IFRS and XBRL: Synergies for 21st Century Financial Reporting

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Abstract: *The aim of the study is to appraise the importance of XBRL for the achievement of IFRS objectives, given the inability of Paper paradigm financial reporting in Hypertext Mark-up Language(HTML) and Portable Format(PDF) systems to automate and exchange data, thereby limiting the potentiality of the high quality standard(IFRS) to significantly improve attributes of information such as timeliness, Understandability and comparability of the performance of multiple companies and foreign markets for effective investment decisions. It was gathered from different authors that data in XBRL can be used interactively because it can be accessed, extracted and analysed automatically by a computer which increases both quality and timelines of analysis and by extension, investment decisions. So a combined IFRS and XBRL implementation approach can enable greater efficiency over reporting output to meet the information needs of the users. It is therefore recommended that the Federal Reporting Council of Nigeria (FRCN) should closely monitor how XBRL is adopted by regulatory bodies around the world, and plan its adoption accordingly for Nigerian companies to remain relevant in the global market.*

Key Words: *IFRS, XBRL, Financial Reporting.*

1. INTRODUCTION:

Loss of investor's confidence in the capital market due to some negative incidences bothering on corporate reporting has increased the need for greater transparency in financial reporting (Mukhatar, 2009). The objective of general purpose of financial reporting is to provide financial information about reporting entity that is useful to users (existing and potential investors, lenders and others) in making relevant and informed economic decisions (Idekwulim, 2014). This requires the information meet certain qualities, which are relevance, timeliness, Understandability and comparability (Ikpefan & Akande, 2012). These qualitative characteristics of financial reporting have long been the focus of accounting standards setters. To this extent, in 2001, the International Accounting Standard Board (IASB) worked on converging accounting standards, and produced a single set of global accounting standards (IFRS), for a transparent and comparable financial statements, with the belief that it would lead to greater market efficiency through the quality of the information, and be able to guide users in making relevant economic decisions. Meaning that the standards show greater relevance, to investors, compared to the national accounting standards Grosu, et al (2010)

The convergence of accounting standard has really stimulated investments and enabled cross border capital flows, resulting in growing demand for businesses to disclose more relevant information to an ever-wider group of stakeholders, on a more frequent and timely basis. The pertinent question is, will this fast spreading current worldwide reporting standard, alone be adequate to satisfy the particular financial information needs of the users, which are real time in nature. Considering financial scandal that is rampant now, investment community therefore has higher expectations than the reporting model allows. The community desires an information system, capable of providing information in the form enabling them to make decisions. The attributes of such information system must include the enablement to have quick access to necessary information (without delay), have possibility to analyze the established data entry, easily detect trends of planned and managed processes and have possibility to continuously communicate and discuss the established facts (Faboyedem, 2011), only then would current world movement towards one set of financial reporting standards (IFRS) be empowered (Hoffman, 2008).

The argument here is that the Paper paradigm financial reporting in Hypertext Markup Language(HTML) and Portable Format(PDF) systems and softwares are incompatible, and are structured for human consumption only, lacking the aid of advanced data exchange, integration and analysis technologies, to easily access multiple companies and foreign markets for accurate and reliable comparism. Thus, Debrecency & Farewell (2010) argued that the reporting system provide little or no support for automated extraction of key factors which is important in our connected world. Faboyede, et al (2016) concurred that the Internet has not yet provided a consistent way for users to extract and analyze data, including the information that companies disseminate in corporate reports. Without this, business reporting information on the internet is not immediately useable because there is no universal software, and neutral standards, for reporting, that have gained acceptance and incorporation into business information production and consumption software (Jones & Willis, 2003). This has prevented genuine cross platform communication and data sharing, and disabled snappy financial analysis and real time information (Faboyede, et al 2016). According to Hennieran (2006),

timeliness of financial information enhances relevance, in order words, undue delay in reporting could result in loss of relevance. Thus Grosu, et al (2010) pointed out that the credibility of the supplied information is not enough, these having also to be relevant, that is, to be useful to the investors in making decision to invest or in choosing the portfolio structure.

