E-BUSINESS CONFLICT RESOLUTION: THE ROLE OF XBRL, THE NEXT-GENERATION DIGITAL LANGUAGE OF BUSINESS REPORTING

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ABSTRACT

Conflict Resolution (an intervention aimed at alleviating or eliminating electronic discord through conciliation) as a business theme is more important than ever in today's fast paced world of e-business and globalization. The significance of an efficient financial reporting and the Internet in human lives cannot be understated. Investors and users of the Internet need accurate and reliable financial information that can be delivered promptly to help them make informed financial decisions. The Internet embodies the importance of technology, its role in resolving disputes, and its impact on the increasing globalization of business, information, and culture. XBRL means Extensible Business Reporting Language. It is an open specification which uses Extensible Markup Language (XML) based data tags to describe financial statements for both public and private companies. It uses accepted financial reporting standards and practices to exchange financial statements across all software and technologies, including the Internet. It is a twenty-first century digital business reporting language which allows software vendors, programmers, intermediaries in the information preparation and distribution process and end users who adopt it as a specification to enhance the creation, exchange, and comparison of business reporting information. This paper, using the secondary data methodology approach suitable for large expository research, presents the advent of the XBRL technology and framework, its history and why it is essential. It reveals the relationship between XBRL and emerging e-standards, highlights the XBRL as a vital support for e-business, and showcases the largest XBRL e-government project in the world. This research finds that XBRL streamlines the financial information supply chain that includes public and private companies, the accounting profession, data aggregators, the investment community and all other users of financial statements. Findings also show that XBRL offers several key benefits like technology independence, full interoperability, efficient preparation of financial statements and reliable extraction of financial information. This work recommends that organizations/investors in every industry, regulatory bodies, professional associations, government, and educational institutions must embrace the XBRL in order not to suffer obsolescence and uncompetitiveness.

Keywords: Conflict Resolution, XBRL, data aggregators, secondary data methodology, XML, distribution process.

1. INTRODUCTION

The electronic age is changing the way financial information is prepared and disseminated (Rezaee and Hoffman, 2001). In today's world of e-business, organizations use e-commerce and related technologies plus processes to develop, expand, or enhance business activities. They carry out business transactions by electronic means, not using paper but utilizing communications infrastructure and the internet. The use of the internet implies that small

companies can act like large companies and vice versa, fundamental change in infrastructure, need for constant change, big opportunity as well as big threat. The significance of the internet in today's living cannot be understated. The Internet embodies the importance of technology, its role in resolving disputes, and its impact on the increasing globalization of business, information and culture (Fazzi, 2005). Conflict Resolution in business is more important than ever in today's fast paced world of e-business and globalization (Business Executive Training and Consulting, n.d.) It has become imperative that successful e-business organizations will not just be posting information on the web site but find ways to attract customers, drive down costs, and deliver services. In the new economy, the growth engine for e-business and for economic growth is more and more related to innovation, software development, alliances, branding in cyberspace and the ability to create, capture and transfer knowledge. Thus, key elements in the value stream of business have become investment in software, intangibles, and intellectual capital. The importance of reporting is found in the ability to know what the business is doing at any given point in time, react quickly to market shifts and competitive threats and remain in tight control while empowering employees to make informed decisions more quickly. It is against the background of the need for accounting to meet the needs of e-business along the line of the finance function managing the value creation, getting the capabilities in place, and ensuring consistency, that the need to consider and engage the eXtensible Business Reporting Language (XBRL) becomes paramount (Sylph, 2000).

The accounting profession has the opportunity to develop a performance measurement system that addresses both value creation and the value realization processes. With such a system, management can be helped in tracking progress in the value creation cycle and providing an early warning information system so that corrective actions can be taken quickly and effectively when things do not go as planned. The challenge of developing such methods, measures and reporting frameworks has been addressed by the far reaching initiative of Extensible Reporting Machine Language known as XBRL. XBRL enables reporting that leverages the internet and the eXtensible Markup Language. It makes possible effective access and analysis of business reports and improves corporate communications with stakeholders. XBRL allows software vendors, programmers and end users to enhance the creation, exchange, and comparison of business reporting information. Business reporting in this context includes, but is not limited to, financial statements, financial information, non-financial information and regulatory filings such as annual and quarterly financial statements. This XBRL document defines XML elements and attributes that can

be used to express information used in the creation, exchange and comparison tasks of business reporting. The XBRL consists of a core language of XML elements and attributes used in document instances. Abstract elements in this core language are replaced by concrete elements in XBRL instances and these abstract elements are defined in taxonomies. XBRL consists of a language used to define new elements and taxonomies of elements referred to in document instances and the relationships between taxonomy elements (Hoffman and Pryde, 2008).

