

Information and Communication Technology (ICT) and Insurance Companies Profitability in Nigeria

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Abstract: *The study examines the impact of Information and Communication Technology (ICT) on insurance companies' profitability. It identifies the imperatives for adoption of ICT to promoting efficient and efficient service delivery in the insurance industry as a strategy for attainment of the profit maximisation objectives of insurance companies in Nigeria. The study is an empirical design which utilises responses of structured questionnaire of 152 respondents from 18 insurance companies to explore the impact of ICT adoption on quality of service delivery and profitability of insurance companies in Nigeria. The study concludes that there is a positive relationship between ICT adoption and insurance companies' profitability in Nigeria. This implies that adoption of ICT by insurance companies can enhance their efficiency, their quality of service delivery, and their profitability. The implication of the findings for practice is that insurance companies should endeavour to update their ICT facilities regularly, in view of its impacts on quality of service delivery and profitability. The paper also highlights the need for regular training of insurance personnel to keep them abreast of the current innovations in the use of ICT to ensure that the industry contribute positively to the economy.*

Keywords: *Information, Communication, Profitability, Insurance Company, Nigeria*

I. INTRODUCTION

From time immemorial, information and communication are vital and essential in all sphere of life. The development of science and technology has greatly enhanced every aspect of human endeavour. Hence, the global business environment has been revolutionalised by creativity, innovation and technological advancement thereby increasing customers' awareness and availability of wider range of sophisticated products/services. New technologies have significantly impacted business organisations to overcome barriers - cost, time and distance - to global operations. Business organisations, insurance companies inclusive, operate in a complex, dynamic and competitive environment. Broadly, information and communication technology (ICT) involves the use of electronic devices for storing, processing, analysing and distributing data. The rapid expansion and increasing use of ICT has immensely promotes scientific approach to information handing and processing. Moreover, ICT enhances management functions of planning, organising and the nature of services offered in the insurance industry. It has greatly improved insurance operations globally in view of the available innovation devices to enhance the speed and quality of service delivery. Consequently, ICT enhances process and procurement required to attain organisational and industrial goals.

The use of ICT in the insurance industry is relevant and beneficial considering the significant role of insurance in the economy. Amongst other, insurance promotes business activity by providing financial intermediary services necessary to induce economy growth (Ward and Zurbruegg, 2000; Liedtke, 2007). The insurance industry consolidation, particularly the recapitalisation, seeks to ensure that the industry contribute positively to the economy (Obaremi, 2007). ICT usage has considerably improved operations and performance of businesses in Nigeria (Osabuohien, 2008; Obasan, 2011). It is, therefore, expected that the impact of the consolidation will enhance the use of ICT by stimulating some form of competitive advantage, accuracy and efficient transactions to improve the quality of service delivery in the Nigerian insurance industry.

II. SCOPE, OBJECTIVES AND SIGNIFICANCE OF STUDY

The study examines the impact of ICT adoption on insurance companies' profitability in Nigeria. Specifically, the objective of the study, include:

- a) To identify roles and benefits of ICT;
- b) To explore the impact of ICT adoption on insurance company profitability;
- c) To preview development of insurance in Nigeria; and
- d) To highlight the place of ICT in promoting efficient and efficient service delivery in the insurance industry in Nigeria.

Despite the benefits of ICT, many business enterprises have not adopted and integrated ICT into their operations. There is dearth of study on the roles of ICT in business enterprises in Nigeria. Moreover, the few

available studies on ICT in Nigeria focused mainly on the banking sector (Osabuohien, 2008; Dauda and Akingbade, 2011; Emmanuel, 2011; Obasan, 2011); and on small medium scale industries (Adewoye and Akanbi, 2012). There is no literature on roles and adoption of ICT in insurance companies in Nigeria. The study, therefore, fills this gap and contributes to knowledge on the impact of ICT adoption on insurance companies' profitability in Nigeria. Consequently, the study is imperative in view of the need for insurance companies' in Nigeria to develop and maintain a high level of ICT usage in order to meet the nation's insurance needs, to enhance their profitability and to contribute positively to the economy.

