

# **Sokoto Journal of Management Studies**

(A Bi – annual Publication of the Faculty of Management Sciences, Usmanu  
Danfodiyo University, Sokoto)

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Volume 14, Issue 1

January, 2018

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**ISSN: 2141-1670**

**Published by**

The Faculty of Management Sciences,  
Usmanu Danfodiyo University,  
Sokoto State – Nigeria

**Index: Crossref**

Gmail: *sjmstudies@gmail.com*

**Printed in Nigeria by  
AL-HAQQ PRINT ENTERPRISE  
08032934584, 08053359297**

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## Computer-Based Financial Reporting and Transaction Processing System in the Nigerian Banking Industry: The Role of Financial Managers

ELEJE, EDWARD OGBONNIA (PHD)<sup>1</sup>; OKOH, JOHNSON IFEANYI  
(PHD)<sup>2</sup> AND OKOYE, LAWRENCE UCHENNA (PHD)<sup>3</sup>

### Abstract

*Financial processing and reporting system of the past have been characterized by delay, inaccurate reporting, misposting and wrong balances. With the emergence of computerized financial processing and reporting system, a priori expectation is that these abnormalities will drop to the minimum or possibly be decimated. But the extent to which the new innovation has curbed financial processing and reporting variance is currently an issue of serious debate especially in developing nations. This paper is apparently one of the contributions in this direction with empirical evidence from the Nigerian banking industry. Specifically, the study investigated the significance of cloud computing (CC) innovation's effect on financial managers' financial processing and reporting role. It also evaluated the significant effect of enterprise resource planning (ERP) as well as extensible business reporting language (XBRL) on financial transaction processing and reporting. The study relied on primary data generated from the administration of self-designed questionnaire on senior personnel of selected Deposit Money Banks (DMOs) in Wukari, Taraba State Nigeria. Data collected were subjected to appropriate statistical analysis using the statistical package for social sciences (SPSS) version 20 chi-square model. All the findings were tested at 95% confidence level. The results obtained from the analysis show that cloud computing has significant positive effect on financial managers roles in the selected banks; ERP and XBRL also have significant positive effect on financial transaction processing and reporting. The above findings are strongly informative to policy. It is confirmatory to the need for the Nigerian government to legislatively mandate corporate financial institutions to fully embrace computerization of their accounting system.*

**Keywords:** Computerized financial reporting, accounting system, financial manager

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## **Introduction**

The basic goal of business organizations is to create wealth and maximize the shares of owners of the business. The role of financial managers in accomplishing this objective lies in the provision of accurate, sufficient, timely and relevant information for decision making by management. Information Technology (IT), whose heartbeat is the computer and its associated software, has become so relevant in our 21st century society that it cannot be ignored. According to Nwachukwu (2011), the IT umbrella can be quite large, covering many fields. It encompasses the processing and distribution of data using computer hard and softwares, telecommunications, and digital electronics. The world of business is not left out in this development; consequently, IT functions have played a critical role in designing, implementing, and maintaining many of the organizations business control processes. Financial accounting and reporting have also been affected by this trend as computers in the modern business world have taken over most of the financial accounting and reporting tasks as well as other areas of accounting that were being carried out manually in the past.

Unarguably, the current revolution in IT has had remarkable effect on the roles of financial managers of corporate organizations. The IT innovation plays a critical role in collecting, processing, and storing data that is summarized and reported in financial statement (Abu-Musa 2007). Thus, organizations are becoming increasingly aware of IT benefits and the need to move with the new trend. However, in a computerized financial reporting system, internal control mechanism proceeds from not only controlling staff but to controlling both staff and machines. In fact, the centrality of internal control in this system is the computer because changes made to data in a computer can leave no clue if there are no effective computer internal checks.

Meanwhile, studies have documented that the major setback of computerized financial reporting system is the skeptical attitude of most company executives who are afraid to fully embrace the innovation due to associated risks (Pekdemir, 2003; Abu-Musa, 2005; Zeng, 2007; Kabiru, 2014). IT revolution has created significant risks related to security and integrity of the accounting information system. The technology in many cases has been developed faster than the advancement in control practices and has not been combined with similar development of the employees' knowledge, skill, awareness, and compliance. Every day, reports can be found in accounting and financial publications about computer related data errors, incorrect financial information, violation of internal controls, thefts, burglaries, fires and sabotage.

