AUTOMATION OF MICRO FINANCE INSTITUTIONS IN NIGERIA: IMPLICATION FOR THE ACCOUNTANTS

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Abstract

The Central Bank of Nigeria (CBN 2005) has reported that over 60 percent of currency in circulation is outside the banks and that 70 percent of this are to be handled by the newly established Micro Finance Fanks (MFBs). Evidences from the literature confirm positive correlation between Information Technology (IT) and performance. Taking a cue from Diffusion of Information theory, the perception of stakeholders in microfinance institutions on the ITimpact on service delivery in the MFBs and the implications for the Accountants is worthy of exploration. This paper explored the impact of information technology on the performance of MFBs and the role of Nigerian accountants with a view to proffering solutions to problems. The study adopts largely exploratory methodology through view analysis of the scholars and practitioners in Information Technology, Accountancy and microfinance institutions in Nigeria. We submit that most of the MFBs are automating their services to enhance service delivery and that accountants have changing roles than the conventional accounting practice prior to the computer revolution. Accountants must continue to update their skills in Information Technology competence for better performance.

Key words: Automation, Micro finance banks, Microfinance Institutions, Information technology, Accounting system

Introduction

Most banks in Nigeria now offer electronic banking services that enhance regional and international fund transfer and other commercial transaction as a result of rapid growth in Information Technology (IT) as observed by (Ayo 2006; Agboola 2006; Ayo & Babajide 2006; Oladejo & Dada 2008). Information Technology concept has gained much acceptance in the banking industry such that non-compliance will put such a bank at a competitive disadvantage as opined by Ovia (2002), Salawu and Salawu (2007) and Agoola (2004). The average banking density in Nigeria as put by CBN (2005) is one financial institution outlet to 32,700 inhabitants. Worse still in the rural area, the ratio is 1: 57,000. The implication is that less than 2 percent of the rural households have access to financial services. Imam (2001:197)

confirmed that 80 percent of Nigerian population required the services of micro credit institution and as explained by Smith (2001:1-20), microfinance institutions have always enhanced and mobilized local resources as well and developing profitable economic activities. Perhaps this made for the recent attention of the Nigerian Government at establishing microfinance banks in the country.

Information technologies affect how organizations are structured, managed and operated. Entities can no longer develop business strategy separate from IT strategy, because IT is an enabler of business initiatives. There is therefore a need to integrate sound business and IT planning, and to incorporate effective financial and management controls within new systems. The relevant and reliable information obtained by professional accountants as put by Ovidiu-Constantin (2009) would lead to a fair presentation of the companyos financial position and performance or non-performance. This information is required by stakeholders in taking the most effective decisions which are the centre of a healthy business environment. These challenges have created many new opportunities for professional accountants and practitioners. According to Olivier (2000) the two most important current influences on the accounting profession are the development of new information technology and the elaboration of an ever more complex regulatory framework. While the roles of accountants are being observed in the automated banking sector and the Insurance industry (Ayo 2006; Salawu & Salawu 2007; Oladejo & Dada 2008), such is expected to be more pronounced in the micro finance institutions. Also, Oladejo and Adereti (2010) conducted an investigation on Information Technology as a contributory factor for the development of Microfinance banks in Nigeria, the challenging roles of accountants were not articulated. Non-parametric statistics (Chi-square) was employed in testing the hypotheses formulated; equally, regression was also carried out to test whether there is relationship between the level of automation of micro banking services and improvement in delivery of such services to their numerous customers in Nigeria. The results revealed that investment in Information Technology will improve customer service delivery and also the performance of Microfinance banks in Nigeria. The study concludes that the recently observed upsurge effectiveness and efficiency in the micro banking sub sector in Nigeria is attributable to their high investment in information technology. All these put together shall form the crux of this paper.