Given the cognitive and time constraints of human users the ability to process the financial statement becomes limited, thereby decreasing accessibility, understandability and breadth of knowledge of the position and performance of many entities and consequently undermining the transparency and objective of financial statements.

Research has shown that, compared to traditional reporting formats such as PDF or HTML, Extensible Business Reporting Language (XBRL), technology provides better financial reporting quality in terms of increased information transparency and efficiency (Kim et al. 2012; Perdana et al. 2015; Wang and Gao 2012). XBRL is a language for the electronic communication of business financial data, by providing the means of universal communication across forms of business information software. It promotes instant information exchange (Jones & Willis 2003), accessibility of financial information thus becomes open to a wider range of people more quickly, and greater efficiency and improved accuracy would be achieved in terms of information analysis. (Watson, 2009),

The developed countries as well as emerging economies around the world have recognized the critical importance of XBRL and are aggressively promoting its adoption in their respective jurisdictions. According to CalCPA, (2010) Companies representing more than 75 percent of the world' s market capitalization has tagged their financial information in XBRL and are sending this information to various government regulators, Including the SEC, China Ministry of finance and China Securities Regulatory Commission and Japan financial securities Authority. They went further to stress that XBRL is also mandated or used in regulatory filling program in Austrialia, Belguim, Canada, China, Denmark, France, Germany, Isreal, Japan, korea, Netherlands, Singapore, Spain, Sweden, Thailand and the United Kingdom to create greater transparency in the capital market. In order to exploit the full potentials of IFRS which supposedly have economic outcome, such as market liquidity, firms cost of capital and investment decision making, adoption of IFRS together with a technological language standard to promote data exchange and analysis is imperative.

Many studies have been carried out on XBRL, relating to the usefulness, perception, and its impact on financial reporting quality and market efficiency. For instance, Faboyede et al (2016), studied the concept and need for XBRL as well as its potential uses and challenges, the research found that there is an ongoing transformation in the way business is conducted and regulated world-wide and the onslaught of the information revolution has profound ramifications for corporate reporting information preparers and users. Lucian (2015), explored the perception and knowledge of Romanian accountants concerning XBRl. The study revealed that majority of accountants do not have knowledge of XBRL, but are open to the idea of voluntary XBRL, and also have a preference for an automated process for creation, editing, viewing and validation of XBRL instant files. Eriane, Ghano & Jama (2014) examined the perception of financial reporting preparers on a financial reporting mechanism via XBRL in Malaysia. Using questionnaire survey on 150 Malaysian accountants as representative of financial reporting preparers of various organizations in Malaysia, the study found that most preparers perceived that XBRL is compatible and subsequently benefits the organizations for decision-making purpose. Liu & Zhu (2016) investigated whether the comparability of financial statement structure has improved in the post-mandate XBRL period using 27,971 corporate filings from 10 industries for the period 2010-2014. The results show a significant, consistent comparability improvement in the post XBRL adoption period, providing empirical evidence of the positive impact of XBRL on enhancing financial statement structural comparability. Cong, Hao & Zou (2016) examined the impact of XBRL reporting required by the U.S Securities and Exchange Commission (SEC) on market efficiency. and found a synchronous increase in information asymmetry and trading volume. These are evidences of the need for joint adoption of IFRS and XBBL adoption for the achievement of accounting standards convergence goals.

The aim of the study is to appraise the importance of XBRL for the achievement of IFRS objectives, given the weaknesses of electronic Paper Paradigm financial reporting. Based on the efficacy of XBRL, we hypothesize that improvement in fundamental characteristics of useful financial reporting will differ significantly when IFRS and XBRL are jointly adopted than when IFRS is adopted, as a standalone. The study is anchored on Efficient Market Hypothesis (EMH) theory. Fama (1965) defines EMH theory as an efficient market for securities, that is, a market where, given the available information, actual prices at every point in time represent very good estimates of intrinsic values. XBRL as a search-facilitating technology, should improve the efficiency of information processing and create an efficient market. The findings in this study will shed lights to regulators on the need to provide more awareness and knowledge to quoted companies in the Nigerian Stock Exchange on the usefulness of XBRL.