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For many financial managers, there is a yawning chasm between appreciating the potentials of IT and making the leap of faith required to use them. This gorge poses a serious challenge to the relevance of the financial manager in today's corporate IT world. To avoid being relegated to a subordinate role, the financial manager has to keep abreast with the essentials of these developments. Ofurum and Ogbonna (2008) posits that, if information and financial specialists are to maintain control of their profession, they need to move beyond their present competence level and acquire more in-depth IT knowledge and skill to the extent that they can do what a system analyst can.

Despite the veracity that IT plays an important role in the field of accounting and financial reporting, something remains lacking. There is very limited knowledge about the effect of some emerging IT innovations on the financial managers' roles especially in the banking industry. This is a strong lacuna that needs to be covered by research. The present study is a contribution to filling this gap. Specifically, the study sought to investigate the effect of cloud computing (CC) innovation on financial managers' financial reporting roles. It further evaluated the effect of enterprise resource planning (ERP) as well as extensible business reporting language (XBRL) on managers' financial transaction processing and reporting. The study will be relevant to management and employees of banks and other corporate firms, customers and investors, professional bodies, government as well as financial analysts, and future researchers.

## **Conceptual Clarification**

### **Nature of Information Technology (IT)**

The Information Technology Association of America (ITAA) documents that IT is the study, design, development, implementation, support or management of computer-based information systems, particularly software application and computer hardware. It involves the processing and distribution of data using computer hardware and software, telecommunications, and digital electronics (Microsoft Encarta, 2008). IT is also a term used to describe a wide variety of items and abilities used in the creation of, storage and dispersal of data and information. It is comprised of three main components including computers, communication network and know-how (Senn, 2004). However, Nwachukwu (2011) observes that modern IT is largely dependent on developments in computer and computer technology for both hardware and software.

Computer on the other hand is an electronic device that is capable of accepting data as input, processing the data, and producing information as output in a



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fast, accurate, and more effective manner than humans. Modern day computer consists of an input device, a central processing unit (CPU), an output device and an external storage device. This definition of computer however, has evolved over time. Computer is a mid-17th century word originating from Latin, which means someone who computes. Prior to this period, certain devices produced have been classified as computer because of their function. Nwachukwu (2011) observes that two of these devices that have survived include the Russian ABACUS and the Japanese Soroban. The ABACUS is still being used in the training of the handicapped.

### **Concept of Financial Reporting**

In order to properly understand recent IT innovations from accounting and financial reporting perspectives, it is very pertinent to conceptualize the basics of financial reporting. Financial reporting is a vital part of corporate governance. It involves the disclosure of financial information to management and the public (if the company is publicly traded) about how the company is performing over a specific period of time (Abdullahi 2010). Financial reports are usually issued on a quarterly and annual basis and essentially prepared by the financial manager who is expected to be a trained professional accountant. Financial report is different from management report, which is financial information that is disclosed to those inside the company to be used to make decisions within the company. Financial reports are included in a public company's annual report.

Financial reporting serves two major purposes. First, it helps management to engage in effective decision-making concerning the company's objectives and overall strategies. The data disclosed in the reports can help management discern the strengths and weaknesses of the company, as well as its overall financial health. Secondly, financial reporting provides vital information about the financial health and activities of the company to its stakeholders including its shareholders, potential investors, consumers, and government regulators. It is therefore a means of ensuring that the company is being run appropriately. If a company is publicly traded, it is subject to some very strict reporting regulations enforced by the Securities and Exchange Commission (SEC), hence the relevance of standardization of financial reporting.

The International Financial Reporting Standard (IFRS) and the Statement of Accounting Standard (SAS) are the standards developed by the International Accounting Standard Board (IASB) and the Nigeria Accounting Standard Board (NASB) respectively to guide financial reporting. The Generally Accepted Accounting Principle (GAAP) is primarily the basis of financial

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reporting in Nigeria; however, efforts are in place to make for the adoption of IFRS by all countries in the world to bring about standardization as well as comparability of financial reporting.

### **Emerging IT Innovations**

- A. **Cloud Computing:** Cloud computing is an on-demand provision of computational resources like data and software through a computer network by a service provider for a stipulated fee. The National Institute of Standards and Technology (NIST), provides a concise and specific definition. According to the institute, cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g. networks, servers, storage, applications and services) that can rapidly be provisioned and released with minimal management effort or service provider interaction. It is an emerging issue in the field of information technology. It is called cloud computing because the data and applications exist on a "cloud" of web servers (ICAN 2009a). Prior to the advent of this technology, organizations have stored and processed data using only a local computer.