Statement of the Problem

The establishment of the microfinance banks has become necessary to cater for the non served financial markets estimated to be 60 %. Further to this is the fact that 70 % of these market are to be handled by the microfinance banks. Evidences from the literature confirm significant and positive correlation between Information (Technology (IT) and performance (Mahmood & Mann 2000; Lipton 2002). Available studies like (Agboola 2006; Ayo, 2006; Fanawopo 2006; Oladejo and Dada, 2008) have focused more on the information technology impact on the performance of commercial banks and insurance companies in Nigeria, since the concept of microfinance banking has just recently been introduced in the Nigerian banks. Also, the study of Oladejo and Adereti (2010) did not explore the challenging roles of Accountants in the automation of Microfinance Institutions.

This paper remains germane by exploring the roles of accountants in the automation of the Nigerian Microfinance banks and is expected to provide answers to the following questions:

What is the impact of information technology on the micro finance services?

- How will the automated micro finance services affect the roles of accountants?
- What roles are expected of accountants in the automation of micro finance services?
- What are the problems and challenges that can influence the roles of accountants in the micro finance institutions?

Specifically, the study is expected to achieve the following objectives:

- To examine the impact of automation on the service of microfinance banks in Nigeria.
- To examine the roles of accountants in the automation of microfinance banks.
- To identify the problems and challenges that may affect the identified roles of the accountants.

Apart from section one which is the introductory part, the paper is divided into three sections. Section two discussed the literature review and conceptual underpinnings, section three explained the methodology adopted for the study, section four provides the framework of the study while section five concluded the study with necessary recommendations.

Literature Review and Conceptual Underpinnings

For many years, accountants, bankers, technology specialists, entrepreneurs, and other practitioners have advocated for the replacement of physical cash and the introduction of more flexible, efficient and cost effective retail payment solutions in line with the global trend (Ovia 2001; Fanawopo 2006; Fansan 2007). Countless conferences and seminars have been held to discuss the concepts of cashless and ochequelesso society as observed by Bank for International Settlement (1998). Automation is gaining grounds on daily basis in the world business circle. According to Ovidiu-Constantin (2009), accounting is heavily involved in the processes of regionalization and globalization, through adjustment and transformation of systems of national accounts into a single system and that the current turbulence that occurs on the capital market requires rapid decisions based on transparent accounting information available in real time.

Technology has greatly affected the accounting profession in the sense that a task that normally would take eight clerks to perform can be accomplished by one accountant as observed by Arbussa (2001) and Abbasi (2007). Technology has come in and changed the way accountants perform their job duties. Information Technology has now made it easier for accountants to generate reports and perform year-end closes. With the establishment of these new technologies the task and man hours needed to perform a duty has been extraordinarily decreased. By simply, clicking on a few buttons, answering few questions become easier and the internet services has made it easiest to contact the whole world without the need to leave our geographical base.

The federal government on the 15th of December, 2005, through the Central Bank of Nigeria (CBN) issued a microfinance policy supervisory and regulatory frame work that allows for the establishment of micro finance banks that will cater for the need of small scale business and the low income group. The policy provides for the establishment of two categories of private sector-driven micro finance institutions of banks (MFBs). These are MFBs licensed to operate in a local government area which must be capitalized to the tune of #20 million and MFBs licensed to operate in state and which must be capitalized to the tune of #1billion. This recent development is the latest effort of the federal government at purveying micro credits to the poor.

The major purpose of Micro Finance Banks is to direct attention of purveying credit to low income group and Micro, Small and Medium Enterprises (MSMEs) as put by Akintoye and Oladejo (2008) and Oladejo and Adereti (2010). The Microfinance Banking concept is an extension of the old community banking system. With the establishment of community banking system the Micro Small and Medium Enterprises access to credit had greatly improved as observed by Imam (2005). This means that the newly established Micro finance banks (MFBs) will henceforth handle the non served market as identified in the Nigerian Microfinance policy thus creating challenges for the accountants in the microfinance institutions.

The implication of the microfinance policy is that Micro finance banks (MFBs) are subjected to regular supervision, control and monitoring of the Central Bank of Nigeria (CBN). For instance the CBN could come up with another minimum capital base beyond the current value, a situation that creates fear and put managers of MFBs on toes. It calls for good corporate performance that would attract depositors and investors to the MFBs. The operations of the MFBs, though directed to Micro businesses and low income groups cannot in anyway be divorced from that of the mega banks. The microfinance banking concept is not recent, although microfinance banks (MFBs) came through the microfinance policy, regulatory and supervisory frame work guideline issued by the CBN in December 2005, the microfinance efforts of the federal government dates back to 1977, when the first rural banking scheme was introduced by the federal government.

