organisation including gathering, analyzing, evaluating, communication and reporting of financial activities of the organization for a specified time period to assist the various stakeholders in the making of decisions about the operation of the given organisation.

E-accounting is a system designed to circumvent the odious flaws of manual accounting which naturally breeds efficiency, accountability and transparency in a defined system of operation (like the Nigerian public sector).

**System**

According to O'Brien (2002) in Kalawole (2009), a system can be most simply defined as a group of interrelated or interacting elements forming a unified whole. He further argues that “A system is a group of interrelated components working together towards a common goal by accepting inputs and producing outputs in an organized transformation process. Such a system can be described as dynamic and has three basic components or functions: input, processing and output”. Apart from these three components already highlighted, a system becomes more useful when two additional components/functions are added. These are feedback and control. Feedback is data about the performance of a system while control involves monitoring and evaluating feedback to determine whether a system is moving towards the achievement of its goal (Kalawole, 2009).

From the foregoing, E-Accounting system in the public sector has these five components/functions. The input component is typified by the intake of data in form of spell-outs of government plans and programme (the budget provisions). The data is keyed into the system and thus processed through public finance activities (taxation, revenue generation, and budget implementation: expenditures). The data collected through the approved budget and processed through the budget implementation and financing processes is thus produced and communicated as output (which takes the form of budget delivery by way of physical infrastructures built, perceived services provided and tangible improved economic indices). By the delivery of the system's output, feedback emanates from the citizenry by way of support and accolades to the government programmes via peace, willful positive response to taxation, safeguarding of government's property, etc, or criticism and display of displeasure with the government through industrial actions (strikes), tax evasion/avoidance, willful disfranchising during electioneering activities, violence and other forms of social vices. The last component of control is thus brought to bear by a responsive government as efforts are made to review the system in order to earn pleasant feedback from those affected by the operations of the government.

E-accounting system thus, offers a coordinated and accountable approach in the public sector of any economy.
Electronic accounting system

Accounting Information System (AIS), according to O’Brien (2002) in Kalawole (2009) are the offset and most widely used information systems in business; they record and report business transactions and other economic events. Thus, Electronic accounting, or E-accounting or, simply put, Computer-based accounting systems record and report the flow of funds through the organization. Dynamically, the advancement in the modern day’s technology has modified the operation of AIS from a ‘one-base-station’ (a given office environment) and a ‘one-access-point’ to ‘multiple/various-access-points’ through the emergence of the on-line accounting system which now uses the internet, intranets, extranets, and other networks. As such, the activities of branches of an organization with such system can be accessed from any point; numerous stakeholders can access information from anywhere and make informed decisions. This has contributed immensely in the growth and development of the world’s international business majority in the private sector.

In a more concise statement, Wikipedia provides that e-accounting refers to “electronic enablement” of lawful accounting and traceable accounting process which were traditionally manual and paper-based. It involves performing regular accounting functions, accounting research and the accounting training and education through various computers based/internet based accounting tools such as digital tool kits, various internet resources, international web-based materials, institute and company databases which are internet-based web links, internet based accounting software and electronic financial spreadsheet tools to provide efficient decision.

According to Al-Kasswna, (2012), the accounting information system is a component of administrative management in business organizations, which handles the collection, tabulation, data processing, financial information communicating and the amount needed to make decisions to users. In the government sector, the government accounting information systems represent essential part in organization hierarchy, as it is used in government operations processing through the collection, tabulation and processing of government data and communicating to users for the purpose of achieving the government accounting purposes. Government E-accounting information system uses information and communication technology through software prepared by specialists because the government accounting systems differ from state to another. This system provides accounting information on time to assist in preparing, monitoring and implementing the state budget. It also helps in making decisions related to financial lending, making state financial policies, that means accounting information systems serve the government administration in planning control and decision-making (Al-Kasswna, 2012). Thus, Ling-fang (2007) in Zakaria et al. (2011) opines that with the computerized AIS implementation, the accounting functions as well as internal operations of financial management of public agencies have been changed to enable the accountants to work more efficiently and conveniently to meet their needs.

As postulated by Al-Kasswna (2012), the discussion on government E-accounting system consists of the following areas:

- The basic components of the government e-accounting information system.
- Quality of government e-accounting information systems.
- Provision of capacities and capabilities to meet the needs of users of information and privacy.