III. REVIEW OF LITERATURE

IT embodies a convergence of interest between electronics, computing and communication. IT refers to a group of technologies that revolutionised the handling of information (Drew and Foster, 1994). Communication technology deals with physical devices and software that link various computer hardware components and transfer data from one physical location to another (Laudon and Laudon, 2010). Broadly, ICT encompasses technologies for processing and communication of information. Chowdhury (2000) states that ICT encompass technologies that can process different kinds of information (audio, video, text, and data), and facilitate different forms of communications among human agents, and among information systems. Thus, ICT are electronic devices for collection, processing, storage, transmission, and dissemination of information (Duncombe and Heeks, 1999; Marker *et al.*, 2002; Ebijuwa, 2005).

Development of ICT assists firms to effectively integrate into the global market. Globally, the development of ICT is increasingly considered to be an important factor influencing economic growth (Tcheng *et al.*, 2007). According to Vu (2004), ICT can enhance firms' efficiency and competitiveness by: promoting better communication and interaction with customers; facilitating significant cost savings through e-commerce and ICT enabled management techniques; and enhancing firms' growth and performance. Furthermore, the development of ICT facilitates better intra-firm communication and increases flexibility thereby facilitating the removal of physical constraints on organisational communication and promoting productivity gains through better management (Jeremy *et al.*, 2003). Investment in ICT can increase production activity and national output; thus, boosting demand for goods and services in the economy. Such investments can also increase employment, directly and indirectly (Alleman *et al.*, 2002).

Notwithstanding the financial implications of ICT investment; such investment is worthwhile as ICT can improve information sharing, decision-making, coordination, product quality, responsiveness and distribution (Al-Mudimigh *et al.*, 2001). Similarly, investments in ICT can also reduce operational costs and facilitate better communication (Datta and Agarwal, 2004; Waverman *et al.*, 2005). Such investment is beneficial as development of ICT enables a firm to explore the global markets and improve the firm's performance (Jeremy *et al.*, 2003). The benefits of investing in ICT development include; improvement of information flows, enhancement of arbitrage abilities, facilitating price discovery, and substitution of costly physical transport by widening markets networks (Sridhar and Sridhar, 2009; Andrianaivo and Kpodar, 2011). This implies that there is a bi-directional (direct and indirect impacts) causal relationship between ICT infrastructure and economic growth (Sridhar and Sridhar, 2009; Adegbelemi Onakoya *et al.*, 2012). Meanwhile, Richardson *et al.* (2006) identify five areas of ICT applications in support of firm development: economic development of product, community development, research and education, small and medium enterprises development, and media networks.

ICT are catalyst to economy growth and development (Kodakanchi *et al.*, 2006). The role of ICT in national development can not be over emphasised. The United Nations Development Programme (2001) describes ICT as a powerful enabler of development due to its role in the society and national development. Likewise, Datta and Agarwal (2004) show that economic benefits of ICT can be direct (through increases of employment and demand) and indirect (notably through social returns). Moreover, effective ICT network provides necessary information need of a nation economy - industry, commerce, agriculture, services sector - to foster necessary structural linkages for sustainable growth (Bhatnagar, 2005; Anie, 2011). Decision on ICT investments must take cognisance of other socioeconomic factors in order to facilitate growth in developing nations, such as Nigeria (Mbarika *et al.*, 2003). ICT are fundamental to every sector of the Nigeria economy. In this regard, Kramer *et al.* (2007) highlight the role of ICT in modern economy growth and development. According to them, ICT reduces transaction cost thereby improve productivity; offers immediate connectivity by improving efficiency, transparency and accuracy; substitutes for other, more expensive means of communicating and transacting; increases choice in the marketplace in order to provide access to otherwise unavailable goods and services; widens the geographical scope of potential markets; and channels knowledge and information necessary for sustainable development (Kramer *et al.*, 2007:7)

