Implications of XBRL Adoption in Nigeria: Perception of Professional Accountants

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Abstract
XBRL is a recent development in the world of financial reporting. In view of its emerging preeminence in some countries of the world contrasted with the apparent backwardness of most African countries in respect of this move, this study sought to examine the implications of XBRL adoption in Nigeria. Adopting a survey design, mean scores and t-test statistic were employed to compare the perceptions of Nigerian professional accountants on the benefits and challenges of XBRL adoption in Nigeria. All these were based on questionnaire responses elicited from 54 out of the 100 copies of questionnaire generated for the study. The findings of the study, among others, revealed that there were perceptual differences among the respondents on the two issues. It is suggested that professional, national and sponsored international XBRL awareness and training would be of the essence if Nigerian Accountants are to find a space on the global map of professional relevance.

Keywords: XBRL, XBRL adoption in Nigeria, Financial Reporting

1. Introduction
In recent years, standardization of financial reporting has been the reechoing emphasis in the world of the accounting profession. The emphasis has been, and still is, that financial report is a source of informed decision-making and as such it needs to be prepared and communicated in a standardized way to satisfy the qualitative expectations of the diverse information users. In line with this drive, the adoption of XBRL (extensible Business Reporting Language) based financial reporting is gradually attracting a growing global advocacy. XBRL is an open technology standard for financial reporting, based on XML (extensible Markup Language) standards. These standards facilitate the development of XBRL taxonomy in any language (Balaji, 2012). It also facilitates the encoding of financial documents in a format that both humans and computers are able to read and analyse (Hampton, 2013). Ghani and Muhammad (2014) also describe it as a standard based method of preparing and publishing corporate reports in a variety of formats for decision-making purpose.

Charlie Hoffman, in 1998, spearheaded the development of this revolutionalizing stride towards a universally uniform electronic financial reporting. XBRL has since then steadily metamorphosed from XBRL 1.0 in July 2000 to XBRL 2.0 in December 2001 and to XBRL 2.1 released in December 2003. As observed by Balaji (2012), several countries of the world, through the support of their respective regulators, accounting bodies and stock exchanges have adopted XBRL as a replacement to paper/PDF filings. In 2004, China became the first country to formally adopt XBRL. In Europe, eye-opening array of government wide and cross-border applications that can share consistently structured XBRL data for both public and private companies have been developed. Expectedly, the US is also not left out of the XBRL move (Kernan, 2008). In Africa, a Deloitte 2012 CFO Survey revealed that 3% of South African companies had implemented it while a further 9% were considering doing so in 2013 (Hampton, 2013). Nigeria, which has adopted IFRS, however, appears not to be making significant progress along this line in spite of the fact that the country’s two professional accounting bodies: Association of National Accountants of Nigeria (ANAN) and Institute of Chartered Accountants of Nigeria (ICAN) are recognized bodies in the international accounting community. This paper seeks to compare the perception of Professional Accountants in Nigeria on the benefits and challenges of XBRL adoption in Nigeria.

To this end, the paper is presented in 5 sections: Section 2 addresses the review of literature relevant to the subject. Details on the research methodology adopted for the study is presented in Section 3. In Section 4, the study data collected is presented, analyzed and interpreted. Ultimately, the summary and concluding remarks and recommendations based on findings are addressed in Section 5.

2. Literature Review
2.1 XBRL
XBRL is a standards-based way to communicate and exchange business information between business systems. XBRL is the open international standard for digital business reporting, managed under the auspices of XBRL International whose responsibility is to improve reporting in the public interest. XBRL is currently used in over 50 countries and supported by more than 600 member organizations, from both the private and public sectors worldwide (XBRL, 2015). According to Doolin and Troshani (2007), XBRL is an XML-based non-proprietary open standard that is used for the exchange, preparation, and publishing of financial information across different
computer hardware platforms, software applications and accounting standards. The main objective is to eliminate labour intensive, time consuming and error-prone practices currently used in producing and disseminating financial reports. XBRL consists of four major components: XML standard, XBRL taxonomy, XBRL instance documents and XBRL specifications (Müller-Wickop, Schultz and Nüttgens, 2010). XBRL is XML based. XML is a mark-up language that defines a set of rules for encoding documents which is both human-readable and machine-readable. XML was developed with the goal of reaching simplicity, generality, and usability over the Internet.