Cloud computing provides computation, software, data access, and storage services that do not require end-user knowledge of the physical location and configuration of the system that delivers the services (Abu-Musa, 2005). Service providers may use the internet or other network to provide web-based tools or applications that users can access through a web browser as if the application were installed locally on their own computers. The user's data are stored remotely on the provider's server. NIST posits that the cloud model promotes availability and is composed of five essential characteristics, three service models, and four deployment models.

### **Cloud Computing and Financial Managers' Role**

One significant advantage of cloud computing to financial managers is that it offers the ability to view and work on client's live data instantly without having to exchange disk or memory stick containing the data (ICAN, 2009b). Consequently, financial managers are able to offer real-time advice due to the availability of up-to-date financial data. Storage facilities provided by vendors ensure increased data security. Guaranteed daily remote data back-ups remove the concern and cost of maintaining your own back-up routines. With password protected and encrypted access, your data is more secured than it



can be on your PC or office network. One of the biggest benefits is how cloud computing addresses solution at a high speed.

### **Concerns of Cloud Computing**

Despite the fact that cloud computing can be of great relevance to role of the financial manager in an organization, several authors have identified certain concerns about the Implementation of cloud computing. ICAN (2009) documented that the biggest concern with cloud computing are security and privacy. The idea of handing over important documents to another company worries some people. Hamlen (2010) posits that "there are numerous security issues for cloud computing as it encompasses many technologies including networks, databases, operating systems, virtualization, resource scheduling, transaction management, load balancing, concurrency control and memory management. The fact that a client can log in from any location to access data could compromise the client's privacy.

Another issue of concern is the dearth of indigenous literature in emerging information technology. Professional and academics in Nigeria are yet to be significantly acquainted with the essentials and practical implications of these technologies. This no doubt has hampered their implementation and the reaping of its attendant benefits.

- B. Enterprise Resource Planning (ERP) innovation:** Enterprise Resource Planning System or Enterprise system evolved primarily from traditional manufacturing resource planning (MRPII) systems. Rashid, Patrick and Hossain (2002) defined ERP as software systems for business management, encompassing modules supporting functional areas such as planning, manufacturing, sales, marketing, distribution, accounting, financial, human resource management, project management, inventory management, service and maintenance, transportation and e-business. The ERP attempts to integrate the functions and activities of all the departments of an organization into a single database to enable the various departments have easy access to information and communication.

Obviously, the ERP system supports a smooth and seamless flow of information across the organization by providing a standardized environment for a firm's business processes and a common database that supports communication. The evolving trend in ERP systems features an internet-enabled extended ERPs (ERP11), which is a 21st century concept. It describes web-based software that allows both

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employees and partners such as suppliers and customers, real-time access to the systems.

### **Benefits of ERP to Accounting and Financial Reporting**

Some researchers are of the view that that so far the impact of ERPs on accounting and financial reporting has been limited, however the greatest benefits have reflected mostly in respect to time and data quality. Maccarrone (2000) investigated the benefits of ERP implementations as regards accounting information and management processes. According to the study, ERP guarantees cost reduction due to timesaving permitted by the system. This implies that fewer resources are needed to attain the same output. Besides, less time is needed for individual activities meaning that less time can be used to improve and control activities, which should improve the organization's competitiveness. Reduced need of time also entails reduced total cycle time and increases correctness of processes. Hence, corrective actions can be taken more rapidly when variances are detected. ERP systems assure consistency and quality of data during collection, storing and elaboration processes. Improved quality of data implies improved decision making which results in higher profits.

However, online analytical processing (OLAP) as well as data warehouse have emerged to provide support for the ERPs. Hall (2008) submits that an ERP system could exist without having a data warehouse. Similarly, organizations that have not implemented an ERP may deploy data warehouses. The trend however, is that organization that are serious about competitive advantage deploy both. Ho (2006) posits that OLAP systems have emerged to support analysis tasks and decision making in organizations. The system was found to reduce time needed to distribute, analyze and consolidate financial management reports.