2. CONCEPTUAL FRAMEWORK
Concept of Extensible Business Reporting Language
XBRL is a digital language that was designed to provide electronic format for business and financial reporting. It is an XML desired standard used for the analysis, exchanging and Reporting Financial and other business performance information (Rayner & Chaneller 2008). A technical supply chain standard for moving financial and business reporting

information into an interactive comparable, intelligent machine readable information format (Watson, 2003) the data can be used interactively because it can be accessed, extracted and analysed automatically by computer. Interactive data conveys the idea of something that a user can directly access and can perform its functions through a minimal intuitive interface of common availability. The interactiveness is made possible by attaching standardized tags to data within documents (financial statements) and other data sources (notes). The tags are defined and maintained in taxonomies, so taxonomy provides information about the tags organizes them so that they have meaningful structure (Glanluca,2009). The product of the tagging process (e.g., the tagged financial statements) is labeled an "instance document" (Plumlee & Plumlee, 2008). Tagging process consist of choosing relevant line item tag from the taxonomy and mapping them to financial figures. When a company reports a figure for annual revenue for example, that figure is tagged in a way that enables, almost any computer to immediately recognize and categorize it under the annual revenues tag (Mugglestone, 2009). In other words, the tags allow computer programs to sort their data and analyse relationship quickly and generate output in various formats. Once the tags have been assigned, it is then possible to extract only the desired information rather than having to download or print an entire document (Barbour, 2004).

Therefore data from companies flow to users via the web and other tools with all the information that the user needs to understand the fact (Debreceny &Farewell 2010) hence XBRL should enhance the distribution of financial and business information to all users and their ability to analyse information (Debreceny, et al 2005). This contextual information about data is called meta-data and XBRL provides a means for this meta data to travel together with the underlying information (Debrecency & Farewell 2010). The content sensitive feature of XBRL tags distinguishes XBRL documents known as instance documents from traditional documents (financial statements) formatted in HTML and PDF. So instance document contains the data of a business report, such as a financial statement and the taxonomy documents describes the financial facts used in the business.

Nonetheless XBRL is not about establishing new accounting standard but enhancing the usability of the ones that exist through digital language of business (Roohanis, 2008) thus it neither adds to the information that business must disclose nor changes the content of IFRS financial statement, rather it is optimized to achieve standardization of date and in this respect, provides all the features relevant to business and financial information concepts. This explains why Sudalaimuthu, & Haratharan, (2011) described it as a computer software language that is developed specifically for automation of business information required. George (2006) sees it as technology that support better generation, reporting and overall usage of the financial information, which eliminates the need for transcribing data from one software application to another. Providing an explicit semantic and machine readable representation of information found in business reporting in general and financial reporting in particular (Debreceny & Gray 2001).

XBRL for Interoperable IFRS Financial Statement

Interoperability is defined as the ability of systems to exchange and make use of information. (online dictionary, 2012) interoperability describes the extent to which systems and devices can exchange data and interpret that shared data such that it can be understood by a user. (Hismis Board, online dictionary 2013). These functionalities are lacking in our current reporting system, but are pivotal in our connected world for accounting data analysis and usability. The objective of general purpose financial reporting is to provide information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. (ACCA study text, 2011). For financial statements to be useful they must possess certain fundamental qualitative characteristics namely relevance and faithful representation that may be enhanced by comparability, understandability, verifiability and timeliness. In line with this, IFRS adoption is generally made on the basis of improvement in reporting quality and comparability across firms and countries for informed business decisions. However, the IFRS financial statement filled in traditional business reporting formats such as PDF and HTML files are like a display on the official website without actual usability. They are human readable only, self-contained and their information cannot automatically be identified or retrieved for computerized analysis or further processing, meaning that the computerized delivery is lost because the transmitted text must be used the same way a paper report is used (KPMG, 2007).