XBRL Taxonomies are the reporting-area specific hierarchical dictionaries used by the XBRL community. They define the specific tags that are used for individual items of data, their attributes and their interrelationships (XBRL, 2015). Taxonomies are based on accounting standards and regulatory reporting regimes. It can be developed for specific countries, accounting jurisdictions, regulatory entities and even particular organizations. Different taxonomies will be required for different business reporting purposes across jurisdictions. Some national jurisdictions may need their own reporting taxonomies to reflect local accounting practices and other reporting regulations. Many different organizations, including regulators, specific industries or even companies, may require taxonomies or taxonomy extensions to cover their own specific business reporting needs.

XBRL instance document is a list of facts or data points associated with conceptual information defined by the associated taxonomy. The actual financial data is represented in an instance document. Within the instance documents data points are also linked to context and unit information. An instance document is similar to the programming of a bar code reader. XBRL specifications enable the definition, preparation and exchange of reporting information across organizational boundaries. It does so in a manner that can be validated at every point in the process. This is made possible through a number of interrelated technical specifications developers.

2.2 Benefits of XBRL Adoption

Benefits derivable from XBRL are enormous, they include information accessibility and security (Boritz and No, 2005), qualitative financial reporting (Vasarhelyi, Chan and Krahel, 2010; Bovee et al., 2002; Pinsker and Shaomin 2008; Pinsker et al. 2005), standardization of information (Wagenhofer, 2003; Baldwin and Trinkle, 2011), transparency (Hodge et al. 2004), comparability (Blankespoor, 2012; Kothari and Verdi, 2009), understandability, relevancy, reliability and time efficiency (Doolin and Troshani, 2007; Vasarhelyi, Chan and Krahel, 2010; Wang and Gao, 2012; Tijani and Ogundeji, 2014).

Boritz and No (2005) stated that information accessibility and security are among the major benefits of XBRL. Information is often referred to as the lifeblood of any organization. That simply lends credence to the fact that information, more so, that which is financial in nature, is a very sensitive issue to an organization and hence, must be handled with utmost care. An effective system of generating and communicating financial report should be one that effectively and efficiently regulates access to information or better put, ensures adequate security and protection for the data of the entity. Having in mind that XBRL is to a certain extent internet-dependent.

Vasarhelyi, Chan and Krahel (2010) assert that XBRL reporting has the capability of providing qualitative financial information and ensures transparency of accounting and financial data to investors, analysts, government and other stakeholders by standardizing the structure and content of financial statements. Financial reports represent an entity’s financial performance and position, depicting them in words and numbers. In other to meet the standard of usefulness expected by the various users, this representation must exhibit qualitativeness in the course of its generation, presentation and communication. In other words, the format chosen to express financial information must be one which enhances the qualitativeness of the information by ensuring that all necessary information relevant to permit informed economic decision about the reporting entity is fully and clearly (without ambiguity) depicted in a comprehensible manner devoid of any errors, omissions or distortions which could undermine the transparency or impede the reliability of the report generated thereby. The tagging of every piece of information relevant to financial reporting will result in a consistent and stable system that make the collection of data for and the preparation of financial reports effective and efficient (Bovee et al. 2002; Pinsker and Shaomin 2008; Pinsker et al. 2005.). The tagging and resulting automation of report generation will make the creation of deceptive financial statements more difficult and thereby improving transparency (Hodge et al. 2004).