### **Challenges of ERP Implementation in Nigeria**

Various studies have identified that irrespective of the overwhelming benefits of the ERPs, its eventual implementation may not be auspicious or risk free after all. ICAN (2009) identified that the problems with ERPs implementation are due to inadequate investment in training of accountants as well as lack of corporate policy protecting the integrity of the data in the ERP system and the way it is used. ERP systems have more to do with changing the way organization do its business than it does with technology. This has resulted in most ERP failures due to cultural issues/factors within the firm that oppose the system change. Hall (2008) observes that choosing the wrong ERPs is a



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common reason for system failure. Furthermore, modifying an ERP program and database can introduce potential processing errors and can make updating the system to later version difficult. Findings show that the total cost of ownership (TCO) for ERPs may be too high for an average company, hence may not be economical for most companies. Hall (2008) identified the following cost; hardware, software, consulting services, internal personnel cost, installation, upgrade and maintenance cost. In addition, paucity of research in this area has kept practitioners in the dark as to its benefits.

- C. Extensible Business Reporting Language (XBRL): XBRL defines an extensible mark-up language (XML) developed to serve the need of the financial community with a standardized method of financial reporting. XML is a Meta language for creating custom mark-up language. It is used to structure, store and send electronic information, especially on the World Wide Web (Microsoft Encarta, 2009). It is similar to the Hypertext Mark-up Language (HTML) in appearance and structure however, important difference exist between them. While both of them use tags and similar attributes the HTML tags have predefined meaning that describes how the attribute will be presented in a document and must be entered manually into the system for processing. On the other hand, XML tags are custom-made to delimit the attributes. The application automatically reads and interprets the data rather than being manually entered (Hall 2008).

XBRL innovation is a language for the electronic communication of business and financial data, which is revolutionizing business reporting around the world today. It was developed by Charles Hoffman while working as an auditor at Price-Water-house. XBRL provides major benefits in the preparation, analysis and communication of business information. Recognizing the potential of XML, the American Institute of Certified Public Accountants (AICPA) encourages research into the creation of an accounting-specific mark-up language that is based on XML.

### **Benefits of XBRL to Accounting and Financial Reporting**

Traditional financial reporting techniques are structured for human consumption without the aid of advanced data exchange, integration and analysis technology. The objective of XBRL is to improve on this by providing a mechanism for automation to ensure unified data exchange, credibility and transparency in a normalized electronic environment (Altova, 2009). XBRL seeks to solve the problem of processing data in reports

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delivered over the internet which prior to its adoption was in such format as HTML which cannot be processed directly by the recipient's application software. Also, identifying the opportunity provided by the advent of internet and globalization, the need for technology standards to promote financial data exchange and accessibility becomes prominent. XBRL seeks to normalize financial reporting through the application of a standard data format for electronic data transmission. Altova (2009) describes normalization as "a situation when data is imported into a spread sheet, database or any other format and it is already in the required format, and the various calculations and other relationship have been verified."

Several other benefits of XBRL have been identified. According to KPMG (2008), XBRL permits the automatic exchange and reliable extraction of financial information across all software formats and technologies, including the Internet. It enhances efficiency by allowing tagged financial information to be transmitted in many formats and deployed with various analytical tools. This efficiency is a potential source of reduced costs. Reduced costs of information preparation benefits preparers and enables more timely and accurate analyses of data needed to make decisions and enhanced analytical capabilities. Users of transnational data can benefit from the relative ease with which the data can be translated from one language to another, as well as from easier access to definitions that enhance comparability. XBRL also improves access to financial information and provides the potential for more accurate and reliable extraction of information. It also provides increased transparency of financial information to stakeholders.

## **Theoretical Framework**

The paper briefly reviewed two basic supporting theories including socio-technical system theory and activity theory respectively.

### **Socio-Technical Systems Theory of Information Technology**

The socio-technical systems approach has become influential in the evaluation of organizational impact of information technology. The theory views any organization as an open system of interdependent sub-units transforming inputs to desired outputs. According to this theory, the gainful employment of any technology hinges on the ability and willingness of users to employ it for worthwhile tasks (i.e., those deemed central to the organization's goals). Socio-technical systems theory has given birth to a framework for technology design that emphasizes holistic job satisfaction (rather than just task performance) and user participation throughout the development process.