Presently to extract information user usually would walk their way through volumes of text and re-keying numerical data they want to analyse in a form acceptable to the application software. In other words, the financial statements are not interoperable suggesting that the unidirectional character of paper base reporting does not allow companies to satisfy the particular needs of financial information users. This basically is not helpful in this era when investors across the globe are demanding for accurate and reliable information that can be delivered promptly for effective allocation of resources. As internet becomes common and powerful the business would seek a commonly accepted and unique rule to rearrange all of these PDF and HMTL data, so that when they appear in the internet, various types of this information can be quickly recognized internationally both by people and machine. Thus the need to provide interoperable computer readable statement, that comply with the harmonized financial reporting standard (Wunder, 2008), a format that significantly enhances the speed of financial statement analysis by investors (Riordan & Storkenmaier 2009). The readability and interoperability features, will bring new type of benefits as processing figures becomes a task left of the computers. Thereby using computer tools to control the presentation and convert the presentation from one format to the other.

XBRL has the capability to automate, interpret and ensure overall usage of the financial information and eliminate the need for transcribing data from one software application to another. This is achieved by tagging individual items of data in such a way that other computers can understand the information and work with it. So user application would be able to interact directly with reported data suggesting that computers can recognize information in a fully tagged electronic document (XBRL document) select it, analyse it, store it, accurately exchange it with other computers and present it automatically in a variety of ways for users (XBRL international 2007). Consistent with this KPMG (2007) stress that, XBRL enables interoperability of data contained in disparate company reporting system, facilitating automatic information exchange among applications within the enterprise and others in the corporate reporting chain. Thus users   can effectively do their own re-ordering of the information to suit their own models and purposes. According to Cox, (2005) interactive date will dramatically improve the usefulness of the entire exercise.

The Role of XBRL and IFRS for the Comparability of Financial Reporting

Accounting is the language of business, while financial reporting is the medium through which the language is communicated. (Ikpefan & Akande 2012). If this is so, the business around the world cannot afford to be speaking differently to each other while exchanging and sharing financial results of business and trade to their international stakeholders (Adejola, 2011). IFRS was developed in the public interest, to provide a single set of high quality, understandable and uniform accounting, to enable better efficiencies in the capital market and for investors both individual and corporate, to be able to compare the results of different companies internationally as well as national, in making investment decisions (ACCA, 2011). To appreciate this, IFRS require a multifaceted view of business which is enabled by the ability to slice and dice information (Oracle White paper 2010). However, most representations of IFRS financial information are coded in unstructured HTML and PDF formats. These systems speak differently and do not allow for searching analysis or manipulation of information. According to Willis (2003), IFRS did not change the process of producing, reporting and analyzing company information thus the filling remains constrained by static data and cannot be processed directly by the recipient's software due to different formats between filer's report. So companies continually depend upon disparate systems to store and deploy much of the needed data (Willis, 2003).

Today analysts manually copy and paste financial information into their system or spend time paging back and front to find what they want. This is an error – prone process that introduces undesirable delays, consequently limiting the number of companies and detailed information needed for effective comparism that will yield shrewed investment decisions. This explains why Sudalamuthus & Haratharan (2011) remarked that there are thousands of companies releasing financial results on quarterly, interim and on annual basis, but there is no easy way to compare contents but for XBRL. The principal idea of XBRL is that if every supplier of information speaks a common language of disclosure by using the same taxonomy. The internet based language, will be a dictionary of data tags, that will define each tagged number in a financial statement (Rainey, 2009), marking every line item in a financial document, to a well deserved standard name.

The tagging process associates elements from XBRL taxonomies with financial items found in the primary financial statement as well as other financial disclosures (Plumee & Plumee 2008). The IFRS taxonomy contains tags for all IFRS disclosures, and the taxonomy is developed following a "Statement Approach" which effectively means that the taxonomy is developed on a standard by standard basis (e.g IAS 1, IAS 2 IFRS I, IFRS 2 etc). (Sudalamuthu & Haratharan, 2011) By providing the IFRS taxonomy the IFRS foundation seeks to address the demands for an electronic standard to transmit IFRS financial information with XBRL (CalCPA, 2010). Using the IFRS taxonomy, the data in a financial statement is linked to the IFRS accounting definitions to allow for effective comparism, because the key feature of XBRS is the ability to link reporting concepts, defined with XML schema to various related resources like multiple labels in different languages and/or for different purposes (Glanluca, 2009). So it is capable of use throughout the world whatever the language of the country concerned. Thereby addressing the issue of IFRS translation into various languages, which according to George, et al (2009) poses a threat to comparability.