In Nigeria, ICT development and usage is enhanced by the nation's federal government through establishment of the National Information Technology Development Agency (NITDA) in 2001. NITDA is an agency responsible for fostering the development and growth of IT in Nigeria. The agency regulates, monitors,

evaluates, and verifies progress of IT development in Nigeria, under the supervision and coordination of the Federal Ministry of Science and Technology (NITDA, 2013). NITDA power has further been enhanced by National Information Technology Development Agency Act (NITDA Act) of 2007 to ensure effective operation and implementation of National IT policy in Nigeria. Consequently, Nigeria is one of the world's fastest growing telecoms market and largest telecoms sector in Africa. Nigeria is ranked as one of the largest internet usage in Africa; with online population of 45, 039,711 users, representing 26.5% of the nations' population (ITU, 2013; IWS, 2013). Likewise, the nation's internet penetration in 2012 was 28.4%, representing 28.9% of African total internet usage (ITU, 2013; IWS, 2013). The nation's ICT development and usage is far above the International Telephone Union's (ITU) benchmark of 1% (Ndukwe, 2005). This suggests that the ICT culture in Nigeria economy has improved significantly.

IV. ICT AND DEVELOPMENT OF INSURANCE IN NIGERIA

The entry of British trading companies in the region and subsequent increased inter-regional trade marked the beginning of modern insurance in Nigeria. Development of shipping and banking activities, coupled with increased trade and commerce necessitated handling of some of business risk locally (Adeyemi, 2005). The mode of operation of early insurance offices in Nigeria started as agencies of overseas insurance companies. The first insurance company, Royal Exchange Assurance Company Limited, was incorporated locally in 1921 by the Guardian Royal Exchange of London. Until the time of independent in 1960, there was virtually no wholly owned indigenous insurance company in Nigeria. During this period, insurance business was predominantly underwritten by the subsidiary of European companies with headquarters based in Europe (Irukwu, 1986). Subsequently, other agencies and companies were established, including: Patterson Zochonis (PZ); Liverpool, London and Globe; BEWAC's Legal and General Assurance; and the Law Union and Rock (Jegade, 2005). The World War II, particularly between 1921 and 1949, adversely impacted the growth of insurance because trading activities were obstructed both in Nigeria and United Kingdom. However, business activities gradually improved, and the Nigeria insurance industry improved accordingly.

The first indigenous insurance company, the African Insurance Company Limited, was established in 1958. By 1976, there were twenty five (25) insurance firms in Nigeria. The Nigerian government ventured into insurance business by establishing NICON and Nigeria Reinsurance Corporation in 1969 and 1977 respectively. This marked the beginning of governmental control of insurance in order to redress the excessive foreign control of insurance business in Nigeria. Prior to introduction of governmental control of insurance, a few foreign companies controlled over 75 per cent of Nigeria insurance portfolio. The insurance industry has grown, but not without its attendant challenges. The challenges include poor market penetration, potential abuse, low level awareness, low operating capital, low local underwriting capacity and acceptance of foreign risks (Ezekiel, 2005). These challenges culminated to massive regulation of the Nigeria insurance industry, which has become substantially intensified in the last two (2) decades. The objectives of the insurance sector reforms include: to increase the industry's low retention capacity; to attract foreign capital infusion into the industry for enhanced premium growth and profitability; to achieve a consolidation that will produce companies capable of meeting claims obligations promptly; to ensure that the nation's insurance companies can effectively compete at the continental and global levels; to enable the industry attract the wherewithal for strategic investments in human capital development for greater efficiencies; to create a necessary competitive environment to promote brand activities, to increase investment and better public awareness of the benefits of insurance to society at large; to actualise necessary economies of scale to ensure that insurance is affordable and accessible; and to encourage the industry to leverage on synergies from mergers and acquisitions and other alignments to achieve superior product innovation, deeper market penetration and product distribution (Obaremi, 2007:52).