Two categories of Microfinance Bank were authorized by the CBN through the policy papers. These are MFBs licensed to operate as a unit bank and MFBs licensed to operate in a state. The MFBs licensed to operate as a unit bank shall be community based banks such banks can operate branches and / or cash centres subject to the stipulated conditions. The minimum paid-up capital for this category of banks shall be \$20.0 million for each branch. The MFBs licensed to operate in state shall be authorized to operate in all parts of the state (or the federal capital territory) in which they are registered, subject to meeting the prescribed prudential requirements and availability of free funds for opening branches. The minimum paid-up capital for these categories of banks shall be \$1.0 billion.

The establishment of microfinance banks of either category has become imperative to serve the following purposes according to the policy guideline;

- i. Provide diversified, affordable and dependable financial services to the active poor, in a timely and competitive manner that would enable them to undertake and develop long-term sustainable entrepreneurial activities.
- ii. Mobilize savings for intermediate use.
- iii. Create employment opportunity of active poor in the country, thereby increasing their individual household income and uplifting their standard of living.
- iv. Enhance organized, systematic and focused participation of the poor in the socioeconomic development and resource allocation process;
- v. Provide veritable avenues for the administration of the micro credit programmes of government and high net worth individuals on a non-recourse case basis. In particular this policy ensures that the state government shall dedicate an amount not less than 1% of their annual budgets for the on-lending activities of microfinance banks in favour of their residents.
- vi. Render payment services such as salaries, gratuities and pensions for all tiers of government.

Banks in Nigeria have realized that they would soon go out of existence unless they keep with the pace at which IT has redefined the creation of value and worth for their customer (Fawcett 1995; Chiline 2001; Armitage 2002; Lucey 2005; Ahiawodzi 2007, Abbasi 2007, Oladejo 2007). The micro finance services in Nigeria are following trends with the mega banks and therefore becoming more and more automated. For instance, Oladejo and Adereti (2010) conducted an investigation on Information Technology as a contributory factor for the development of Microfinance banks in Nigeria Non-parametric statistics (Chi-square) was employed in testing the hypotheses formulated; equally, regression was also carried out to test whether there is relationship between the level of automation of micro banking services and improvement in delivery of such services to their numerous customers in Nigeria. The results of the two hypotheses tested revealed that investment in Information Technology will improve customer service delivery and also the performance of Microfinance banks in Nigeria. The study concludes that the recently observed upsurge effectiveness and efficiency in the micro banking sub sector in Nigeria is attributable to their high investment in information technology. However, the challenging roles of accountants were not articulated in their study.

There is an implication of upsurge in Information Technology for accountants in Nigeria which requires further analysis. For example, the professional accountant needs to understand the procedures of both the automated system and manual systems by which transactions are initiated, recorded, processed and reported, and how they interact and evolve. Professional accountants often play important roles as managers, advisors and assurance providers in the adoption, deployment and use of various information technologies by organizations of all types and sizes. Society expects professional accountants who accept an engagement or occupation to have the competence to perform the required work.

Research Methodology

This section discusses the methodology adopted to achieve the objectives of the study. It provides the sources and measurement of variables that guide the framework of the study. The research methodology adopted for the study is exploratory as the views of scholars and practitioners in Information Technology and accountancy are gathered together forming the basis of our analysis. This makes the findings of the study to be of importance with the corresponding recommendations.