By IFRS adoption, the outlook of companies is no more measured by local standard but by international standard. Now that more and more enterprise especially the listed companies have adopted this new accounting standard and the both propose a common referential, presentation format and a framework for the financial production, in order to eliminate actual territorial and international discrepancies, joint adoption of the two standards becomes imperative. Disparate business reporting procedures across business reporting jurisdictions becomes integrated. (Yan & Rostamzadah 2012), and inconsistent use of terminology is avoided (Muller, et al, 2012). Financial statements would then be easier to search and compare (Ahmad & Khan 2010) on a like to like basis (Roberts, 2004) across multiple documents of firms from different countries and across multiple reporting periods (Boritz, 2005). Investors, auditors and analysts can more easily locate and analyze desired information

XBRL and Fundamental Characteristics of Financial Reporting

The two fundamental qualitative characteristics of financial statements useful for decision making are relevance and faithful representation. Information is relevant if it is capable of making a different in the decision made by users, which in turn is dependent on its predictive value, confirmatory value or both (ACCA, 2011). Thus the relevance of information is

affected by its nature and materiality. By materiality, it means that every detail of a transaction capable of influencing decisions must be fairly disclosed. However, if every detail of a transaction is known, it may be too late to publish the information because it has become irrelevant. (ACCA, 2011) in other words, delayed information results in loss of relevance (Hennievan, 2006), the value relevance literature emphasized the need to create a business reporting model that is capable of providing information that users need to correctly assess companies' economic value. (Bonson, 2008). This underscores the assertions of Grosu, et al (2010) that the credibility of the supplied information is not enough but should also be useful for investors in making the decisions to invest or in choosing investment portfolio structure.

XBRL is fundamentally about decision making (Coffin, 2011). Users are looking for timely, accurate and complete information to reduce the uncertainty related to their investment capital. Unfortunately, the electronic paper format of financial reporting lack automation of information necessary to support timely decision making. Hungry to make company reports more relevant and useful for decision making, the financial service industry, the largest business information producers and consumer in the world, have recognized, supported and advocated widespread XBRL adoption (Roberts, 2004). The technology is developed specifically for automation of business information requirement. The basic financial information only needs to be prepared once and is available in a machine readable format so that automated processing and access is facilitated, simplifying information distribution in a timely manner (Muller – Wickop, 2012). ACCA (2011) pointed out that information reported on a timely basis when not all the aspects of the transaction are known may not be complete or free from error. This is quite in place, but at the same time investment decision is not an annual event, and users of information differ. Some may be focused more on real time company specific disclosures and others interested in detailed, consistent and comparable data.

XBRL is considered a viable option because it does not only allow automation of information but investors can also use software to validate data electronically received and consequently reduce errors and inaccuracies. According to Plumlee & Plumlee (2008) XBRL provides a method of expressing semantic meaning as a means to validate the content of an instance document against the semantic meaning based upon taxonomy defined relationship. Thus, XBRL increases both quality and timelines of analysis and by extension investment decisions (Jones & Willis 2003). So striking a balance between timeliness and provision of reliable information as expressed by ACCA becomes unnecessary, because, each group of users is able to obtain information they need to make their own decisions (Bonson, 2008).

XBRL and Enhancing Qualitative Characteristics of Financial Statement

Comparability and understandability are considered the most significant of the enhancing qualitative characteristics of a useful financial statement. The absence of a common set of accounting and financial reporting standards makes it difficult to compare financial information prepared by entities located in different parts of the world. Today many organizations all over the world are adopting IFRS, a set of methodologies and disclosures requirements for the preparation and presentation of financial statements with the goal of implementing a common set of accounting standards worldwide (Magglestone, 2009) According to IASB conceptual framework (2010) information about a company is more useful if it can be compared with similar information about other companies (and with similar information about the same company for another time), because it enables users to identify and understand similarities and differences among them. Consequently, facilitate investment and other economic decisions across borders, increases market efficiency and reduces the cost of raising capital in a global economy that keeps increasing at a sky rocketing rate (Adejola, 2011).