The first major step at regulating the activities of insurance business in Nigeria was the report of Obande J. C. Commission of 1961. The commission report resulted in the establishment of Department of Insurance in the Ministry of Trade, which was later transferred to the Ministry of Finance. The report also led to the enactment of Insurance Companies Act of 1961, which took effect on 4 May, 1967. The Act established, among others, the office of the Registrar of Insurance to supervise insurance practice; minimum capital requirement; and other conditions for registration, monitoring, and control of insurance operation in Nigeria. Subsequently, several regulatory legislations have been promulgated. The National Insurance Commission (NAICOM) was established by the nation's penultimate military administration in 1997. NAICOM is a governmental agency responsibility for monitoring and regulating insurance business and practice in Nigeria. The first major recapitalisation process was introduced by the Insurance Act 2003. Section 9 of the Act increased the minimum capital requirement by as much as 650%. There were still over 107 insurance, including reinsurance companies, left in the industry at the end of the recapitalisation exercise in February 2004 (Fatula, 2007). Likewise, section 9(4) of the Act empowered NAICOM to increase the minimum capital requirement from time to time.

Another recapitalisation and consolidation exercise took place in 2005. The Nigeria insurance industry witnessed a major reorganisation after the completion of the exercise in 2007. As at September 2005, there were one hundred and four (104) insurance companies and four (4) reinsurance companies before recapitalisation. At the beginning of the exercise in 2005, varying degrees of radical increased capital requirements, as shown in Table 1, were prescribed.

Table 1: Nigeria Insurance Companies Capital Base

CATEGORY	OLD CAPITAL BASE (2003) (N)	OLD CAPITAL BASE (2007 TILL DATE) (N)	INCREASE IN PERCENT (%)
Life Insurance	150 million	2 billion	1,223
General insurance	200 million	3 billion	1,400
Composite	350 million	-	-
Reinsurance	350 million	10 billion	2,757

The new minimum capital regime, which was to be complied with by the end of February 2007, changed the insurance industry considerably. Many companies were forced to merge in order to comply with the new minimum capital regime through mergers and acquisitions. Only 49 insurance and 2 reinsurance companies, out of the 104 insurance companies and 4 reinsurance companies in existence before the exercise, met the new capital requirement and were certified by the government in November 2007. Meanwhile, after a significant period of uncertainty in the industry, the number of insurance companies reduced drastically. The Nigeria insurance market as at January 2013 comprised 18 life companies, 34 non-life companies, 9 composite companies and 2 reinsurance companies (NAICOM, 2013). Most insurers have significantly increased their retentions and capacities. This is beneficial to the industry as it enable insurers to raise their capital according to the risks they underwrite, and to concentrate on businesses in which they have core competence.

The regulatory institution, NAICOM, is presently looking at the direction of a risk-based capital to further recapitalise insurance companies in accordance with the risks they underwrite. This is to ensure that insurance industry in Nigeria adequately address the gaps in risk management and supervision. In an effort to address the gaps in the risk management and supervision, NAICOM has decided to migrate from compliance-based supervision to rules-based supervision (Ayeleso, 2010). Moreover, the development of the new capital levels has enabled a number of Nigerian insurers to expand their interests into other regional markets; thus, enhancing the industry premium income and competitive advantage at the continental and global levels. Furthermore, there is an urgent need to address the challenges of improper conduct in the market. NAICOM has started addressing these challenges by published code of good corporate governance for the Nigeria insurance industry in 2009. Corporate governance is concerned with the role of stakeholders, and its impact on the collective welfare of society. OECD views the role of corporate governance as twofold: first, it covers the manner in which shareholders, managers, employees, creditors, customers and other stakeholders interact with one another in shaping corporate strategies; and second, it relates to public policy, and an adequate legal regulatory framework, which are essential for the development of good systems of governance (OECD, 2009).