According to Filipek (2007), XBRL is an Internet-based information standard that enables a seamless flow of information within the entire business reporting supply chain, both for private and public organizations and for internal and external reporting. It is a business standard for using Extensible Markup Language (XML) which is a language that enables information to be exchanged by the use of tags. XBRL allows organizations to exchange information using a specific set of taxonomies (i.e., documents that describe key data elements to be included in an XBRL document) and instance documents (i.e., a collection of data elements that are included in those taxonomies). XBRL is a common data language used across the entire supply chain, from reporting individual business events and financial results inside an organization to reporting to external stakeholders. XBRL, through the use of a tagging scheme for all business reports, enhances the usability of business data by eliminating the need to re-key, thereby minimizing the risk of error (Hamscher, 2005). XBRL is a next generation digital reporting language and the penalty for not adapting it will be obsolescence, non-competitiveness, and limited service capabilities (Willis, n.d.). To date, several taxonomies have been issued, including the XBRL Global Ledger (GL) that is a single, holistic framework of taxonomies representing data fields in a typical enterprise resource planning (ERP) system. By getting global agreement on the different taxonomies, XBRL enables organizations to exchange financial information without any problems. It was created to help companies save costs and streamline their processes for collecting and reporting financial information as it was developed because it was actually nearly impossible to take information from a financial report and reuse it. Although a lot of the use of XBRL has been regulator-driven by the finance sector, there is just as much of a business case for organizations to use XBRL for internal purposes. This is because, as the name implies, XBRL can be used for all kinds of business reporting. XBRL is not a proprietary software product but an open standard developed by XBRL International Inc., a not-for-profit consortium of more than 500 companies and agencies worldwide that build XBRL and promote its adoption.

This article paper introduces the XBRL concept, its history, the need for it, its benefits, its functional framework, and its relationship with electronic standards that have emerged. It projects XBRL as a vital twenty-first century support for e-business and presents the case study of the largest XBRL e-government project in the world. It concludes by underlining the fact that XBRL is the next-generation digital language of business reporting that will help every organization, in every industry, around the world to internet-enable its business reporting, its business analysis, and thus reduce their costs and risks and increase their ability to make more informed decisions.

2. A SHORT HISTORY OF XBRL

The XBRL was conceived in April 1998 by Charles Hoffman, a Certified Professional Accountant (CPA) with the firm Knight Vale and Gregory in Tacoma, Washington, who investigated how XML could be used for electronic reporting of financial information. Charles began the development of prototypes of financial statements and audit schedules using XML. The AICPA High Tech Task Force, after it was alerted about the potential of using XML in financial reporting created, crafted, and perfected the product description proposing the creation of a prototype set of financial statements using XML. In October, 1998, the prototype project was funded and by December, 1998, it was completed. In 1999, the prototype was presented to the AICPA, the business plan was created, funding was granted by AICPA Board of Directors, experimental prototype was created, a steering committee was formed by twelve companies, and the specification was announced.

In April 2000, the XBRL technology was unveiled during the first XBRL press conference held at the midtown offices of Morgan Stanley Dean Witter in New York City. In July of same year, the first specification (1.0) was released for commercial and Industrial companies in the United States and the formation of an international organization to position for rapid global expansion and adoption of XBRL was announced. Also in 2000, the XBRL was acknowledged by Bill Gates and the Security and Exchange Commission Chairman as the next revolution on the Internet. In 2001, the first, second, and third XBRL international conferences took place in London, the U.S., and Sydney respectively. XBRL announced that its specification had been modified to reflect World Wide Web (W3C) recommendations so that all XML efforts could be consistent and use common software tools. Other developments which took place in the year 2001 include: the announcement of development effort to create XBRL for General Ledger; the formation of first set of XBRL country jurisdictions; the recommendation of XBRL for government use by key U.S.

government agencies; the introduction of XBRL 2.0 into the streets; and the successful piloting of XBRL by Bank of America using real client information.
By December 2001, the membership of XBRL had grown to 130 companies and international organizations (XBRL International, n.d. (a)). XBRL has grown into a global consortium that represents more than 400 organizations and government across the financial and business reporting supply chain (Watson, 2006). As of 2006, more than 8,200 U.S. financial institutions were using XBRL to submit quarterly reports to banking regulators while financial regulators in many industrialized countries have implemented and are still implementing similar projects. For example, XBRL activities are occurring in countries such as United States, Canada, Australia, China & Hong Kong, Japan, Malaysia, New Zealand, Singapore, Taiwan, Germany, India, Ireland, Netherlands, Nordic Federation (Denmark, Norway, Sweden), South Africa, Spain, Switzerland, and United Kingdom (Hannon and Roohani, 2001). Nigeria is yet to join the train as there no recorded XBRL activities as of today. XBRL and the U.S. taxonomies that contain U.S. Generally Accepted Accounting Principles (GAAP) tags are currently supported in document-creation tools from Blast Radius, CaseWare IDEA, Fujitsu, Hitachi, Rivet Software, Semansys and UBmatrix. Oracle, SAP, AccPac and other ERP vendors are able to export XBRL, making it easier to import data into powerful analytic software from such companies as SAS.

3. THE NEED FOR XBRL

There are many pervasive supply chain problems that exist today due to the lack of an open information standard and the reliance on proprietary formats to exchange information between business parties. These problems include the distortion and omission of information, high data access and analysis costs, untimely reporting and analysis processes, poor information quality, and lack of implicit relationships between reported concepts and relevant resources. XBRL addresses these information problems and enhances the work of internal auditors by enabling them to do more at a lower cost. XBRL is not an accounting standard but a means of communicating current and future business reporting standards. The XBRL has been named as the next-generation digital language of business that can ensure the integrity of electronic financial reports (Bidgoli, 2004; Hannon, 2003).