However, realizing the full benefits when the filling is still in the conventional electronic paper format is most unlikely. Given the ever increasing volume of data in multiple companies the users will have to go through lengthy and error prone process like reconciliation, retyping of data, analyses of excel spread sheets. Jones & Willis (2003) aligned that extracting information directly from company reports is difficult and time consuming, requiring substantial time and costs of manual information gathering from lengthy reports that can total over 100 pages. One of the main goals of developing XBRL is to make it easier and more efficient for investors and analysts to search and analyze financial data across multiple reporting periods and companies. Companies reporting under common taxonomies provide easy access to specific details that are immediately comparable in effect this can stimulate investments and enable cross boarder capital flows. Similarly, Robert, (2004) posits that faster access to greater volumes of data will improve the range and quality analysis that can be performed by the consumer of financial statement. For these reasons comparability maybe considered the most important for an interoperable financial statements.

Many factors potentially impede comparability of accounting figures. For instance, organization reporting incentives vary significantly across firms, industries. countries and political regions. The standards themselves offer guidelines not specific rules that provide firms with substantial discretion. Thus Hennievan (2006) stressed that the financial analysts must be capable of using the financial statements in conjunction with other information in order to reach valid investment conclusion.

Interestingly, XBRL has a role to play here. For example, the total set of elements included in the taxonomy is larger than the set of elements required to be disclosed by the IFRS guidelines. The additional elements are included because they are either commonly observed disclosures under IFRS or are required to ensure structural integrity of a financial statement (Robert, 2004). Consistent with this Bonson, et al (2008) stressed that companies may create an extension to the original

taxonomy with the appropriate elements and inter-relationships for their special reporting requirements without loss of comparability and integrity of data. So if a user can link a piece of financial information to the underlying concept or definition, then he or she has a better chance of receiving accurately the message that the sender is trying to convey. The user can then assess many companies, make deductions and take decisions.

Understandability of information improves the efficiency of comparability for investment decision making. Understanding business performance requires an appreciation of the big picture and not single line items such as turnover or profit. As increasingly more information is being generated, the volumes of reports simply continue growing, these pages have thousands of facts, working with them requires the users to have detailed knowledge of the context both about the accounting or other techniques aspects of the report and particular reporting entity. In order to break through this information overload and promote optimum usage of information, the internet capabilities need to be optimized, which means presenting the financial statement in a way other users will identify and interpret all the appropriate financial information items in a semantically meaningful way to understand it. According to Debrecency, (2001), the limitations of HTML, makes it difficult for users to find the information they seek and Gunn, (2007) argued that locating good quality information among the amount of information available is one of the bigget challenges of internet. According to Debreceny & Farewell (2010) XML overcomes the limited ability of HTML to represent semantic meanings of concepts, similarly Clinton & White (2004) pointed out that taxonomies define the information so that it may be understood across systems, support wide set access to the information by the analyst community. Thereby giving these supply chain participants a greater range of information which today is typically bound deep within the financial notes (Ball, 2006).

3. CONCLUSION:

The requirements of financial reporting have been adjusted to satisfy disparate stakeholders need through IFRS, but inability of the conventional electronic paper format to automate, exchange and present data such that it can be understood by users, limit the potentiality of the high quality standard(IFRS) to significantly improve attributes of information (such as relevance, fair presentation, comparability and understandability for users of to have better decision making as well as restoring the confidence of investors in the aftermath of financial crises, which have damaged the credibility of financial reporting. Hence XBRL is perceived as a technology that can enhance the interoperability of financial data. So a combined IFRS and XBRL implementation approach can enable greater efficiency and control over reporting output to meet the information needs of the users.

4. RECOMMENDATION:

The Federal Reporting Council of Nigeria (FRCN) should closely monitor how XBRL is adopted by regulatory bodies around the world, and plan its adoption accordingly. So that Nigerian companies will remain relevant in the global market.

FRCN should create adequate awareness among companies through seminars and workshops about XBRL, so as to the reporting format as an opportunity to review and improve their financial consolidation and reporting system especially now that the investing community is in great demand for a timely and transparent data.