Thus, socio-technical theorists recommend the analysis of all stakeholders, not just the direct users of a technology, the formation of planning groups to oversee the design, the performance of prototyping exercises, and the analysis of likely impact the technology on the organization. In studying technology acceptance, socio-technical theorists conceptualize acceptance in terms of two competing forces: control and enhancement. Control factors are those that impose rules or structures upon the users, thereby removing autonomy (control over their own actions) from them. Among the control issues raised with respect to technology design are: access, reliability, confidentiality, monitoring, pacing, stress, social contact. Low or high presence of certain factors such as low reliability and high pacing with the introduction of a new technology is likely to reduce the user's perception of control and thus increase the risk of resistance (Connor, 1997). Enhancement factors include sense of mastery, growth of knowledge, discretion, ability to act informally, requirement for certain skills, and enabling worker cooperation. A technology that is designed to support such factors is likely to increase user acceptance in an organization.

### **Activity Theory of Information Technology**

Activity theory is an approach to understanding human work and technology which emphasizes the long-term well-being of workers or users. Activity theorists argue that acceptance of technology is contingent on the extent to which it meets goals in the context of the user's own work. Activity theory largely aligns itself with the broad humanistic aims and the methods of the socio-technical approach. It is at least partially distinguishable by its emphasis on the product of the organizational process which characterizes socio-technical systems thinking.

### **Review of Empirical Studies**

Very limited extant empirical literature exists at the moment in respect of computerized financial reporting innovation globally and in Nigeria. Hazar and Mohamed (2013) investigated accounting information systems in an ERP environment and Tunisian firm performance. Their research empirically tested the influence of accounting information systems on business performance. Data was collected and analyzed using partial least square (PLS) technique of structural equation modeling. The study found that a system that responds quickly to user requirements and that is easy to use would facilitate the use of advanced accounting practices, such as holding a balanced scorecard, budgeting and profitability analysis.

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Sangster, Leech and Grabski (2009) evaluated ERP implementations and their impact upon management accountants. They utilized primary data aided by postal questionnaires. The researchers found that under successful ERP implementations, management accountants' role become more enriching without any noticeable reduction in the tasks they traditionally perform. Kabiru and Abdullahi (2014) verified information technology and accounting information system in the Nigerian banking industry. Data for their study was both primary and secondary. By applying the analysis of variance (ANOVA) technique, their study found that accounting information technology is relevant in simplifying issues and in the provision of quality information.

Booth, Matoksy and Wieder (2000) studied the impacts of enterprise resource planning systems on accounting practice. The study derived data from both primary and secondary sources. By applying analysis of variance (ANOVA) technique, the study found high levels of information integration for many functional areas of an enterprise. Alves (2010) found a statistically significant relationship between accounting practices and performance expressed in terms of autonomy, turnover evolution and reduced cost levels. The study supports the significant influence and effect of information technology on accounting practices, stating that "today, accounting and information technology are inseparable". Accountant's uses of sophisticated management accounting techniques are clearly dependent of IT existence. Though he stated that the benefits for accounting from IT are materialize only in uncertain ways and only after long implementations.

## **Methodology**

The study employed longitudinal survey method with a self-designed questionnaire instrument in data generation. Both the validity and reliability of the instrument were ascertained. Validity test was carried out via pilot survey in line with Onwumere (2009) to ensure that the instrument measured what it was intended to measure. Reliability test was conducted via the test-retest approach to ascertain the consistency of the instrument after several measurements. The population of study was fifty eight (58) permanent senior staff of three (3) deposit money banks (DMBs) in Wukari, Taraba state namely; Zenith Bank Plc., UBA Plc., and Unity Bank Plc. respectively. The fifty-eight personnel of the three banks also formed our sample issued with the questionnaire since the number was manageable. All the 58 staff returned their questionnaire which were first analyzed and summarized descriptively with total score, Likert scale rating and simple percentage. The data were further subjected to chi-square statistical test at 95% significant level to measure the discrepancies existing between the observed and expected frequency and to



proof the level of significance in testing stated hypotheses. Below is the standard chi-square distribution model used for the analysis:

$$X^2_c = \sum_{i=1}^k \frac{(O_i - e_i)^2}{e_i} + \frac{(O_2 - e_2)^2}{e_2} + \frac{(O_3 - e_3)^2}{e_3} + \dots + \frac{(O_n - e_n)^2}{e_n}$$

Where:

- $O_1 \Rightarrow$  First observed frequency
- $O_n \Rightarrow$  nth observed frequency
- $e_1 \Rightarrow$  First expected frequency
- $e_n \Rightarrow$  nth expected frequency.