The need for XBRL is determined by the multiple uses it could be put into. XBRL is versatile. It can gather information from diverse systems, add information extracted from outside sources like a data base or credit rating agency, and combine the information into formats that can be supplied to, or accessed by, groups like regulators, stockholders, analysts, internal management

teams, tax authorities (Sylph, 2000). It is the way to turn data into strategy. The purpose of the the XBRL specification lies in the intention to benefit four categories of users namely: 1) business information preparers, 2) intermediaries in the preparation and distribution process, 3) users of this information and 4) the vendors who supply software and services to one or more of these three types of user. The overall intention is to balance the needs of these groups creating a standard that benefits to all four groups. Generally, when it has become necessary to make specification design decisions that might benefit one community at the expense of another, it is the needs of end users of business information that take precedence over other needs. XBRL majorly improves the business report product, facilitates current practice, and does not change or set new accounting or other business domain standards, even though it should facilitate changes in reporting over the long term range.

XBRL provides users with a standard format in which to prepare reports that can subsequently be presented in a variety of ways. The standard format also enables the exchange of information between different software applications, permits the automated, efficient and reliable extraction of information by software applications, facilitates the automated comparison of financial and other business information, accounting policies, notes to financial statements between companies, and other items about which users may wish to make comparisons that today are performed manually. Further, XBRL facilitates "drill down" to detailed information, authoritative literature, audit and accounting working papers as well as includes specifications for as much information about the reporting entity as may be relevant and useful to the process of financial and business reporting and the interpretation of the information(Hoffman and Pryde, 2008).

XBRL supports international accounting and other standards as well as languages other than the various dialects of English while it is extensible by any adopter to increase its breadth of applicability. Its design encourages reuse via incremental extensions such as exemplified in the specification of the format of information that would reasonably be expected in an electronic format for securities filings by public entities. XBRL facilitates business reporting in general, and is not limited to financial and accounting reporting. It focuses on the genuine information needs of the user and adheres to the spirit of reporting standards that avoid the use of bold, italics, and other stylistic techniques that may distract from a true and fair presentation of results. As a result, there is no functional requirement that XBRL documents support any particular text formatting conventions. XBRL instances transmit a set of facts and there is no constraint on

how much or how little the instances contain as a single fact can form the entire content of a valid XBRL instance. This thus provides a great deal of flexibility and is meant specifically to achieve the goals of allowing XBRL to be reused within other specifications and for application software needing to extract data from otherwise arbitrarily formatted documents (See the appendix for tables 1 and 2 on further XBRL stakeholder benefits).

4. THE XBRL FRAMEWORK

XBRL is an open standard for the structured and standardized collection, generation, and delivery of financial and corporate information. XBRL enhances XML with business semantics and rules. XBRL defines a syntax in which a fact can be reported as the value of a well defined reporting concept within a particular context. In XBRL terminology, a concept is a definition of a reporting term. The syntax enables software to efficiently and reliably find, extract and interpret those facts. The XBRL framework splits business reporting information into two components: XBRL instances and taxonomies. (Hoffman and Pryde, 2008). XBRL instances contain the facts being reported while the taxonomies define the concepts being communicated by the facts. The combination of an XBRL instance and its supporting taxonomies, and additional linkbases constitute an XBRL business report. While a taxonomy defines reporting concepts, it does not contain the actual values of facts based on the defined concepts. The fact values are contained in XBRL instances and are referred to as "facts". Besides the actual value of a fact, such as "cash is 500,000", the XBRL instance provides contextual information necessary for interpreting the fact values. For numeric facts, the XBRL instance also documents measurement accuracy and measurement units. A taxonomy is comprised of an XML Schema [SCHEMA-1] and all of the linkbases contained in that schema or directly referenced by that schema. The XML schema is known as a taxonomy schema.

The relationship of XBRL to other works is such that it (XBRL) uses several World Wide Web Consortium (W3C) recommendations, XML 1.0 [XML], Namespaces in XML [NAMESPACES], and refers directly to XML Linking [XLINK]. It also relies extensively on the XML Schema [SCHEMA-1] and [SCHEMA-2] recommendation. The scope of XBRL does not include transaction protocols. It includes financial reporting and contemplates extensive detail in the representation and use of accounting conventions, which distinguishes it from these other financial arena XML specification-based efforts such as OAG (Open Applications Group), OMG (Object Management Group), FpML (Financial Products Markup Language), finXML (Financial XML), OFX/IFX (Open Financial Exchange) and ebXML (e-Business XML).

5. XBRL FUNDAMENTALS

According to IFRS Foundation (2011), XBRL uses computer scientists' concept of metadata. In brief, metadata is data about data. XBRL uses technology called XML Linking (XLink). Values between tags (for example <Asset>100</Asset>) are found in instance documents. Information on what an Asset is and how a computer should treat it is provided in schema files. Relationships are described in linkbases which are segregated into different categories depending on what is described and how it is done. In XBRL, a taxonomy consists of the core part which is a schema (or more schemas) and linkbases. The schema is the part that contains definitions of elements (such as Assets) whereas linkbases provide relationships between them. An XBRL schema stores information about taxonomy elements (their names, ids and other characteristics). It can be regarded as a container where an unstructured list of elements and references to linkbase files are described.

Namespaces are used to distinguish between elements that are unique to a schema. An element is a business concept (such as Assets, Liabilities, Income…) presented to a computer in a way that it could learn its main characteristics. Namespaces look like Internet addresses (for example http://xbrl.iasb.org/int/fr/ifrs/) but they are not. The example below describes simplified (prefixes have been omitted) definition of the element Assets:
<element name="Assets" id="Assets" periodType="instant" balance="debit" abstract="false" substitutionGroup="item" type="monetaryItemType"/>.
The most important representations here are name, type, balance and period type.