REFERENCES
Journals
1. Ahmed N and khan N. A (2010). Global convergence of financial reporting. *Journal of arts science and commerce. www.researchsworld,com Vol1(1) 40-45.*
2. Ball 1. (2006) XBRL, Automation and enhancing the credibility of financial reporting and auditing. www.ifac.orgl./iball-XBRLautomation
3. Bonson, E. Cirtigo V. and Escobar, T. (2008). The role of XBRL. In enhanced business reporting (EBR). *Journal of emerging technologies in accounting* vol. 5(1) 161-173
4. Brandshaw, M and Miller G.(2008) will harmonizing accounting standards really harmonize accounting? Evidence from non U.S firm adopting U.S. GAAP. *Journal of accounting auditing and fiancé* 23(2). 233-264.
5. Clinton E, White J.R (2010) Jim's sporting Goods. The more to XBRL Reporting. *Issues in accounting education* Vol 25(3) 1-9 Publication of the American accounting association.
6. Coffin Z (2001) The top ten effects of XBRL: the future of internet reporting circa.europn.eu/ire/dsis…. /topten effect of XBRL-2001-2coffin.
7. Debrecenry, R and Gray G. (2001). The production and use of semantically rich accounting reports on the net. XML and XBRl. *International journal of accounting information system* 2(1) 47-74.
8. Debreceny R. and Farewell, S. (2010) Adios, Airways: An Assignment on mapping Financial Statement to the U.S GAPP XBRL Taxonomy. *Issues in Accounting Education* Vol. 25(3) 465-488 A publication of the American Account Association.
9. Debreceny R.S (2005) Financial reporting in XBRL on the SEC's EDGAR system: a critique and evaluation. *Journal of information systems*. Vol 19(2) 191-210

10. Dhole, S. Lobo, G. J., Mishra, S., & Pal, A. M. (2015). Effects of the SEC's XBRL mandate   on financial reporting comparability. International Journal of Accounting Information Systems (19), 29-44.

11. Engel, P., Hamscher, W., Shuetrim, G., Kanno, D.V, & Wallis, H. (2004). Extensible Business Reporting Language (XBRL) http://www.xbrl.org/Specification/XBRLRECOMMENDATION-2003-12-31+Corrected-Errata-2004-04-29.pdf.

12. Faboyede, S. Nwobu, O. Akande, O. Oladipo, O.(2016). Extensible Business Reporting Language (XBRL): A Tool for Accounting Education in the 21st Century Journal of Accounting, Finance and Auditing Studies 2(3) 85-97

13. Faboyede, S.O. (2011) Environmental Protection and sustainability Reporting Extensible business reporting Language (XBRL) interactive data to the rescue. Journal of Sustainable Development and Environmental Protection. 1(2) 6-17

14. FASB.(2010).Conceptual Framework for Financial Reporting, http://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1176157498129&acceptedDisclaimer=true

15. Garbellotto. G. (2010). Extensible business reporting language (XBRL). What's in it for internal auditors.www.theija.org/000/extensible business/phix,net/co/

16. George, R (2006). The impact on XBRL on financial reporting. www.financialexecutives.org

17. Grosu V, Hlalius, E. Lancu E, Petris, R. and Socoluc M. (2010) The role of the XBRL standard in optimizing the financial reporting. *Journal of computing.* Vol2(2). 44-48

18. Gunn, J. (2007) XBRL: Opportunities and Challenges in enhancing financial reporting and assistance process. *Current issues in auditing.* .1(1) A36-A43

19. Heinemann, G. (2006) *International Financial Reporting Standards.* A practical guide. Fourth edition Washington D.C. The international Bank for reconstruction and Development/ the World Bank.

20. Hodge. T. D., Kennedy, J. T and Manies C.A (2004). Does search facilitating technology improve the transparency of financial reporting? *Accounting review* 79(13) 687-703

21. Hoftman, C (2008). What is XBRL? http://xbrl is quarespace. Com/storage/whatisxbbl-2008-05-17 PDP http://www.ifac.org./mediacenter/?gfnode/view/73

22. Ikpefan O.A & Akande, A.O (2014) International Financial Reporting Standard (IFRS): Benefits, obstacles and intrigues for implementation in Nigeria. *Research Journal* of Finance and Accounting Vol. 3(1).143-151

23. Jones, A. & Willis M. (2003). The challenge of XBR: business reporting for investor. Balance Sheet. 11(3) 29-37

24. Josiah M. et al (2013) Accounting Standards in Nigeria, the Journey so far Research Journal of Business management and Accountancy Vol. 2(10) 2-18.