### **Data Presentation and Analyses**

Respondents' demography and main questionnaire data are as contained in appendix 1. Accordingly, age distribution shows that majority of the respondents (36.8%) were within 45-56 age bracket. Sex distribution shows that majority of the respondents were male (68%). Qualifications data shows that majority of the respondents were graduates. For staff designation/staff, distribution confirms that approximately 34% of the respondents were supervisors while the remaining 66% were distributed across unit head, HOD, and Directors. The responses to the twelve related main questions administered in the questionnaire were affirmatively high. None of was below 3 points mean agreement. Hence, decision based on the sample mean for the banks are in positive agreements. This is supported by their various mean deviations which are all less than one.

### **Test of Hypotheses and Empirical Results**

#### **Null Hypothesis One**

- $H_{01}$ : There is no significant positive effect of Cloud Computing innovation on financial transaction processing and reporting role of financial managers in the bank.

**Table 1: Observed and Expected Frequencies for Hypothesis One**

	Observed N	Expected N	Residual
S.Disagree	2	46.4	-44.4
Disagree	12	46.4	-34.4
Undecided	44	46.4	-2.4
Agree	124	46.4	77.6
S.Agree	50	46.4	3.6
Total	232		

**Table 2: Computed Chi-Square Test Statistics for Hypothesis One**

				Hypothesis1
Chi-Square				14.165 <sup>a</sup>
Df				4
Asymp. Sig.				.000
Monte CarloSig.				.000 <sup>b</sup>
Sig.	95% Interval	ConfidenceLower		.000
		Bound		
		Upper		.007
		Bound		

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 46.4.

b. Based on 232 sampled tables with starting seed 2000000.

**Source:** IBM SPSS Processed (2017).

### Decision Rule

The general decision rule for testing hypothesis is to reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_A$ ) if the computed chi-square value ( $X^2_c$ ) is greater than the tabulated chi-square ( $X^2_t$ ).

The tabulated chi-square for hypothesis one at three degree of freedom and 95% confidence level is 9.448. This value is less than the computed value of 14.165 in table 2. Consistent with the chi-square decision,  $H_0$  was rejected resulting in the submission that there is significant positive effect of Cloud Computing innovation on financial transaction processing and reporting role of financial managers in the bank.



### Null Hypothesis Two

H<sub>02</sub>: There is no significant positive effect of ERP innovation on financial transaction processing and reporting role of financial managers in the bank.

**Table 3: Observed and Expected Frequencies for Hypothesis Two**

	Observed N	Expected N	Residual
S.Disagree	4	46.4	-42.4
Disagree	24	46.4	-22.4
Undecided	39	46.4	-7.4
Agree	120	46.4	73.6
S.Agree	45	46.4	-1.4
Total	232		

**Table 4: Computed Chi-Square Test Statistics for Hypothesis Two**

			Hypothesis 2
Chi-Square			15.542 <sup>a</sup>
Df			4
Asymp. Sig.			.000
Monte Carlo Sig.			.000 <sup>b</sup>
Sig.	95%	Confidence Lower	.000
	Interval	Bound	
		Upper Bound	.046

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 46.4.

b. Based on 232 sampled tables with starting seed 2000000.

**Source:** IBM SPSS Processed (2017)

### Decision Rule

The decision rule governing Chi-square statistics is to reject the null hypothesis (H<sub>0</sub>) when computed chi square value (X<sup>2</sup><sub>c</sub>) is greater than tabulated chi square value (X<sup>2</sup><sub>t</sub>), and not to reject it if otherwise. The tabulated chi-square for hypothesis two at four degree of freedom and 95% confidence level is 9.488. This value is less than the computed value of 15.542 in table 4; hence, H<sub>0</sub> was rejected resulting in the conclusion that, there is significant positive effect of ERP innovation on financial transaction processing and reporting role of financial managers in the bank.

### Null Hypothesis Three

H<sub>03</sub>: There is no significant positive effect of XBRL innovation on financial transaction processing and reporting role of financial manager in the bank.