The components of government E-accounting information systems

Jamus (1991) in Al-Kasswna (2012) highlights that Government e-accounting information systems depend on a range of components that contribute in achieving objectives, which include:

Equipment and devices: To achieve the system objectives, the best advanced devices must be effectively used so as to contribute to the success of these systems. Software: Information systems cannot achieve the objectives of the system on its own. There should be programs that contribute to providing appropriate information of the software which is a series of instructions that enable the computer system of interpretation, translation and processing written in certain language. Regulations and circulations: Any e-accounting system derived to replace a manual system is a system derived from the scientific method, and certain instructions. In the government system, government accounting system is based on instructions issued by the government financial management whereby electronic systems are designed in line with legislation and regulations of financial instructions which focus on government approved transactions on the specified documents, such as disbursement and payment vouchers, which are main documents under the government system. Disbursement document is for the government expenditures (current and capital) that are made as specified in the State general budget. Payment document is a specific model under which all amounts paid under the financial instructions and regulations are related to the collection of revenue. Users and IT department management: To achieve success in government accounting information systems in government entities, Information Technology (IT) management must run programs, maintain programs, follow-up breakdowns in addition to developing and modernizing systems in line with modern developments.
and users needs, and the need to train staff and users in electronic systems must be carried out.

**Controls:** The government databases include financial and non-financial information; such data faces penetration and misuse as modification or deletion that may lead to damage to society and loss of citizens rights. Therefore, control regulations must be issued to minimize the risk of intrusion and abuse of the electronic systems by enacting appropriate controls to prevent and to ensure the safety of electronic systems.

The quality characteristics of government E-accounting information systems

The concept of quality here refers to a group of qualities that make it consistent, and to conform to the specified specifications, standards and designs. The purpose of the government e-accounting information systems is to take part in improving and strengthening the business in business organizations, and the quality of government accounting information systems influenced by the needs of users of government accounting information. The characteristics of government accounting information are a set of qualitative characteristics that make government information useful to information users. Consequently, the quality of government e-accounting information systems represent some of the properties and specifications used in the comparison between the systems, namely, (Siam, 2004, in Al-Kasswana 2012):

**Accuracy:** It means processing data without errors and providing accurate information without contradictions.

**Speed:** It is represented in the phase of entry, processing, retrieval and preparation of the report, particularly the government accounting information systems may be exposed to pressure due to use of more than one sector therefore speed in data processing, and retrieval of report are required, and speed in the transmission of information and data across networks.

**The system efficiency:** The efficiency of the government accounting information system represents in the system’s ability to provide services and information in a short time, to reduce the cost of services to government and citizens, and to increase productivity of government entities in number of transactions during official business.

**The system effectiveness:** It represents that the current system meets the user goals and requirements specified; affects all levels of management reports required, and reduce the routine procedures used in the government unit.

**Flexibility:** The accounting information systems must be flexible and able to keep pace with modern developments in information technology. It does not need training for long periods of time; it is so easy to deal with as it is able to meet all new needs for administration.

**Reliability:** This factor represents the system output in terms of accuracy, trueness and reliability.

**Appropriateness:** It represents that the accounting information systems provide the desired information and restores secondary data. Subsequently it is appropriate to the unit needs.

**Information security and data in government E-Accounting formation systems:** In terms of confidentiality in access to information, to define the powers, to provide adequate protection for databases, and to retrieve data and information if lost.

**Self-censorship in government E-Accounting information systems:** It represents that documents reports, and statements cannot be modified after printing, the document cannot be printed more than once. Documents cannot be deleted after printing, and data cannot be repeated.

**Provision of capacities and capabilities to meet the needs of users of information and privacy**

That the primary objective in government e-accounting information systems is the production and delivery of information to the parties concerned, both internal parties as government unit managers, the control bodies like the Audit Bureau of the Ministry of Finance and other government agencies, external bodies that prevent loans and assistance to government units, including civil societies for government performance analysis. Therefore these systems should be designed to fit the needs and requirements of these users. So that these systems’ outputs represent the best of their information; and to achieve this goal in the output system, it must be taken into account that these systems must be simple and easily understood by users, with periodic and regular reports, that contain appropriate information relevant to the subject, and directly address the beneficiary category.