25. Kim, J. W., Lim, J. H. & No, W. G. (2012). The Effect of First Wave Mandatory XBRL Reporting Across the Financial Information Environment. Journal of Information Systems 26(1), 127-153.

26. Mugglestone P. (2009) IFRS and XBRL their impacts on group financial reporting, challenges, choices and transformative technologies. Sapinsider.niopuds.com,www.insider learningnetwork.com

27. Mukhatar A. (2009) Nigerian Banks: The challenges of Adopting International Financial Reporting Standards. Zenith economic quarterly *A publication of Zenith Bank Plc* Vol. 4 (2) 20-31

28. Oracle white paper (2010). Preparing U.S companies for the transition to IFRS. A guide for JD Edwards customers. http://www.oracle.com/us/products/applications/062073.pdf.

29. Perdana, A., Robb, A., & Rohde, F. (2015). An Integrative Review and Synthesis of XBRL Research in Academic Journals, Journal of Information Systems 29(1), 115-153.

30. Plumlee, D.R. & Plumlee M.A (2008) Assurance on XBRL for financial reporting. *Accounting horizons* Vol 22(3) 353-368

31. Ragothaman S. (2012) Voluntary XBRL adopters and firm characteristics: An Empirical Analysis. *The international Journal of Digital Accounting Research* Vol.12. 93-119

32. Robert D. (2004) "Whats in it for me?". XBRL and the producer of business reporting. http://www.xbrl.org/business/companies/xbrl-whats-in-it-for-me.pdf

33. Shin, R.Y (2003). XBRL Financial Reporting and Auditing File:///c:/users/ad/downloads/sba.ctmfiles/financialplaln-fc.php-f-

34. Sudalaimuthu, S.& Hariharan, R. (2011). The role of XBRL and IFRS in Financial Reporting. *International Journal of Multidisciplinary Research.* Vol1 (4), 89-106

35. Tsakumis, G.T.I Campbell S.R, Doupruk T.S (2009) IFRS: Beyond the standards. https://www.journalofaccountancy.com/issues/2009/feb/ifrsbeyondthestandards.html

36. Wang, Z. & Gao, S. 2012. "Are XBRL-Based Financial Reports Better than Non-XBRL Reports? A Quality Assessment," *International Journal of Economics and Management Sciences* (6), 513-518.

37. Graham Ward (2004) How XBRL can enhance the credibility of Auditing financial statements. https://slideplayer.com/slide/4711102/.

38. Watson C. (2009) XBRL Innovation is about to explode httpllsintianet/xprl.pho.
39. Willis,M. (2003) XBRL: Blue print for a revolution. Prince water house Coopers https://www.pwc.com/gx/en/xbrl/pdf/xbrl_blueprint_for_a_revolution.pdf
40. Wunder, H. (2008)" The status of International Business and Financial Reporting harmonization" working paper http://ssrb.com/abstrct=613622
41. XBRL. International (2007) what is XBRL? http://www.xbrl.org/whatisXBRL.
42. Yang, S; Liu, F; & Zhu (2016). Impact of XBRL on Financial Statement Structural Comparability. *Proceedings of the Thirty Seventh International Conference on Information Systems,* Dublin. Stevens Institute of Technology School of Business Research. . https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2881547
43. Zhu, H. (2011) Interoperability of XBRL financial Statement in the U.S. *International Journal of E-Business Research* 7 (2) 19-33.

Textbooks
• Adejola, A.P (2011). XBRL, practical implementation guide for preparation and presentation of financial statements, Nigeria, *White Knight consulting publications*.
• ACCA (2011). *Financial reporting (international and United Kingdom)* London, BBP learning media Ltd.
• Idekwulim, P. C. (2014). Teach yourself IFRS. Lagos, PICCAS GLOBAL CONCEPT.