**Table 5: Observed and Expected Frequencies for Hypothesis Three**

	Observed N	Expected N	Residual
S.Disagree	3	46.4	-43.4
Disagree	19	46.4	-27.4
Undecided	37	46.4	-9.4
Agree	122	46.4	75.6
S.Agree	51	46.4	4.6
Total	232		

**Table 6: Computed Chi-Square Test Statistics for Hypothesis Three**

	Hypothesis 3
Chi-Square	22.536 <sup>a</sup>
Df	4
Asymp. Sig.	.000
Monte Carlo Sig.	.000 <sup>b</sup>
Sig. 95% Confidence Interval	Lower Bound .000 Upper Bound .046

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 46.4.

b. Based on 232 sampled tables with starting seed 926214481.

**Source:** IBM SPSS Processed (2017)

### Decision

The tabulated chi-square value for hypothesis three at three degree of freedom and 95% confidence level is 9.488. This value is less than the computed value of 22.536 in table 6. Hence, in line with the above decision rule, H<sub>0</sub> was again rejected resulting in the submission that there is significant positive effect of XBRL innovation on financial transaction processing and reporting role of financial manager in the bank.



## **CONCLUSIONS AND RECOMMENDATIONS**

This research empirically investigated computerized financial reporting innovations and financial managers' roles in the Nigerian banking industry. Specifically, the study evaluated the significant effect of the new computerized accounting and financial reporting innovations such as enterprise resource planning, extensible business reporting language, and cloud computing on transaction processing and financial reporting roles of managers in the banking industry. By employing both descriptive and inferential statistics on primary data generated from three selected banks in Wukari metropolis, the study made three major conclusions.

First, financial managers of banks are beginning to adopt ERP technology in their operations and the innovation so far manifests significant positive effect on transaction processing and financial reporting in the banks. Secondly, banks have also commenced the application of XBRL and the applied innovation so far has significant positive effect on financial reporting of banks employing it. Additionally, financial managers of banks have also employed cloud computing in their accounting roles and the innovation has shown significant positive effect on their financial reporting roles. From the premise of these findings and conclusions therefore are the following two major recommendations for fast-tracking the value added impact of these emerging ITs in banks:

First, there is need for government to legislatively mandate other corporate financial institutions yet to fully embrace computerization in their accounting system to do so since the innovation has been proved productive in banks.

Secondly, banks should further strive to exploit the gains of these new computer innovations in order to remain stronger in the prevailing competitive banking environment.

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## APPENDIX 1: RESPONDENTS' DEMOGRAPHY

Table 1: Age Distribution of Selected Banks Staff

		Frequency	Percent	Valid Percent	Cumulative %
Valid	25-35	15	25.7	25.7	25.7
	36-44	16	27.2	27.2	52.9
	45-56	21	36.8	36.8	89.7
	57 – Above	6	10.3	10.3	100.0
	Total	58	100.0	100.0	

Table 2: Sex Distribution of Selected Banks Staff

		Frequency	Percent	Valid Percent	Cumulative %
Valid	Male	39	67.6	67.6	67.6
	Female	19	32.4	32.4	100.0
	Total	58	100.0	100.0	

Table 3: Distribution of Selected Banks Staff By Qualification

		Frequency	Percent	Valid Percent	Cumulative %
Valid	National Diploma	16	27.6	27.6	27.6
	B.Sc. or Equiv	30	51.7	51.7	79.3
	Master Degree	9	15.5	15.5	94.8
	Above Masters	3	5.2	5.2	100.0
	Total	58	100.0	100.0	

Table 4: Distribution of Selected Banks Staff by Staff Designation

		Frequency	Percent	Valid Percent	Cumulative %
Valid	Supervisor	20	33.8	33.8	33.8
	Unit Head	14	24.3	24.3	58.1
	HOD	3	5.1	5.1	63.2
	Director	9	14.7	14.7	77.9
	Others	13	22.1	22.1	100.0
	Total	58	100.0	100.0	

Table 5: Descriptive Summary Questionnaire Responses

	N	Minimum	Maximum	Mean	Std. Deviation
Q1	58	2	5	3.67	.856
Q2	58	2	5	4.05	.805
Q3	58	1	5	3.14	.793
Q4	58	1	5	3.00	.894
Q5	58	2	5	3.67	.913
Q6	58	2	5	4.19	.602
Q7	58	2	5	4.54	.634
Q8	58	1	5	3.42	.765
Q9	58	2	5	3.65	.787
Q10	58	2	5	3.74	.826
Q11	58	2	5	4.21	.685
Q12	58	1	5	3.05	.892
Valid N (listwise)	58				

**Source:** IBM SPSS Processed (2017)