The insurance industry is a major player and contributor to the nation's economic development. The industry is also crucial to sustainable development of a nation (Adeyele, 2011). Insurance is important to the national economy due to its economic and financial intermediation functions to household, businesses and government. However, the Nigeria insurance industry accounts for less than one per cent of the nation's Gross Domestic Product (GDP) (NAICOM, 2013). Modern society and businesses are threatened by higher risks than ever. It is therefore necessary that insurance firms' should develop and maintain a high level of ICT usage in order to meet the nation's insurance needs, to enhance their profitability and to contribute positively to the economy. This implies that there is a positive relationship between ICT and organisational activities (Wali, 2010). Recapitalisation has resulted in installing substantially better developed IT facilities in insurance companies in Nigeria (Ayeleso, 2010). Development and usage of ICT in the insurance industry is relevant as its foster flexible, time conscious and customer focused service delivery. ICT infrastructure can reduce transaction costs, and improve outputs of firms in various sectors of the economy, including insurance (Röller and Waverman, 2001). Thus, ICT enables insurance companies to explore the benefits of technological advancements to take timely decision to improve the Nigeria insurance industry competitive advantage (Pankajakshi and Shailaja, 2012). Likewise, ICT adoption can significantly impact the insurance industry by improving the mode of operation and development of range of services to customers; by creating multi-channel communication between the company and customers; and by actualising effective organisation and efficient management of customers' information (Caviello, 2008). Consequently, ICT, if adequately engaged by insurance firms, can ensure creation and maintenance of a flexible business network of inter-organisational

arrangements within the Nigerian insurance industry (Jaiswal, 2009). More interestingly, almost all insurance companies in Nigeria have internet, website and on-line real time e-insurance facilities which have improved the scope of insurance practice in Nigeria.

Considering the fact that the insurance sector is a major player and contributor to the nation's economic development, coupled with the apparent benefits of ICT in enhancing competitive advantage of the Nigeria insurance industry; the researcher's posed the hypotheses that:

H₀: There is no positive relationship between ICT adoption and insurance company profitability in Nigeria.

H₁: There is a positive relationship between ICT adoption and insurance company profitability in Nigeria.

V. METHODOLOGY

Both primary and secondary data were utilised for the study. The literature is the secondary source; while, the primary data was collected through survey - structured questionnaires. The study was conducted between July 2012 and January 2013 within Lagos metropolis. The population of the study consists of 49 insurance companies in Nigeria. The sample is made up of 18 insurance companies, representing about 37%, randomly selected for the study. The sample is quite adequate as a sample of 0.05 proportion of the population is believed to be satisfactory in making inferences (Amadi, 2005). 180 participants, 10 each from the 18 selected companies, were enlisted for the study. Out of the 180 questionnaires distributed; only 152, representing about 84% response rate, participated in the study.

The questionnaire was specifically designed to accomplish the objectives of the study. The questionnaire is divided into 2 sections, comprising 20 questions. The first section contains information on the respondents' age, sex, highest educational qualification, department/unit and position/level. The second section comprises 15 questions which measure the role of ICT in profitability of insurance companies in Nigeria, using a five points Likert scale: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The survey responses were processed with IBM Statistical Package for Social Sciences (SPSS) V19 Software. Descriptive statistics was adopted for data analysis; while, the hypothesis was tested with Pearson product coefficient of correlation (r). Coefficient of determination (R²) was also computed.

VI. RESULTS AND DISCUSSIONS

Of the 152 respondents, 82 (54%) were males; while 70 (46%) were females. Their age ranges from 19-58 years. More than half of the respondents' falls within 27-34 years (67.8%) age bracket; 8.6% were in 19-26 years age bracket; 15.8% were in 35-42 years age bracket; 5.9% were in 43-50 years age bracket; and 1.9% were in 51-58 years age bracket. Regarding their educational qualification; most of them (56.6%) have first degree (HND/BSc), whilst 32.7% had Master degree and other professional qualifications. The least qualified among them (10.7%) had National Diploma (ND).

The responses to section B questions, as shown in Table 2, indicated that majority of the respondents' perceived that ICT enhances insurance companies' operations and performance. Specifically the findings shows that: The development of ICT promotes good corporate governance in the Nigeria insurance; ICT facilitates timely information processing and distribution; development of ICT facilitates timely preparation and distribution of insurance policy documents; ICT positively impacts insurance companies performance; insurance companies employ IT experts to manage their ICT facilities operations; insurance companies have technical know-how to operate their ICT facilities; there is adequate internal control over operation of ICT in insurance companies; ICT enables insurance companies to delivery quality services to customers; ICT enhances the speed of insurance companies service delivery; and there is a positive relationship between ICT adoption and insurance company profitability.