The government e-accounting information systems personnel must keep up with developments in information technology and communications as IT world is a rapidly changing non-stationery industry. Moreover, there is increasing trend today to use wireless networks in data exchange and transmission of information, hence, the need for the government agencies using E-accounting systems to keep pace with these developments.

**The Nigerian public sector**

Ikwumezie (2009) asserts that the public sector plays a very important role in the quality of our lives. It supports the way we govern ourselves, administer our laws, develop and deliver our social programmes and protect our interests and values in the world. Public sector is the term used for areas in which the government owns the factors of production. It includes all organizations which are not privately owned and operated but, which are operated or established by government on behalf of the public; in which case the government acts as an
entrepreneur and owns the factors of production with which it produces goods and services for the citizenry. As posited by According Adimmadu (2003), the public sector is on the other hand the civil service. He noted that the public sector constitutes the institutional structure through which government’s policies and programmes are initiated, appraised and implemented.

Ihe and Umeaka (2006) opine that the public sector refers to that portion of an economy in which the activities are under the control and direction of the state. Therefore, public sector of any economy is that segment of the economy in which decisions of what to produce, how and for whom to produce it lie within the mandate of the public (represented by the government).

In Nigerian economy, public sector consists of the federal, state and local governments, their institutions and other agencies (Nnamocha, 2002). The institutions, ministries, parastatals and agencies owned by these tiers of government represent the public sector. These agencies of the government carry out the activities of government at all levels of governance. It therefore becomes imperative for the government to make annual budgetary provisions for their existence and operations, and in turn for the welfare of the public.

Public Sector Accounting thus, is that accounting method/approach applied to non-profit pursuing entities in the public sector, including central, state and local governments and quasi-government special corporations for which the size of profit (if any) does not provide an effective measurement for evaluating performances. It is, according to ICAN, a process of recording, communicating, summarizing, analyzing and interpreting government financial statements and statistics in aggregate and details. It is concerned with the receipts, custody and disbursement, and rendering of stewardship on public funds entrusted.

ICAN postulates the following as the main purposes of public sector accounting: Ascertaining the legitimacy of transactions and their compliance with the established norms, regulations and status; Providing evidence of stewardship; Assisting planning and control; Assisting objective and timely reporting; Providing the basis for decision-making; Enhancing the appraisal of the efficiency in management; Highlighting the various sources of revenues and the expenditures to be incurred; Identifying the sources of funding capital projects; Evaluating the economy, efficiency and effectiveness with which public sector organizations pursue their goals and objectives; Ensuring that costs are matched by at least equivalent benefits accruing; Providing the details of outstanding long-term commitments and financial obligations; Providing the means by which actual performance may be compared with the target set; and Proffering solutions to the various bottlenecks and/or problems identified.

Corruption

Corruption is the process of circumventing formally agreed, official schedules or implicit rules for decision-making (in the public or private sector) by use of personal inducements in order to achieve institutional and/or personal objectives.

Corruption can be defined as a process by which the virtue of the citizen is undermined and eventually destroyed (Otalor and Eiya, 2013).

Corruption can also be defined as the use of public office or the use of official position, rank or status by an office bearer for his own personal benefit Myint (2000) in Otalor and Eiya (2013). While activities such as fraud and embezzlement can be undertaken by an official alone and without involvement of a second party, others such as bribery, extortion and influence peddling involve two parties – the giver and taker in a corrupt deal. Two party type of corruption can arise under a variety of circumstances such as: government contracts, government benefits, government revenue, time savings and regulatory avoidance, Influencing outcomes of legal and regulatory processes (Otalor and Eiya, 2013).

Corruption or “corrupt” behavior has broadly been defined as the violation of established rules for personal gain and profit”, or “efforts to secure wealth or power through illegal means – private gain at public expense; or a misuse of public power for private benefit or a behavior which deviates from the formal duties of a public role, because of private gain (Sen, 1999; Lipset and Lenz, 2000; Nye, 1967).

This definition includes such behavior as bribery (use of a reward to pervert the judgment of a person in a position of trust); nepotism (bestowal of patronage by reason of inscriptive relationship rather than merit); and misappropriation (illegal appropriation of public resources for private uses (Banfield, 1961 in Otalor and Eiya, 2013).

Corruption has also been looked at as the abuse of public office for private gains through rent seeking activities when an official accepts, solicits, or extorts a bribe. Public office is also abused when private agents actively offer bribes to circumvent public policies and processes for competitive advantage and profit or even if no bribery occurs, through patronage and nepotism, the theft of state assets or the diversion of state resources (World Bank 1997).