Analysis of the Roles of Accountants in the Automated Microfinance Banks

The banking sector is undergoing significant changes in its accounting information system strategies, because of the challenges posed by globally competitive market and everincreasing demands on information technology as opined by the American Institute of Chattered Public Accountants (AICPA 1998). Society expects professional accountants who accept an engagement or occupation to have the competence to perform the required work. The accountancy profession as a whole has the obligation to ensure that candidates seeking to qualify as professional accountants possess the necessary IT competences; and, after qualifying, keep abreast of relevant developments through continuing professional development. There is the need for Accountants to understand workings of accounting software like Microsoft Excel, Sage and Peachtree as averred by Akintoye, Momoh and Adewoyin (2008). Fully integrated software packages such as SAP, PeopleSoft, Baan, and Oracle provide many capabilities such as entry and analysis of transactions in real-time,

Internet and Intranet connectivity, enterprise-wide budgeting, multidimensional analysis, and workflow (Lucy 2005). These are expected to be greatly exploited by the Professional Accountants especially for the operations of microfinance banks.

Olivier (2000), observed the evolution of business reporting on the Internet and its likely consequences for accounting, accountants and assurance services provided by auditors. To be able to assist in a credible business in a country accounting unit itself had to adapt to the new trends of harmonization and standardization of existing on the international front as averred by Ovidiu-Constantin (2009). Opportunities for accountants arise in areas such as information systems design, information systems management, and control and information systems evaluation. Professional accountants can, with more specialized training, work in these areas.

Omoteso, Patel, and Scott (2010) conducted an exploratory study to assess, from a structuration theory perspective, the impact information and communications technology (ICT) tools and techniques are currently having on audit tasks, auditors (internal and external) and the organisations they work for from the point of view of coordination, control, authority and structure. Based on a triangulation of interview and questionnaire techniques, the findings indicate that ICT is re-shaping auditors' roles and outputs as well as audit organisations' structures. The findings also project the view that continuous auditing, artificial intelligence and CobiT are expected to gain more prominence while a need was also seen for new software development to help auditors match the complexity of their clients' information systems. The study's results reveal the current state of affairs of the relationship between ICT and auditing against the backdrop of continuous global ICT sophistication thereby updating ICT audit literature and the likely future direction of this relationship. The revelations from this study of Omoteso et al (2010) confirm the need for Accountants and Auditors to upgrade their skills to meet the challenges of Automation. While the emphasis has been on general performance of audit tasks, the specific roles in the microfinance institutions should be explored.

Studies over the years have paid more attention to the applications of IT to the commercial banking activities (Lipton 2002; Eyadat and Kozak 2005; Agboola 2006; Ayo 2006). Recently, Oladejo and Dada (2008) investigated the impact of IT on the performance of Insurance companies in Nigeria. This is very simple because Microfinance Bank is a new baby in the Nigerian banking sector. However microfinance banks operate on the basic theory of banking like the mega banks. Also Information Technology is technology that any players in the financial sectors should not be left out considering its vast benefits and opportunities. Experiences from other countries revealed greater attention on the application of IT to the activities of micro businesses and micro finance institutions to facilitate their operations and bring about greater business advantage (Abassi 2007). The need to package the operations of microfinance banks to meet the global challenges of Information Technology prompted Ayantokun (2008) to tell the newly established MFBs in Nigeria to adopt robust ICT concept for better performance.

Ayo, Ekong, Fatudimu, and Adebiyi (2007) conducted an investigation on the level of adoption of ICT in the Nigerian banking sector using SWOT analysis. It was found that all banks in Nigeria offer e-banking services and about 52% of them offer some forms of other on line banking services. They agreed with fact that Nigeria was the fastest growing telecoms nation in Africa and the third of the world. The country had experienced a phenomenal growth from a teledencity of 0.49 in 2000 to 25.22 in 2007. This trend had brought about a

monumental development in the major sector of the economy, such as banking, telecoms and commerce in general. They concluded that all the 25 banks in Nigeria engaged the use of ICT as a platform for effective and efficient delivery of banking services such as electronic payment cards with internet banking and mobile banking services gradually being introduced.