However, the results also show that: ICT adoption is not a substitute for effective regulation of the insurance industry; insurance companies do not invest heavily on training of personnel on usage and handling of ICT facilities; insurance companies do not update their ICT facilities regularly; and ICT does not reduce paper work in insurance companies in Nigeria. Consequently, the regulatory authority (NAICOM) needs to strengthen its monitoring and supervisory activity to ensure effective regulation of the industry. Likewise, there is need for insurance companies to regularly update their ICT facilities; and invest more on training of personnel on usage and handling of ICT facilities.

Table 2: Statistics and percentage of responses (Section B)

	STATEMENT/QUESTION	SA (%)	A (%)	U (%)	D (%)	SD (%)	CUMM (%)
1	Development of insurance operations and adoption of ICT promote effective supervision of the industry by regulatory authorities	18.4	21.2	7.6	35.4	17.4	100
2	Development of ICT promotes good corporate governance in the Nigeria insurance	36.7	43.3	4.4	13.4	2.2	100
3	ICT facilitates timely information processing and distribution	58.6	41.4	0.0	0.0	0.0	100
4	Development of ICT facilitates timely preparation and distribution of insurance policy documents	42.2	57.8	0.0	0.0	0.0	100
5	ICT has positive impact on insurance companies performance	43.3	41.2	4.4	6.7	4.4	100
6	The cost of acquiring ICT in insurance companies outweighs its benefits	35.7	36.6	2.1	23.5	2.1	100
7	Insurance companies invest heavily on training of personnel on usage and handling of ICT facilities	9.1	32.2	5.1	53.6	0.0	100
8	Insurance companies employ IT experts to manage their operations of ICT facilities	43.1	43.3	4.4	6.7	2.5	100
9	Insurance companies have technical know-how to operate their ICT facilities	32.6	45.2	11.1	8.9	2.2	100
10	There is adequate internal control over operation of ICT in insurance companies	39.6	43.6	8.9	7.9	0.0	100
11	ICT enables insurance companies to delivery quality services to their customers	39.7	60.3	0.0	0.0	0.0	100
12	Insurance companies regularly update their ICT facilities and development	13.1	20.2	11.1	45.6	10.0	100
13	ICT enhances the speed of insurance companies service delivery	30.6	46.3	23.1	0.0	0.0	100
14	ICT reduces paper work in insurance companies	12.0	17.9	17.9	24.9	27.3	100
15	There is a positive relationship between ICT and insurance company profitability	43.0	57.0	0.0	0.0	0.0	100

Source: Field Survey, 2013

Key: SA = Strongly Agree; A = Agree; U = Undecided; SD =Strongly Disagree; and D = Disagree

Hypothesis Testing

H₀: There is no positive relationship between ICT adoption and insurance company profitability in Nigeria.

H₁: There is a positive relationship between ICT adoption and insurance company profitability in Nigeria.

The responses to question 15 (see table 2 above) were used to validate the hypothesis. All the respondents agreed (43% strongly agreed, and 57% agreed) that there is a positive relationship between ICT adoption and insurance company profitability.

Table 3: Correlations between ICT * Insurance Company Profitability

		ICT	Insurance company profitability
ICT	Pearson Correlation	1.00	.786**
	Sig. (2-tailed)		.000
	N	152	152
Insurance company profitability	Pearson Correlation	.786**	1.00
	Sig. (2-tailed)	.000	
	N	152	152

** . Correlation is significant at the 0.01 level (2-tailed).

The outcome shows that there is very strong positive relationship between ICT adoption and insurance companies' profitability in Nigeria, as shown in Table 1 and 2. The relationship is significant with a correlation coefficient (r) of 0.786 of 78.6% at 5% level of significant ($p < .05$). Since the correlation between ICT and insurance company profitability ($r = 78.6\%$) is significant at $p < 0.05$, the null hypothesis is rejected and alternative hypothesis is accepted. This affirms that the two variables are positively related in the population. This implies that ICT adoption enhances insurance companies' profitability in Nigeria.