One of the objectives of financial statement preparation is the provision of a basis for trend, cross-sectional, and industry based comparison of an entity’s operations. FASB (1980) (as cited in Franco, Kothari and Verdi, 2009) define comparability as “the quality of information that enables users to identify similarities and differences between two sets of economic phenomena”. Information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity for another period or another date. Comparability therefore, has been entrenched as one of the core requisites of transparent and fair reporting. It must however be noted, that the extent of comparability of a financial report is a function of several factors which include the manner of presentation and communication of such report.
Blankespoor (2012) reiteraled that in view of the uniquely identifiable and standardized data tags system of XBRL, comparison of data across time and across firms is facilitated thereby resulting in decreased cost of information acquisition and integration for decision making. While XBRL is not likely to eliminate differences in GAAP interpretation it will make the generation of reports under different standards possible through the tagging of every event (Baldwin and Trinkle, 2011). It will result in the standardization of information content (Wagenhofer 2003). Companies will be able to easily access the necessary data to compile reports under different sets of standards (Coffin 2001), and the need for an extensive and expensive conversion project to keep multiple sets of books will not be necessary. XBRL is intended to eliminate time-consuming, labour intensive and error-prone practices which are currently used for generating and exchanging financial reports (Doolin and Troshani, 2007).

Financial reports are instruments of informed decision-making for the different categories of stakeholders. This, however, is to the extent to which the information expressed in the report is understood by the users. Put differently, a financial report’s relevance is to a large extent influenced by the degree of understandability of the information it conveys. Based on the understanding that decisions are time bound, the time taken to generate, disseminate and access financial report information is of the essence. Any system which generates a well packaged report that is not timely would definitely impair the relevance of such a report. In their assessment, Vasarhelyi, Chan and Krahel (2010) pointed out that the use of XBRL based reporting could help users to overcome the time-taking task of having to manually pull or request data from a source and which made the generation of reports clumsy and laborious. Besides the timesaving, Blankespoor (2012) noted that by providing information in machine-readable format, XBRL data filings could help reduce processing costs for investors, facilitating comparison across firms and time, and highlighting contextual information and relations between data items.

It is worthy of note that any material distortions or errors arising from the pattern of communicating and disseminating financial reports go a long way to undermine the reliability of such reports; any decision taken thereupon will definitely be a misinformed one. Wang and Gao (2012) (as cited in Cottin and Mathern, 2001) asserted that using XBRL technology could obtain higher volume of specific information in shorter time period and avoid human errors. Tijani and Ogundeji (2014) reiterated this viewpoint pointing out that in addition to its multi-format information generating capability, XBRL ensures that the information so generated is error free and it also permits automated information scrutiny procedures.

2.3 Challenges of XBRL Adoption

Despite high prospects and the supporting empirical evidences of XBRL adoption as highlighted above, a number of concerns have been raised. Doolin and Troshani (2007) acknowledge that the adoption of XBRL entails uncertainties. They acknowledge that environmental factors were more prominent in explanations of the limited adoption of XBRL. They find that lack of available support for XBRL in the form of software tools and taxonomies standards and small market size, were considered important factors negatively influencing XBRL adoption. Boritz and No (2005), noted that prevailing information access regulation and control approaches which consist of a combination of user IDs and passwords and point-to-point, transport-level security for data transmissions over the Internet such as SSL/TLS, S-HTTP, and VPN though useful, have their limitations and may not be able to guarantee the integrity of the information. Boritz and No (2008) found two-thirds of the XBRL instance documents in the SEC’s Voluntary Filing Program contain validation exceptions, inconsistencies, and errors. Boritz and No (2009) discovered several challenges such as misspellings, inconsistent labels, missing totals and redundant elements in XBRL reported documents. Debreceny et al. (2010) examined US SEC XBRL filings and observe an average of 1.8 errors per filing in a sample, which has a median error of $9.1 million per filing with 4 the maximum exceeding $7 billion.

According to Dunne, Helliar, Lyrner and Mousa (2009), concerns about XBRL include the integrity and security of the audit report and the information to which it relates, and the practices for presenting non-audited and audited reports on websites. The inclusion of an audit report is seen as fundamental for indicating that the financial information presented is a true and fair view of the financial performance of the company. Roberts (2011) acknowledged that auditing pose a challenge to XBRL adoption. Audit has the major task of undertaking an objective examination of the reports generated by an entity in order to express an opinion as to whether such reports paint a true and fair view of what the financial performance, position of the entity is. In doing this, the manner of reporting adopted is of the essence. It must not be such as will not impede effective audit nor will it increase unreasonably, the cost of audit. Hence, Roberts (2011) advised that audit and assurance firms should be exploring the potential impact and planning on how to build the skills and acquire the tools that are needed to provide assurance over XBRL documents produced by clients.