Agboola (2006) discovered that the adoption of ICT banks has produced largely positive outcomes such as improved customer services, more accurate records ensuring convenience in business time, prompt and fair attention, and faster services e.t.c. Also, the banksø image is improved creating a more competent market. Work has also been made easier, and more interesting, the competitive edge of banks relationship with customers, and the solution of basic operational and planning problems ha been improved. Fanawopo (2006) stated that Nigeriaøs debit card transactions rose by 93percent between January 2005 and March 2006 over previous years owing to aggressive roll out initiatives by Nigeria banks, powered by inters witch network had increased from 1,065,972 in 2004 to 14,448,615 between January 2005 to march 2006. This is a rise of 92.6 percent with respect to the previous years. More than 800 ATMs have been deployed on the network, while about 2 million cards have been issued by 23 banks at march 2006.

Agboola (2001) studied the impact of computer automation on the banking services in Lagos and discovered that Electronic Banking has tremendously improved the services of some banks to their customers in Lagos. The study was however restricted to the commercial nerve centre of Nigeria and concentrated on only six banks. He made a comparative analysis between the old and new generation banks and discovered variation in the rate of adoption of the automated services. He contended that on-line system has facilitated internet banking in Nigeria and also that banks now offer customers the flexibility of operating an account in any branch irrespective of which branch the account is domiciled.

The International Accounting Education Standards Board, an independent standardsetting body within the International Federation of Accountants (IFAC), approved exposure draft, Information Technology for Professional Accountants, for publication on August 15, 2006. The document was intended to assist member bodies to prepare professional accountants to use information technology (IT) and to work in the IT environment, describing the knowledge and competences required. It provides more detail of the knowledge and competences required of professional accountants in the IT environment, to prepare them to use IT, work in the IT environment, and/or rely on IT. Information technology (IT) is pervasive in business, requiring the professional accountants be competent in this technology. IT encompasses hardware and software products, information systems operations and management processes, IT controls frameworks, and the human resources and skills required to develop, use and control these products and processes to generate the required information. Competence is being able to perform a work to a defined standard, with reference to real working environments. Individuals are expected to develop the appropriate IT competences required to qualify as professional accountants, and then to maintain these and develop further appropriate IT competences throughout their careers.

Accountants are also expected to be aware of the current Accounting Information Systems (AIS) which seek to link servers over the Internet to exchange data in which case the computing environments require a high degree of interoperability among heterogeneous computer systems and applications. Many organizations including bank sectors are now recognizing the importance of early warning system controls such as embedded modules or real-time detection modules which provide an integrated diagnostic view of on-line, real-time

system. These modules contain a set of manager defined rules. Exceptions to these rules will trigger alarms that are intended to call the managerøs attention to any deterioration or anomalies in the systems.

An open system oriented approach has been recently suggested by Botes (2008). This is the Unified Accounting Information Framework (UAIF) that is based on an industrial standard CORBA architecture. UAIFøs mission is to promote true distributed client-server processing and inter-applications communication in order to facilitate electronic exchange of standard business documents between third parties. Instead of scrapping the legacy systems, this framework takes advantage of distributed object technology, on-line detection system, which can improve the quality and accuracy of accounting information for specific industry and can be viewed as an enabling technology for continuous reviewing and auditing (AICPA, 1995). UAIF consists of three important emerging technologies identified to be distributed object technology, on-line detection operation and XML. All these required high technology competent accountants with skills to use the designed software for accounting process. Professional Accountancy bodies in Nigeria especially the Institute of Chartered Accountants of Nigeria (ICAN), Association of National Accountants of Nigeria (ANAN), Chartered Institute of Taxation of Nigeria (CITN) etc are responding positively towards Information Technology requirements of accountants by way of Mandatory Continuous Professional Training and Educations for their members.