Corruption requires a multifaceted attack. It requires, for example, a set of regulations against corrupt practices, a code of conduct for employees and vendors, awareness raising campaigns, training of staff, internal controls, sanctions and incentives, protection of whistleblowers and an open approach towards information reporting (Otalor and Eiya, 2013).

Corruption is one of the greatest challenges of the contemporary world. It respects no national boundaries and deepens poverty around the globe by distorting
Table 1. Summary of responses from the federal and state ministries.

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<th>Federal Ministry</th>
<th>State Ministry</th>
<th>Total</th>
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<tr>
<td>No. of Responses</td>
<td>40</td>
<td>30</td>
<td>70</td>
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political, economic and social life. Corruption undermines good government, fundamentally distorts public policy, leads to the misallocation of resources, harms the private sector and particularly hurts the poor citizens who bear the heavy economic and social costs of corruption (Stapenhurst, Johnston and Pellizo, 2006).

Ruzindana (1999) in Ayobami (2011) asserts that corruption in Africa is a problem of routine deviation from established standards and norms by public officials and parties with whom they interact. He also identified the types of corruption in Africa as bribery, private gain, and other benefits to non-existent workers and pensioners (called ghost workers), the dishonest and illegal behaviour exhibited especially by people in authority for their personal gain is corruption. According to the ICPC Act (section 2), corruption includes vices like bribery, fraud and other related offences.

Corruption is the abuse or misuse of power or position of trust for personal or group benefit (monetary or otherwise). Corruption, when become endemic in a system (like in the case of Nigerian system), usually takes a form of an organized crime. According to the perception index of Transparency International, Nigeria was ranked 144th out of the 146 countries, beating Bangladesh and Haiti to last position. An analysis of the anti-graft/anti-corruption laws in Nigeria shows that corruption will continue in spite of the laws because the perpetrators do not fear any consequences (Ayobami, 2011).

Corruption is witnessed in Nigeria today almost in all facets of the government’s activities, viz: it is found in award of contacts, recruitment and promotion of staff, dispensation of justice, and misuse of public offices, positions and privileges, embezzlement of public funds, just name it. Corruption can be systematic in nature and can affect the whole life of an organization or society.

It has been observed by development scholars that corruption has an adverse effect on social and economic development and also in building a nation. The effects include: Diversion of development resources for private gain; misallocation of talent; lost tax revenue; negative impact on quality of infrastructure and public services; and slowing of economic growth (Ayobami, 2011).

METHODOLOGY

This study embraced both primary and secondary data sources in its development. The secondary data were sourced from the review of related literature basically to create a theoretical background for the study. The primary data on the other hand were sourced via a well-structured questionnaire (survey research tool) administered on fourteen (14) selected government owned ministries (eight federally owned and six state ministries). Participants in the survey consist of five senior staff randomly selected from each of the fourteen ministries, bringing the total sampled respondents to seventy (70) (Table 1). The questionnaire administered during the exercise was designed with particular target at realizing the core focus of the study; thus, it consists of the four direct assertions/statements hinged on the objective of the study. The raw data collected were tabulated and evaluated using the 5-point Likert Scale. Table 2 shows the responses of the 70 respondents. The options of the Likert scale are ranked from 1 to 5; that is, Strongly Agreed (ranked 1), Agreed (ranked 2), Undecided (3), Disagreed (4) and Strongly Disagreed (5).

Findings/Results

From the analysis above, the following results emerged:

i.) For the first assertion (Likert item 1), the calculated response average is 2.8 which is greater than the standard value of 2.5.

ii.) For Likert item 2, the calculated response average is approximately 2.8 which is also greater than the standard mark of 2.5.

iii.) Likert items 3 and 4 also share in the same results as in 1 and 2 above. Their calculated response averages are 2.7 each greater than the standard value of 2.5.

Discussion of the findings

The above analysis reveals that the four assertions
Table 2. Analysis of responses from the respondents using Likert scale.