A calculation linkbase contains definitions of basic validation rules, which apply to all instance documents referring to a particular taxonomy. The idea of the calculation linkbase is to improve the quality of an XBRL report. The definition linkbase provides taxonomy creators with the opportunity to define different kinds of relations between elements. There are four standard types of relationships supported by the definition linkbase. A reference linkbase presents relationships between elements and external regulations or standards. There are several types of references that could be provided for each element. Label linkbase enables the ability to create an element that is assigned with labels for different languages. There may also be different labels for different purposes. All labels are stored and linked to the elements in a label linkbase. XBRL allows the creation of different labels depending on the context in which an element will be used.

Taxonomy extensions are built for different purposes mainly by regulators, local authorities or simply by reporting companies. There are several rules that have to be obeyed while building extension taxonomy. The most important one states that the extension should not physically modify the content of any of the files of the base taxonomy. This is usually made impossible by locating the base taxonomies on their website which prevents other users from making changes to the files.

Discoverable Taxonomy Set (DTS) contains one or more taxonomies i.e. a number of schemas together with linkbases related to them. This term was developed as taxonomies became more complicated and more closely related to each other.

Footnotes appear on instance documents and provide additional information for some of the elements. If for example, in a business report, several concepts refer to the statement "For more information see Disclosures on Assets", it is possible to create linkages between them and a footnote element containing this block of text.

6. XBRL AND THE EMERGENCE OF E-STANDARDS

According to Hannon and Roohani (2001), e-Standards are fundamental to the XBRL concept. HTML is the standard that enabled the web's first 'Big Step' while XML is the web's next 'Big Step'. And XBRL is XML-based while it is uniquely focused on financial reporting. There are over 200 XML-Based Specifications and Protocols that exist. Examples include: RosettaNet – computer company supply chain and trading webs; OBI - Open Buying on the Internet (retail e-commerce); FpML - Financial Products (Derivatives, Swaps, FX); ACORD XML - Insurance industry information exchange standards derived from EDI; and UN/CEFAC = EBXML. Organisations regulating accounting/auditing reporting standards include Accounting Standards Board (ASB), International Accounting Standards Committee (IASC), Financial Accounting Standards Board (FASB), International Federation of Accountants (IFAC), Security and Exchange Commission (SEC), and Territory Institutes like Institute of Chartered Accountants of Nigeria (ICAN). Influential electronic business standards include World Wide Web-W3C, OASIS; UN/CEFAC; T (ebxml), xml.org, RosettaNet, and ACORD.

7. XBRL AS A SUPPORT FOR E-BUSINESS

The explosive growth of the Internet is not only changing the way companies conduct their business, but also promises to forever alter the way they communicate business performance. E-business encompasses any business that uses e-commerce and related technologies and processes to develop, expand or enhance its business activities. The age of interactive data is here to stay. The XBRL adds reporting to e-commerce. The XBRL emerging technology solves the challenges of a manually intensive, error-prone and inefficient method of analyzing and organizing a client's information. XBRL as a language for the electronic communication of business and financial data is revolutionizing business reporting around the world. XBRL complements any e-business XML language and also plugs into XML standards such as IRML, RIXML, NewsML, PRISM, OeBF, MPEG-21, etc. It increases the interoperability of disparate software, thus making information directly exchangeable across all software applications. The XBRL provides major benefits for those who prepare, analyze and communicate business information and offers cost savings, greater efficiency and improved accuracy and reliability to all those involved in supplying or using financial data. The public is increasingly becoming daily aware of the XBRL as a viable solution to help both companies and investors make smarter financial decisions. The XBRL protects investors and ensures that markets function best when all the information that market participants need is available to them when they want it, and in a usable form.

XBRL enhanced business reporting will provide users with the breadth of information they require at the speed they need to be successful in today's economy. This is because companies are empowered to more efficiently disseminate their financial information to the end user in a reliable, accurate and consumable way. XBRL saves costs, streamlines the processes for collecting and reporting financial information, and eliminates the delay in the gathering of critical information by regulators for benchmarking and monitoring. It offers greater efficiency as well as improved accuracy and reliability to all those involved in supplying or using data. XBRL is what makes it possible to use the EBR framework effectively. An XBRL system would help regulators do their jobs better and give banks a better gauge of their competitors. It is instructive to note that the users of the XBRL language include participants in the global and jurisdictional financial information supply chain (e.g. companies, accountants, regulators, analysts, investors, aggregators, distributors and others who create and use financial information) as well as vendors who provide software and services to them.

XBRL is able to support e-business because of its key benefits of Integrated Enterprise Resource Planning (ERP) and E-Business Solution, Responsive and Open Communication (new opportunities can be capitalized on by taking advantage of common standards and the open platform of the Internet), and Consistent and Efficient Exchange of Information (elimination of manual re-keying of information ensures data integrity and frees up valuable resources). XBRL greatly enhances existing and new e-business strategies (Microsoft Business Solutions, 2002).