Mohammed et al., (2009) narrated that factors such as learning cost of additional software and hardware components; lack of experts to support its adoption; large set-up cost and other human efforts hinder the adoption of XBRL especially in evolving economies. Shin (2003) observed that XBRL reporting calls for
acquisition of sound knowledge and technical expertise on XBRL application. According to him, auditing of XBRL based financial reports would require that the auditor be able to design procedures that will determine whether the specifications, taxonomy, and instance documents are appropriate for financial statements. Such an examination, he stated, would involve considering XBRL details in order to ensure that they are up to date and properly applied. However, Shin (2003) opined that when financial information is streamed in real time, the risk of error in the financial statements could become higher, depending on the controls in place regarding changes in that data.

2.4 XBRL Adoption in Nigeria

Taking a cue from the adoption of IFRS in Nigeria, The truth still remains as we speak, that the expected adoption level of this standard to date has not been achieved due to challenges which range from the cost of training or acquiring competent personnel level of competence armed with the wherewithal to effectively implement the standard. These developments are also relatable to the issue of XBRL adoption in Nigeria. More so the usual general initial aversion to change borne out of the tendency of rigidity on old practice could also be a factor. According to Doolin and Troshani (2007), a survey conducted by Pinsker (2003) suggested that due to the relative newness of XBRL, the auditing, accounting and financial reporting sectors have relatively little knowledge and experience on the reporting language. To turn the table around positively, it might be necessary for the stakeholders to adapt the XBRL adoption framework as suitable within the Nigerian context. These framework elements as outlined by Ernst and Young (2009) are:

- Educate and assess — the time to learn more about XBRL and better understand the specific regulatory requirements and adoption timeline.
- Prepare for the rule — the “think, design and build” phase, which includes mapping of financial statement information to the appropriate XBRL taxonomy (e.g., IFRS, SEC).
- Comply with the rule — Create, review and submit the appropriate XBRL documents to the regulator.

Majority of publicly listed entities in Nigeria publish their periodic reports via Portable Document Format (PDF) until recently when the X-Issuer was launched in March, 2013 by the Nigerian Stock Exchange. The X-Issuers’ Portal allows listed companies to submit their reports online. The output formats are capable of being standardized into layouts such as Hyper-Text-Markup-Language (HTML) or Portable Document Format (PDF). It is a platform directed towards improving transparency and accountability. Tijani and Ogundeji (2014) conducted a study to determine whether the introduction of the X-Issuer can discourage adoption of XBRL in Nigeria. The result of the survey clearly showed, that the introduction of X-Issuer by Nigerian regulatory authority is highly unlikely to discourage the deployment of XBRL in the near future. Respondents were also of the opinion that the perceived benefits identifiable to XBRL would encourage its adoption. However, the findings hypothesized that listed companies in Nigeria are not likely to adopt XBRL voluntarily. Respondents were of the opinion that Nigerian companies currently lack the operational and technical skills to deploy the technology.

Ogundeji, Oluwakayode and Tijani (2014) conducted a survey to examine the factors critical to the adoption of XBRL in Nigeria. The result reflects positive effect of perceived usefulness on intention to use XBRL. They also discovered that output quality has positive effect on perceived usefulness and job relevance has positive effect on perceived usefulness. Onyebuchi (2014) observes that found there is need for greater accountability and transparency in Nigeria and this could be achieved by using XBRL. This suggest that the use of XBRL is very relevant to the corporate reporting function and prospective users in Nigeria perceive it to be beneficial.