Coefficient of Determination (R^2)

The correlation between ICT and insurance companies' profitability (r) is 0.786; then, the coefficient of determination (R^2) is $(0.786)^2 = 0.617798$. The outcome indicates that 61.78% of the variance of insurance company profitability can be explained by adoption of ICT. Thus, there is a very strong correlation between ICT adoption and insurance company profitability. The study, therefore, concludes that there is a positive relationship between ICT adoption and insurance companies' profitability in Nigeria. This is consistent with the findings on previous studies on ICT in Nigeria, which affirm that ICT usage considerably improved operations and performance of businesses in Nigeria (Osabuohien, 2008; Obasan, 2011).

The findings reveal that a positive correlation exists between ICT adoption and insurance companies' profitability in Nigeria. This implies that a marginal change in the level of the investment and adoption of ICT in the Nigeria insurance industry will result to a proportionate increase in the profit level. This suggests that the adoption of ICT by insurance companies in Nigeria will enhance their efficiency, their quality of service delivery, and their profitability. The major findings of the study as revealed by the results, as shown in Tables 2 and 3 above, can be summarised as follows:

- The development of ICT promotes good corporate governance in the Nigeria insurance.
- The adoption of ICT adoption is not a substitute for effective regulation of the insurance industry in Nigeria. Consequently, the regulatory authority (NAICOM) needs to strengthen its monitoring and supervisory activity in order to ensure effective regulation of the industry.
- ICT adoption facilitates timely information processing and distribution.
- Development of ICT facilitates timely preparation and distribution of insurance policy documents.
- Factors that influence the insurance companies' intensity of ICT usage include the personnel age, educational qualification, computer literacy and personnel training on the use of ICT facilities.
- ICT usage positively and significantly impacts the speed of operations and service delivery, productivity and profit level of the insurance companies in Nigeria.
- Insurance companies employ IT experts to manage their ICT facilities operations.
- Insurance companies in Nigeria have technical know-how to operate their ICT facilities.
- Insurance companies do not update their ICT facilities regularly; hence, there is need for insurance companies in Nigeria to update their ICT facilities regularly.
- Insurance companies do not invest heavily on training of personnel on usage and handling of ICT facilities. It is therefore necessary for insurance companies in Nigeria to increase their investment on training of personnel on usage and handling of ICT facilities.
- There is a positive relationship between ICT and insurance company profitability in Nigeria.

The implication of the findings for practice is that insurance companies in Nigeria should endeavour to regularly update their ICT facilities, in view of its impacts on quality of service delivery and profitability. This is necessary in order to be relevant in the rapidly changing technological world. Moreover, ICT literacy enhances the skills and abilities that advance the use of computers and related information technologies to meet personal, educational and organisational goals (Lowe and McAuley, 2002). Consequently, regular training should be given to their personnel to keep them abreast of the current innovations in the use of ICT to ensure that the industry contribute positively to the economy. This will further enhance insurance companies' efficiency and quality of service delivery in Nigeria.

VII. CONCLUSIONS

Development of ICT assists firms' to effectively integrate into the global market. The insurance sector is crucial to sustainable development of a nation. The study is significant in view of the need for insurance companies' in Nigeria to develop and maintain a high level of ICT usage in order to meet the nation's insurance needs, to enhance their profitability and to contribute positively to the nation's economy. The study examined the impact of ICT adoption on insurance companies' profitability in Nigeria. It identifies the imperatives for adoption of ICT to promote efficient and efficient service delivery in the insurance industry as a strategy for attainment of the profit maximisation objectives of insurance companies in Nigeria. Using structured questionnaires of 152 respondents from 18 insurance companies, an empirical analysis was undertaken to explore roles of ICT in enhancing quality of service delivery and profitability of insurance companies in

Nigeria. The data were processed with IBM SPSS V19 Software, and the hypothesis was tested with Pearson correlation. The outcome suggests that adoption of ICT by insurance companies can enhance their efficiency, their quality of service delivery, and their profitability. The implication of the findings for practice is that insurance companies should endeavour to update their ICT facilities regularly, in view of its impacts on quality of service delivery and profitability. The paper also highlights the need for regular training of insurance personnel to keep them abreast of the current innovations in the use of ICT to ensure that the industry contribute positively to the economy.

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