8. HOW XBRL AIDS CONFLICT RESOLUTION IN E-BUSSINESS ENVIRONMENT

According to Reiss (2001), e-business primarily stands for internet enabled business as the enabling process is based upon the application of internet technologies (Intranets, Extranets) and related standards (HTTP, HTML, XML, CORBA, etc). E-business covers several levels which include contract-based transactions with customers (commerce), mutual support by knowledge transfer (community), bi/multilateral exchange of information (communication), and access to data (information). Conflicts arising from the challenges posed by e-business (such as high-speed skyrocketing boom, slow and retarded diffusion, roller coaster-ups and downs, dramatic recession and decline) are tackled successfully with the evolution and revolution of XBRL. Critical success factors for e-business comprising cost, convenience, commerce (profitability), effectiveness, efficiency, connectivity, diversification, risk sharing etc. are all provided for by the nature of the XBRL. The XBRL framework makes possible simple, transparent, and effective processes for global business reporting. This is because the focus areas of XBRL include: semantic framework, meta-model for defining business process, a set of re-useable core components (common business semantics), infrastructure, transport, routing, packaging, collaboration protocol profiles/agreements, shared repository network, company profiles, business process models and related message structures. XBRL is like e-business. Interactions between different organizations are made possible. Within an organization, semantics are no issue. International Financial Reporting Standards (IFRS) provide a strong legal framework for XBRL semantics. Likewise the United States GAAP (Generally Accepted Accounting Principles) and the International Accounting Standards Board (IASB). Organizations/users involved in e-business are able to build their own taxonomy with the use of XBRL (Raman, 2005).

XML is considered critical to the success of e-business. It has separate tags for style and content, allows users to create their own tags or codes, describes the

structure and content of document, and enables the control of how the document is presented. Extensible business reporting language (XBRL) is based on XML. XBRL tags the data of computerized business and financial reports with an identification code or marker that stays with the data when the data are moved or altered. The tags can be added using a flee add-on program or customized software-tagging tools. When a company takes a set of financial statements and translates them into XBRL using available software, data tags are added to the document that describes the content in a standard way. For example, there is a standard data tag to identify accounts receivable and another to identify inventories. When -- and if -- all financial statements are published on the Web in XBRL, analysts will be able to download the statements from many companies into a database. Because standard data tags are used, the database will automatically identify any financial statement line item from each company, regardless of where it appears in the document or how it is described. As electronic financial reporting continues to evolve, XBRL is emerging as a candidate for a markup language that will standardize data transfer (Rezaee and Hoffman, 2001).

9. XBRL AND E-BUSINESS CONFLICT RESOLUTION DEVELOPMENTS IN NIGERIA

Government agencies and ministries in Nigeria have been saddled with the task to keep more accurate records in the future so as to enable government manage resources more effectively. It was acknowledged that this will be possible by leveraging technology (e.g. electronic payments system) and its associated programs not only to enhance [the government's] service delivery but to advance and sustain the growth of the economy (EDGAR, 2010).

The Association of National Accountants of Nigeria (ANAN) had been an XBRL International Inc. Corresponding Member for about a year, with 3 of its members nominated to work with other volunteers within the XBRL consortium. The Association was founded in 1979 and Chartered in 1993 as the second professional Accountancy body in Nigeria. Its professional membership strength stands at about 15000 as at beginning of August 2010. It is a member of Nigerian Accounting Standards Board (NASB), an Institutional member of International Association for Accounting Education and Research (IAAER). The focus is to incorporate XBRL and the related IFRS-Taxonomy into the training curriculum of its students at the Nigerian College of Accountancy Jos, Nigeria, where the students average about 3000 per year.

Meanwhile, The Chartered Institute of Taxation of Nigeria (CITN) the

professional body that regulates the practice of Taxation in Nigeria is in working relationship with ANAN to promote XBRL in Nigeria, while Tysog Consulting coordinates activities towards the evolution of XBRL Nigeria Jurisdiction (XBRL Planet, 2010). The Covenant University in Ota, Ogun State also plans to run XBRL enlightening workshops in conjunction with informed international academics and local professional bodies in accounting and finance in 2011.

10. XBRL TECHNICAL INDEX

This is about the most important technical documents on XBRL. The technical index enables the user to locate the documents that are most relevant to him. The user is also enlightened on publishing specifications defining how XBRL works and a range of guidance and support on how XBRL may be implemented and used. Specifications provide the fundamental technical definition of how XBRL works. There are requirements for new specification modules. It is recommended that new implementations of XBRL should follow the latest version of the main Specification, version 2.1 (XBRL International (n.d. (b)).
Taxonomies are dictionaries used by XBRL. There are rules provided on how taxonomies should be created. The Financial Reporting Taxonomies Architecture (FRTA) document guides the creation of taxonomies under version 2.1 of the Specification. It sets out recommended design architecture and establishes rules and conventions which help make taxonomies more usable and efficient. There is the FRTA Conformance Suite which provides tests to verify that software applications comply with the Financial Reporting Taxonomies Architecture document. Instance documents are XBRL files representing the data in financial reports. The Financial Reporting Instance Standards (FRIS) document guides the creation of instance documents under version 2.1 of the Specification. Its rules facilitate the analysis and comparison of XBRL financial reporting data by computer applications and human readers. They complement the rules in the FRTA.

On XBRL Software tools, it should be noted that XBRL member companies provide a variety of software tools specifically to assist those creating XBRL taxonomies and instance documents.