3. Methodology

Beside the study’s secondary data which were sourced from journals, periodicals and other publications, a survey was undertaken to facilitate a quicker and systematic collection of reliable primary data via a vis the administration of hard-copy questionnaire to judgmentally selected professional accountants. Focusing on Nigeria as the case in point, the essence of the survey was to assess the perceptions of these professionals on certain key-empirically identified benefits and challenges of implementing XBRL in other to evaluate the similarities or otherwise, of their perceptions. These respondents were comprised of members of the two major professional accounting bodies in Nigeria: ANAN and ICAN. Out of the 100 copies of questionnaire generated for the study, 54 were properly completed and turned in for the study analysis. 39 of the respondents were ICAN members while 15 were members of ANAN. With respect to professional specializations, 19 of the respondents specialized in Financial Accounting; 5 in Oil & Gas Accounting; 4 in Management Accounting; 5 in Tax Consultants; 3 in Management Consulting; 1 each in Forensic Accounting, Auditing and Environmental Accounting while the remaining 15 of them specialized in more than one area of Accounting.

Their responses were subsequently analyzed using the means scores and the t-test statistic.
4. Data Analysis and Results

In line with the study objective, the two null hypotheses were stated thus:

H0: There is no statistically significant difference in the perception of Nigerian professional accountants on the benefits of XBRL adoption in Nigeria.

H0: There is no statistically significant difference in the perception of Nigerian professional accountants on the challenges of XBRL adoption in Nigeria.

Tables 1 and 2 present the mean scores, t-test statistic for the respondents’ perception on the benefits, and the challenges of implementing XBRL, respectively.

Table 1: The distribution of respondents’ perception on benefits of XBRL adoption

<table>
<thead>
<tr>
<th>One-Sample Statistics</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>XBRL enhances comparability across firms</td>
<td>54</td>
<td>4.389</td>
<td>.9208</td>
<td>20.741</td>
<td>.000</td>
<td>1.38889</td>
</tr>
<tr>
<td>XBRL improves understandability of financial reports</td>
<td>54</td>
<td>4.185</td>
<td>.5519</td>
<td>15.778</td>
<td>.000</td>
<td>1.18519</td>
</tr>
<tr>
<td>XBRL enhances relevance of financial reports for decision making</td>
<td>54</td>
<td>4.074</td>
<td>.69640</td>
<td>11.334</td>
<td>.000</td>
<td>1.07407</td>
</tr>
<tr>
<td>XBRL increases reliability of financial information</td>
<td>54</td>
<td>3.814</td>
<td>.93312</td>
<td>6.417</td>
<td>.000</td>
<td>.81481</td>
</tr>
<tr>
<td>XBRL reduces the cost of generating financial reports</td>
<td>54</td>
<td>3.611</td>
<td>.94003</td>
<td>4.777</td>
<td>.000</td>
<td>.61111</td>
</tr>
<tr>
<td>XBRL saves time on generating information</td>
<td>54</td>
<td>4.018</td>
<td>.87934</td>
<td>8.512</td>
<td>.000</td>
<td>1.01852</td>
</tr>
<tr>
<td>XBRL improves the efficiency of the financial reporting process</td>
<td>54</td>
<td>4.092</td>
<td>.68041</td>
<td>11.800</td>
<td>.000</td>
<td>1.09259</td>
</tr>
<tr>
<td>XBRL facilitates continuous reporting</td>
<td>54</td>
<td>3.777</td>
<td>.94503</td>
<td>6.048</td>
<td>.000</td>
<td>.77778</td>
</tr>
<tr>
<td>XBRL facilitates continuous auditing</td>
<td>54</td>
<td>3.556</td>
<td>.98415</td>
<td>4.148</td>
<td>.000</td>
<td>.55556</td>
</tr>
<tr>
<td>XBRL decreases data redundancy issues</td>
<td>54</td>
<td>3.611</td>
<td>.97935</td>
<td>4.585</td>
<td>.000</td>
<td>.61111</td>
</tr>
<tr>
<td>XBRL improves the ease of accessing/retrieving information</td>
<td>54</td>
<td>4.148</td>
<td>.76250</td>
<td>11.065</td>
<td>.000</td>
<td>1.14815</td>
</tr>
<tr>
<td>XBRL makes it more difficult to issue misleading financial statements</td>
<td>54</td>
<td>3.222</td>
<td>1.14376</td>
<td>1.428</td>
<td>.159</td>
<td>.22222</td>
</tr>
</tbody>
</table>