Problems and Challenges Facing Accountants in the Automation of MFBs in Nigeria

In our contemporary days, a lot of factors are inhibiting against the roles of Accountants in the automation of the Microfinance banks in Nigeria, some of which have been identified in the literature as follows:

- Inadequate awareness about Information Technology and its inevitability in the modern day business. Though people are aware of Information technology, the level of awareness is relatively low.
- Low level of IT Competence among the Nigerian Accountants despite efforts of the professional bodies. This is because not many of the professional accountants possess information technology skills to cope with the upsurge in information technology by the financial institutions.
- Developing accounting system and framework entails understanding complex hardware and software packages for accounting purposes.
- Inadequate power supply, because of the government inability to provide a stable power supply in the country, which has hindered access to the Internet, may mar internet reporting.
- Insecurity of sensitive information transformation transmitted data and message from one point to another.
- Unreliable telecommunication facilities, because of the poor telecommunication network in Nigeria making transactions in Information Technology to be greatly limited compared to what exists in other developed countries.
- Internet frauds and the related cyber crimes may discourage full adoption of IT concepts by the society and thus the roles of accountants.
- Problem of location, because most of the MFBs are in rural area to satisfy the objective of rural development where there is dearth of infrastructural facility.

Conclusion

The study observed that automation is a technological driven innovation brought by changes in the manners of doing things. Micro finance services are provided by microfinance banks and directed at purveying credits to the poor as contained in the Micro finance policy of Nigerian government. The rate of Automation in the newly established microfinance banks is not as faster as that of the mega banks in Nigeria. Accountants have several roles to play in the automation of the micro finance services. However there are problems and challenges threatening this performance of the expected roles by the accountants as identified above.

Recommendation

In the light of the fore going, the following suggestions may be useful:

- The microfinance banks should not take technological development for granted irrespective of their sizes so as not to be carried away by the wind of changes.
- Accountants should be Information Technology competent so as to be able to cope with the handling of IT related services of the micro finance banks.
- Professional bodies should emphasize mandatory compulsory education and training in Information technology to update members on new development in IT.
- There should be regular workshop and seminars on IT related issues especially as affecting the services of accountancy.
- Government should make for enabling IT environment by making available electricity supply and infrastructural facility.
- There is the need to develop comprehensive banking policies in Nigeria in order to support the replacement of traditional manual methods of banking with more advanced computer-based systems.

References

- Abbasi Alireza (2007), E-Commerce development in Iran Webology, volume 4 number 4 December 2007. http://www.webology.ir/2007/4n4/a49.html
- Agboola A.A (2001) ,õImpact of Electronic Banking on Customer Services in Lagos, Nigeriaö, *Ife Journal of Economics and Finance*. Vol. 5 No. 1&2.
- Agboola A.A (2004), õInformation and Communication Technology (ICT) in Banking Operations in Nigeriaö, OAU, Ile-Ife, Nigeria.
- Agboola A.A (2006), Electronic payment systems and Tele banking Services in NigeriaöJournal of Internet Banking and Commerce, Vol. 11 no3htt://www.arraydev.com/commerce/jibc1).
- Akintoye I.R, Momoh O.S, and Adewoyin A.A (2008), Fundamentals of Accounting, Banking & Finance Computer Software. Unpublished students manual.
- Akintoye I.R. and Oladejo M.O (2008), õTheory of micro enterprises: The Nigeria experienceö, *International Journal of Social Sciences*, Vol.3, No 7.