The Link Role Registry provides a set of standard technical features which may be used in XBRL taxonomies and instances. The XBRL Specification provides a set of standard XLink roles and arc roles that may appear in XBRL instances and linkbases. Broadening use of XBRL is leading to the proposal of new, non-

standard roles which have common and useful semantics. The XBRL Link Role Registry (LRR) is a public, online listing of these non-standard roles. It provides structured information about their purpose, usage, and any intended impact on the validation of XBRL instance.

The XBRL Product Roadmap sets out XBRL International's current plans for the development and release of technical documents and production of training materials.

XBRL International also publishes a range of Conformance Suites to help developers ensure that their software complies with XBRL specifications and standards.

11. THE LARGEST XBRL E-GOVERNMENT PROJECT IN THE WORLD

According to UBmatrix (n.d.), the Netherlands has embarked on the largest XBRL e-government project in the world. The Dutch government realized that it needed to reduce the administrative bur¬den on companies and allow them to better invest their form filling time and money in ways that actually contribute to economic growth. Businesses in the Netherlands spend approximately €1.5 billion each year compiling and delivering accounting reports, tax declarations and statistical data to the govern¬ment. This was because all 200,000 businesses in the Netherlands had to file multiple forms to the government each year, thus engaging considerable effort and money to complete and submit forms. The burden was compounded because forms that contain very similar data had to be separately filed to three different agencies namely the Chamber of Commerce, the Tax and Cus¬toms Administration, and the Central Bureau of Statistics. The challenge was that none of these bodies could compare information with each oth¬er as they all had their own IT systems that described the same basic data in very different ways. The consequence was that businesses had to submit multiple forms, instead of filling out a single version that could be shared among the tax office, the census bureau and the commerce department.

In order to resolve the aforementioned issue and enhance efficiency, the Netherland government launched the Netherlands Taxonomy Project (NTP), which is the largest XBRL e-government project in the world. The project represents a joint effort by the Ministry of Justice and the Ministry of Finance aimed at standardizing all financial and statistical reporting information across the three agencies by applying XBRL. The Dutch government, through the project, leveraged the UBmatrix Processing Engine for con¬suming and

validating XBRL documents and made it possible for all businesses to submit information via reporting forms which enter a common XBRL gateway, allowing the data to be shared and accessed by individual agencies. As a result, the exchange of information between governmental bodies can be carried out in an automated fashion.

In the Netherlands, reporting has thus become faster, more efficient, and there is less chance the information submitter can make a mistake on the re¬porting form due to the business rules and logic inherent in XBRL. The internal data mod¬els of the Dutch governmental bodies involved have greatly improved. This is evidenced by the fact that before the project began, the agencies collected a total of 180,000 data elements, most of which were highly duplicative. After the project, the number of data items was reduced to about 6,000 XBRL concepts, eliminating the need for separate retrieval of financial and statistical information. The new XBRL-based data standards have improved integration, made reporting more efficient and enhanced the transparency and sharing of data. It is estimated that the Dutch government achieved a cost reduction for companies to the tune of €350 million annually.

12. CONCLUSION AND RECOMMENDATIONS

XBRL is a critical step towards next-generation financial management. A new era of digital reporting led by XBRL, is beginning to take hold across the globe. XBRL is the first and only global XML language for business and financial reporting that can meet the needs of any country, any industry, any company, for any kind of report. XBRL will complement any e-business XML language and also will plug into XML standards such as IRML, RIXML, NewsML, PRISM, OeBF, MPEG-21, etc XBRL enhances the distribution and usability of existing financial statement information. It is an enabler and an extension for relational database functionality for all financial statement information. It addresses the problems of Ineffective communication to investors, inefficient aggregation and analysis, and inefficient creation of financial statements. XBRL enables: business reporting that leverages the Internet and XML, Effective access and analysis of business reports, improved corporate communications with stakeholders, and lowering of financial reporting cost. The common interchange format and storage of XBRL provide good information management practice which reduces redundancies and discrepancies, makes possible repeatable processes using tools, and grants a platform for continuous reporting.

The potential XBRL applications include anything that involves electronic business reporting information. These include external reporting such as

regulatory filings or annual reports, internal reporting such as management reports or Board reports, analyst reports etc. XBRL will help every organization, in every industry, around the world to internet-enable its business reporting and analysis, and thus reduce their costs and risks and increase their ability to make more informed decisions. Financial service firms, media companies and government agencies are also all expected to adopt XBRL quickly. Even companies that are not technology-inclined may have strong incentives to embrace XBRL. Banks may recommend businesses use it when applying for a loan. For example, they may decide to give priority to XBRL applications over other more time intensive forms of loan applications.

In view of the invaluable contribution of the XBRL to the growth and development of global economies, the following recommendations are made:
(a) Every organization in every industry, particularly the big size ones should immediately set in motion activities that will culminate into a full embrace of the XBRL digital reporting technology in order to take advantage of the revolutionary development affecting financial services, e-Government, business intelligence / knowledge management, supply chain, information providers /content, and business performance.

(b) The accounting, finance, and business related professions, practitioners and associations in the country will have to follow the XBRL technology and catalyze the recording of business activity in a real-time mode. The way to get there is by following the path of: Needs Assessment, Design Solution/Business Plan, Training and Education, as well as Implementation.