At a 95% level of confidence and 53 degrees of freedom, the test statistic results in Table 1 above apparently indicated that there were significant differences in the respondents’ perception on the assertions that XBRL, if implemented in Nigeria, would enhance cross-firm comparability (t = 20.741, p = .000); improve understandability of financial reports (t = 15.778, p = .000); enhanced relevance of financial reports (t = 11.334, p = .000); increased reliability of financial information (t = 6.417, p = .000) reduce the cost of generating financial reports (t = 4.777, p = .000); time savings in information generation (t = 8.512, p = .000); improved efficiency of financial reporting process (t = 11.800, p = .000); continuous reporting (t = -1.728, p = .000); facilitate continuous auditing (t = 4.148, p = .000); decrease data redundancy (t = 4.585, p = .000); and ease of...
information access and retrieval (t = 11.065, p = .000. However, the respondents did not differ significantly in their perception as to whether the adoption and adoption of XBRL in Nigeria would make it more difficult to issue misleading financial statements (t = 1.428, p = .159). The mean response of 3.2222 indicated that they were largely undecided about the issue.

In Table 2, although the perceptual disagreement among the respondents, over the challenges of data integrity protection (indicated by a mean score of 2.8333), was found to be statistically insignificant (t = -1.102, p = .276); the interestingly uniform p value of .000 indicated that there were significant differences in the perception of the respondents on the challenges of: XBRL software exorbitance (t = 8.210); much effort and resources needed for staff training (t = 6.979) considering the high technical expertise needed to use XBRL (t = 5.529); complication of auditing (t = -2.424); dearth of XBRL knowledgeable professional accountants in Nigeria (t = 9.089); and the initial aversion to change which would affect XBRL adoption in Nigeria (7.751).

On the basis of these findings, the null hypothesis is hereby rejected. The study, therefore upholds that there is a statistically significant difference in the perception of Nigerian professional accountants on the benefits and challenges of XBRL adoption in Nigeria.

5. Summary and Concluding remarks
The paper which centered on the implications of XBRL adoption in Nigeria sought to compare the perceptions of Professional Accountants in Nigeria on the perceived benefits and challenges of implementing it in Nigeria. Sources in the course of the study revealed that XBRL is one of the recent financial reporting standardization moves across the globe, which has been successfully implemented in countries in Europe and Asia with a reported level of effectiveness. The survey of the perceptions of these Nigerian professionals, who represented virtually all the specialized fields of Accounting, lent credence to the opinions of Vaserhelyi, Chan and Krahel (2010); Blankespoor (2012) and Wang and Gao (2012) among others, on the implications of financial reporting via XBRL. These included the capacity of XBRL to enhance financial report comparability across firms, the understandability and relevance of XBRL-based financial reports to decision making, issue of time efficiency in respect to information generation, accuracy and reliability of XBRL-generated information as well as information accessibility and security. Conversely, these professionals raised concerns over the monetary and manpower cost implication of setting up, running and maintaining the XBRL system as well as the dearth of XBRL knowledgeable professionals to drive the innovation in Nigeria. Driven by these findings, it is suggested that just as they responded commendably to the IFRS drive, the Nigerian Accounting Professional bodies: ANAN and ICAN should initiate and sustain a well thought out awareness and training structure for new and existing members to get them exposed to the workings of XBRL and how it can aid the work in the various specialized fields of Accounting. Sponsored international training programmes, seminars would not be out of place. The way things are going, Nigerian professional accountants should explore and plan on how to build the skills and acquire the tools that are needed to help them obtain and maintain a strong international relevance. Organizations could be enlightened to appreciate the fact that the benefits of XBRL reporting would ultimately be a good enough payback for the initial cost of adoption.

References


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