- International Journal of Development and Management Review (INJODEMAR) Vol. 6 June, 2011
- Arbussa Reixach, A. (2001), öThe effect of Information and Communication Technologies on the Banking sector and the payment systemö, Phd Thesis, University DeGiroma, Spain, http://www.tdx.cesca.estesisuncr/available/tdx hlh201101181822//taar.pdf
- Ahiawodzi, A (2007): õThe Impact of financial liberalization policy on financial savings in Ghanaö. An elasticities Approach *J. Central Univ Colh* 1 (1): 61-63.
- Armitage, K (2002), Information Technology, The growth of E-Banking, New Jersey: Pentice Hall Incorporated.
- American Institute of Chattered Public Accountants (AICPA 1995), Unified Accounting Information Framework (UAIF)
- Ayantokun, Oluwaseyi (2008); Adopt Robust ICT, Banks Chief Tells MFBs; *Nigerian Tribune*, Wednessday, 1st October 2008, pp 35.
- Ayo Charles .K (2006), õThe Prospects of E-Commerce implementation in Nigeriaö *Journal* of *Internet Banking and Commerce*, Vol. 11, No 3.
- Ayo, Charles K. and Babagide Daniel O. (2006): õDesigning a reliable E-Payment System: Nigeria a case studyö Journal of Internet Banking and Commerce August 2006, vol 11 no 2 http://www.aravdev.com.commerce/isbc
- Ayo, Charles, Ekong, Uyinnome. O, Fatudimu, Ibukun. T and Adebiyi, Ayodele (2007); M-Commerce implimentation in Nigeria: Trends and Issues. *Journal of Internet Banking and Commerce*, Vol 12 No 2,
- Basu, A, Blavu, R, Yulek, M (2004), Microfinance in Africa: Experience and Lessons from IMF, IMF working paper.
- Botes Christo (2008), Utilising Advanced Accounting Software to trace the reintegration of proceeds crimes from underground banking into the formal banking system. Unpublished MSc thesis, University of South Africa.
- CBN Policy Issue (2005), Microfinance Policy, Regulatory and Supervisory Frame work, December 2005
- Chiline, Viatechslav. V. (2001), "Modern Trends in Global Banking Developmentö. USA, dissertation.com www.dissertation.com/library/1121555a.htm
- Fanawopo, S (2006), "World without cash Nigerian-s payment card grows significantlyö.
- Fasan, R. (2007), "Banks, customers relation and use of ATM cardsö. *Business Day Newspapers*. Retrieved February 28,2008, from http://www.businessdayonline.com.

- Oladejo, M. O; & Olowookere J. K. Automation of Micro Finance Institutions in Nigeria
- Fawcett, Phillip (1995), CFSP Information Technology, Chartered Institute of Banker, Cambridge, Book production consultant plc
- Imam Hamra (2001), õPotential of Mico-creditö as Poverty Removal Strategy, in Research and Policy Directions on Poverty in Nigeria: Center for Gender and Social Policy
- International Accounting Education Standards Board (2006): Exposure Draft *Proposed International Education Practice Statement 2.1*Information Technology for Professional Accountants. August 2006
- Lipton, J.D (2002), õFinancing E-Commerce; legal and practical Risksö; Journal of Information, Law and Technology. http://eljwarwick.ac.uk/jilt/ol-l/liptonhtml.
- Lucey, Terry (2005), Management Information System, 7th Edition, London: DP Publication.
- Mahmood, M. Adam and Mann Gary. J (2000), Special Issue: Impact of Information Technology on Organizational Performance vol 16, no4 pp3-10.
- Oladejo, M.O (2007), Essentials of Management Information System and Communication Technology, Lagos: Peace Concept Publisher.
- Oladejo, Morufu. O and Adereti, Adeboye. S (2010): The Impact of Information Technology on the Performance of Micro Finance Institutions in Nigeria, *Journal of Economic Development and Managerial Studies*, Vol.1 No.1. www.icidr.org
- Oladejo, M.O & Dada Adeboye (2008). õInformation Technology and Service Delivery: An Investigation into some selected Nigerian Insurance Companiesö, in Proceedings of International Conference on Research and Development, Vol.1, No.13
- Ovia, Jim (2000), õPayment System and Financial Innovations. A paper presented at the Annual Policy Conference, Nov. 2002.
- Olivier, Henry (2000), "Challenges facing the accountancy professionö, *European Accounting Review*, Volume 9, Issue 4 pp 603 624
- Omoteso, K., Patel, A. and Scott, P. (2010), Information and Communications Technology and Auditing: Current Implications and Future Directions. *International Journal ossf Auditing*, 14: 1476162. doi: 10.1111/j.1099-1123.2009.00410.x
- Ovidiu Constantin, Bunget (2009),õIssues on the contribution of the accountancy profession to enhancing the quality of the environment business in Romaniaö Online at http://mpra.ub.uni-muenchen.de/12984/.MPRA Paper No. 12984, posted 24. January 2009 / 14:52
- Salawu Rafiu.O & Salawu, Mary. K (2007), õEmergence of Internet Banking in Nigeria: An Appraisalö, *Information Technology Journal*.Vol.6, No 4, pp 490-496.