(c) Regulatory bodies such as the Securities and Exchange Commission, the Central Bank, the Accounting Standards Board, the Deposit Insurance Corporation, the Corporate Affairs Commission, etc should set up advisory committees that will pave the way for the them (regulators) to require companies to turn their traditional financial statements into more easily searchable, comparable, and interactive documents. For example, through a committee's advice, all publicly traded companies could be required to file audited XBRL financial statements in three to five years. In the near term, the largest companies could be required to use the extensible business reporting language to tag their financial data and share that information with the regulatory bodies without an external auditor's review.

(d) The government should, through a strong will power reflected in development activities/policies, embrace and promote the XBRL as a national

means of communicating current Generally Accepted Accounting Principles, future business standards, current national reporting practice, and flexible/future general reporting practice.

(e) The XBRL concept, projects, and education should form a strong part of the curricula in schools at tertiary and secondary levels.

Finally, given the initiation of the above recommendations, the nations of the world will begin to enjoy the XBRL offered benefits of reducing cost of analyzing and reporting financial information, increasing speed and efficiency of business decisions, enhancing the distribution and access of existing financial statement information, exchanging information more readily, and increasing as well as enhancing analysis.

REFERENCES:

1. Bidgoli, H. (2004) The Internet Encyclopedia. Available from http://books.google.com.ng/books
2. Business Executive Training and Consulting (n.d.) Conflict Resolution. Available from http://bet.c.tweenmedia.net/index.php
3. Coffin,Z.P.(2000)XBRLBenefits.Availablefrom http://www.de.haas.nl/Digital%20Reporting/XBRL%20Benefits.htm
4. EDGAR (2010) Nigeria's Government Plans to Beef Up Reporting Standards. Retrieved from http://www.edgar-online.com
5. Fazzi, C. (2005) 'Conflict Resolution in the Age of the Internet'. Dispute Resolution Journal, Aug.-Oct. Available from http://findarticles.com/p/articles
6. Filipek, R. (2007) XBRL Comes of Age. Retrieved from http://www.entrepreneur.com/tradejournals/article/170281642.html
7. Hamscher, W. (2005) XBRL: Don't Know it? You Will Soon. Retrieved from http://www.sas.com/news/sascom/2005q²/column_trends.html
8. Hannon, N. (2003) Challenge to Accountants: Go Digital. Retrieved from http://www.imanet.org/pdf/1793.pdf
9. Hannon, N. and Roohani (2001) The Next Technology Revolution: XML→XBRL. Available from http://web.bryant.edu/Nxbrl/XBRL_Hannon.ppt.
10. Hoffman, C. and Pryde, C. (2008) Extensible Business Reporting Language (XBRL). Available from http://www.xbrl.org/specification/XBRL-RECOMMENDATION
11. IFRS Foundation (2011) Fundamentals. Available from http://www.ifrs.org/XBRL/Resources/Fundamentals.htm
12. Microsoft Business Solutions (2002) XBRL: Supporting Electronic Business. Available from
13. http://www.abcsi.com/images/Navision_XBRLeBusiness.doc.
14. Raman, D. (2005) How EBusiness Standardization can help XBRL. Retrieved from http://www.xbrl.org/Brussels%20presentations/wednesday%20presentations
15. Reiss, M. (2001) E-Business: Basics and Challenges. Available from http://www.ifp.uni-stuttgart.de/publications/phowo01/Reiss.pdf
16. Rezaee, Z. and Hoffman, C. (2001) XBRL: Standardized Electronic Financial Reporting- Extensible Business Reporting Language. Retrieved from

http://findarticles.com/articles
17. Sylph,J.M.(2000)E-Business. Retrievedfromhttp://www.ifac.org/mediaCenter/files/297_NIVRAoct25Sylph.ppt
18. UBMatrix (n.d.) The Netherlands Embarks on Largest XBRL E-Government Project in the World.Retrievedfrom http://www.ubmatrix.com/downloads/Netherlands_Taxonomy_Project_UBmatrix_business_brief.pdf
19. Watson, L.A. (2006) XBRL- Interactive Data at Your Desktop. Available from http://www.cpa2biz.com/content/media/producer_content/Newsletters/Articles_2006
20. Willis, M. (n.d.) XBRL: The Language of Accounting in A Digital World. Retrieved from http://www.pwc.com/extweb/service.nsf/docid
21. XBRL International (n.d. (a)) Welcome to XBRL. Available from http://www.xbrl.org/history.print.aspx
22. XBRL International (n.d. (b)) XBRL Technical Index. Retrieved from http://www.xbrl.org/TechIndex
23. XBRL Planet (2010) Nigeria. Retrieved from http://xbrlplanet.org

APPENDIX:

Table1

XBRL Stakeholder Benefits for the Not-for-Profit and Public Sector

Department of Statistics	XBRL allows an analyst to pull information across say all companies in a particular industry or according to some other criteria. XBRL provides a more efficient and cheaper platform for a data warehouse of registered and unregistered companies.
Central Government	Similar to the HTML document revolution, XBRL documents will be a standard feature of most commonly used software applications in the near future. XML is already being used to transmit selected financial statement information data to Treasury
Registrar of Companies	All filings currently made with the Registrar are scanned and stored electronically, but cross-sectional analysis of the information is impossible. Requiring financial statements to be submitted in XBRL would provide a powerful analytical tool to the regulator and to others accessing that information
Inland Revenue	Companies will render tax returns via XBRL.