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<tr>
<th></th>
<th>S.D</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>S.D</th>
<th>Response Average</th>
</tr>
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<tbody>
<tr>
<td>Electronic accounting system is a necessity in the operations of government activities in this modern era.</td>
<td>12</td>
<td>27</td>
<td>7</td>
<td>11</td>
<td>13</td>
<td>2.8</td>
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<tr>
<td></td>
<td>(0.17)</td>
<td>(0.77)</td>
<td>(0.30)</td>
<td>(0.63)</td>
<td>(0.93)</td>
<td></td>
</tr>
<tr>
<td>The present operation of the Nigerian public sector has not fully ‘pragmatized’ (i.e. activated) electronic accounting information dissemination approach in the entire system.</td>
<td>10</td>
<td>29</td>
<td>6</td>
<td>18</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
<td>(0.83)</td>
<td>(0.26)</td>
<td>(1.03)</td>
<td>(0.50)</td>
<td></td>
</tr>
<tr>
<td>The apparent lack of accountability and corruption perpetrated by some public office holders is linked to the absence of a well-designed electronic accounting system in the operational structure of the nation’s public sector.</td>
<td>15</td>
<td>28</td>
<td>6</td>
<td>7</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>(0.21)</td>
<td>(0.80)</td>
<td>(0.26)</td>
<td>(0.4)</td>
<td>(1.0)</td>
<td></td>
</tr>
<tr>
<td>The installation of a well-designed electronic accounting information system in the nation’s public sector can checkmate corruption in the economy.</td>
<td>14</td>
<td>30</td>
<td>5</td>
<td>8</td>
<td>13</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>(0.2)</td>
<td>(0.86)</td>
<td>(0.21)</td>
<td>(0.46)</td>
<td>(0.93)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Field Survey, May 2014

Key: S.A = Strongly Agreed, A = Agreed, U = Undecided, D = Disagreed, S.D = Strongly Disagreed

Note: Average Response = n/N * R

Where: n = Number of responses to a particular assertion.
N = Total number of respondents.
R = The rank of the given option being selected.

(Likert items), posited in this study, represent the authentic situation of the Nigerian public sector. It thus reveals that electronic accounting information system has hitherto not been clearly activated in the nation’s public sector’s operations; as such, the installation of a well-designed e-accounting system in the structure of the nation’s public sector has really become necessary because, as revealed in the analysis, the absence of this contributes to poor accountability attitude of the sector’s operators. This has been adjudged as a canker that breeds corruption in the system. Hence, the analysis further reveals that the installation and/or activation of a well-designed electronic accounting information system in the structure of the nation’s public sector operation will amount to a veritable tool in checkmating corruption in the system and thus serves as a catalyst in engendering economic development in the economy.

Conclusion

The study focuses on the relevance of electronic accounting system in curbing corruption and spurring economic development in Nigerian in particular and in the world in general. Primary and secondary data were utilized in the development of the study. The primary data analysis enabled a clear discussion and decisions on the main objectives of this study, while the secondary data (literature review) enabled the theoretical and conceptual basis of the study. The study adopts Likert scale in analyzing the raw data collected through field survey. The results of the analysis prove that the Nigerian public sector, just like many other public sectors of developing economies in Africa and beyond is in dear need of a well-designed electronic accounting information system in its operational structure, as the absence of this breeds lack of accountability and corruption in the system.

It is the authors’ conclusion therefore that though there may appear the presence of some form of electronic devices around the public offices in Nigeria which are also being employed in the prosecution of official duties, but clear-cut electronic accounting information system is not yet fully pragmatized or activated in the public sector system of the Nigerian economy. But the functionality of e-accounting information approach is a veritable tool in checkmating corruption in any system; and so is become inevitable in the Nigerian public sector and a panacea to the current poor development status of the nation.

Recommendations

Based on the results from the analysis of the study above, the following recommendations are proffered towards ensuring the that corruption in the Nigeria economy in general and the public sector in particular is curbed, through the installation of electronic accounting information system.
i.) The government should embrace and bring to bear a well-designed e-accounting information system to cover such areas like budgeting system (from formulation, approval, implementation, disbursement, etc.), payrolls, pensions matters, etc.

ii.) The government should ensure adequate investment on modern IT gadgets for the sector's operation at a global standard level.

iii.) Regular enhancement of public sector operators' skills in using information technology equipment and tools for the discharge of their duties rather than the current manual/paper approaches.

iv.) Scholars should endeavor into more researches on the impact of e-accounting information system in fighting wastes, redundancy, ghost/fictitious records, fraud and corruption in the government sector of the economy.

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