	Companies will not have to recreate source data for the purpose of tax filings. The tax agency can control the format of tax filings via appropriate taxonomies.
Securities Commission	Recent studies of public companies indicated that 99% of companies surveyed have a Web site and that the vast majority of those companies provide financial information on their Web site. The Securities Commission has started a project that will enable them to readily check that disclosures and filings are accurate and not misleading.
Reserve Bank	Deutsche Bundesbank is facilitating the development of its own taxonomy to monitor and regulate financial statements. Likewise, any country whose prudential supervision regime is founded on comprehensive disclosure to facilitate comparability, will benefit from XBRL.
E-Government	Access to information is an important consideration. XBRL is an appropriate format to "secure" that financial information.
Accounting Institutes / Institutes of Chartered Accountants	XBRL will result in the automated creation of an XBRL compliant report from an accounting database and other original source files. The Institute will control a common data format for many software applications and many types of reporting. A shared data item taxonomy will be created which is always grounded in existing standards.
Schools	Submitting financial statement information in XBRL would facilitate benchmarking the financial performance of schools.
The Public	The benefits of XBRL are significant. After XBRL becomes established and well known the public will demand the XBRL format from not-for-profit organizations. Public sector organizations will want to use this format as it is more desirable for users of their financial information. Initial demand for financial statement information in XBRL will probably come from Treasury and financial institutions as they begin to experience the advantages from early adopters. Enterprises that adopt XBRL sooner rather than later will benefit from increased coverage and analysis by stakeholders. We expect that the implementation

	of XBRL will be entirely market driven once the benefits can be seen through their overseas equivalent organizations

SOURCE: Coffin (2000):

Table2

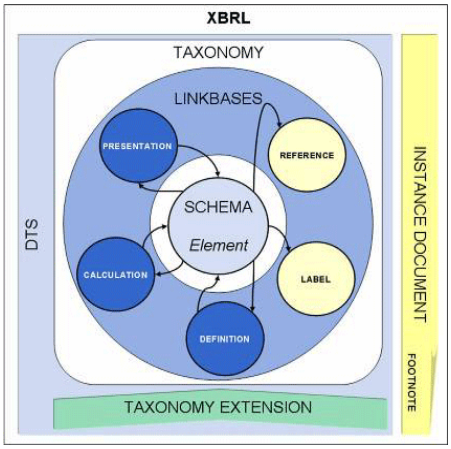
XBRL Stakeholder Benefits for the Private Sector

Corporate – External Financial Reporting	Companies who prepare financial statements: More efficient preparation of financial statements because they will be created one time and rendered as printed reports, on Web sites, as Edgar filings, or as other regulatory filings. XBRL financial information can be rendered in various formats based upon the user's request, thereby reducing the costs associated with report preparation. In more general terms, XML is projected to reduce the cost of publishing content to the Web by 30 to 50 percent.
Corporate – Internal Financial Reporting	Internal management reports will be available on line at any point in time. XBRL makes a reality the concept of a "virtual close" rendering up to the minute financial information.
Corporate – multi- national	XBRL will enable large multi-national companies to quickly prepare, analyze and publish the financial statements for numerous subsidiaries in different countries, with different languages, on different computer systems.
Credit Controllers/ Banks	Credit Analysis - providing XBRL financial information for credit request purposes will enable less costly and more timely analysis. Companies applying for a loan will make their financial information available to the bank in XBRL. That financial information will be e-mailed to the bank and will automatically be imported into the bank's loan analysis software. Credit approval time, for example, will be reduced from days to a matter of minutes.
Shareholders	XBRL provides a robust platform for significantly enhanced assessment, extraction, and query tools for shareholders and other users in the market.
Investors	An investor can use XBRL to compare the

	performance of a range of companies belonging to different revenue levels, located in different countries and using different currencies and languages.
Analysts	XBRL will result in enhanced distribution and usability of existing financial statement information, including: automated analysis, significantly less re-keying of financial information from one form into another form, receipt of information in a preferred format according to a specific style of analysis.
Auditors	A client will be able to transfer all required audit schedules to its auditor in an industry standard format. XBRL will revolutionize the way we do audits by facilitating the concept of the "continuous audit".
Educators	Educators have a major role to play in both educating the general business public and in providing students with the ability to use XML technology. XBRL is a subset of XML specifically focused on efficient and effective financial reporting.
Researchers	Typically researchers make decisions about the past (cf. analysts). XBRL has strong archiving capabilities. In particular, it provides the ability to store and extract financial information in a similar way. XBRL taxonomies will facilitate this process. Researchers will also able to look at accounting policies and accounting policy changes easily and quickly using XBRL.
Financial Publishers and Data Aggregators	XBRL facilitates more efficient data collection. It lowers operating costs associated with customized, idiosyncratic data feeds and reduces errors. It also "adds value" to the data and increasing transaction capacity.
Independent Software Vendors	Virtually any software product that manages financial information will use XBRL for its data export and import formats, thereby increasing its potential for full-interoperability with other financial and analytical applications.

SOURCE: Coffin (2000)

Table 3



Calculation Linkbase
Definition Linkbase
DTS
Element
Footnote
Instance Document
Label Linkbase
Linkbase
Presentation Linkbase
Reference Linkbase
Schema
Taxonomy
Taxonomy Extension
XBRL

Source: IFRS Foundation (2011)

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