# XBRL: AN INTEGRATED REVIEW OF THE STAKEHOLDERS IN TODAY'S BUSINESS ENVIRONMENT

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#### **ABSTRACT**

Today's dynamic business environment creates complex businesses that demand more sophisticated financial reporting methods. The technological advances since the invention of the computer and especially the personal computer and local area networks have made this process easier in the way that it is possible to trace changes in the statements that are caused by certain transactions. To take a leap forward in 21st century, XBRL International, a non-for-profit consortium comprising companies and organizations like the American Institute of Certified Public Accountants (AICPA), International Accounting Standards Board (IASB), Microsoft and Price water house Coopers introduced new electronic reporting language XBRL (Extensible Business Reporting Language) with a goal to enable and facilitate the publishing of financial business data in electronic form with a standardized method by developing, maintaining and disseminating which can be seen as the financial profession's adaptation of XML for financial reporting. XBRL is a new improving tool for business reporting which provides appropriate information in a timely, frequently, transparently and in a customized manner to the stakeholders like investors, customers and suppliers globally. In this research paper the perceptions of CAs and CFOs of selected listed Indian companies are analyzed where XBRL's ardent need in 21st century is discussed. The paper concludes that the adoption of XBRL creates major opportunities for an improved business processes and operations; and leads to easier sourcing of finance. However, due to lack of awareness and assistance of this new language, early adoption of XBRL may create a global chaos.

KEYWORDS: XBRL, XML, Stake holders, CAs and CFOs, Ardent Need, Global Chaos.

### Introduction

Ever since the creation of corporations, stakeholders have demanded accounting information in order to get an insight into the firm's finances. Initially the double-entry bookkeeping was materialized in several centuries ago and has developed a base for financial reporting for internal and external stakeholder over a time. Reporting of financial data fulfills the requirements of tax purposes, protection of creditors' and shareholders' faith has experienced an ever-increasing volume of regulations. Traditionally, during the audit process the financial statements prepared by the company's accounting department were manually compared to the evidence of transactions that occurred during the accounting period. However, the dynamic business environment of today creates complex businesses that demand more sophisticated financial reporting methods. The challenge today consists of providing the appropriate information in a timely, frequent, assured and customized manner to the various users like investors, customers and suppliers. Due to these demands, it is very essential to decide how companies communicate financial information. For this reason, in the world of digitalization E-reporting came in existence with new improved tools. To accomplish the need of transparency, accuracy and harmonized disclosures of financial information, XBRL is quickly becoming an indomitable force. XBRL is a truly revolutionary technology. "XBRL has the potential to slash hours of waste, cost and inefficiency-not just for users of financial data, but for the companies that prepare it as well."Cox said in a public statement. "XBRL" stands for Extensible Business Reporting Language. It is asubset of Extensible Markup Language

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(XML) and an Internet technology for data exchange and transformation which is a standardized language for data exchange across the globe. XBRL is a combination of technology and reporting terms which expresses in such a way that it is human readable or by other software for further processing.

### **Background of XBRL**

In 1998, the World Wide Web Consortium (W3C) developed the extensible Markup Language (XML) to facilitate electronic publishing. XML is a general-purpose language for constructing and presenting documents with accepted formats and rules. In 1999, XBRL International, a non-for-profit consortium comprising companies and organizations like the American Institute of Certified Public Accountants (AICPA), International Accounting Standards Board (IASB), Microsoft and Price water house Coopers, was founded. Its main goal was to enable and facilitate the publishing of financial business data in electronic form with a standardized method by developing, maintaining and disseminating XBRL without human interference and to make reporting and analysis faster, cheaper and significantly easier to automate.

#### Components of XBRL

XBRL consist several parts some of the them are Specifications, Taxonomies, Schema and Instance documents:

- Specifications: It contains technical grammatical rules for creating taxonomies and instance documents.
- **Taxonomies:** These are the dictionaries which define all the concepts to be used in a particular instance document.
- **Schema:** Taxonomies need a structure and have to be specified. In order to provide that structure and order schema (or schemas) and link bases are required. These two items ensure that the taxonomy is complaining with a definite standard.
- Instance Document: An XBRL document with actual data is called instance document:

#### **Benefits of XBRL**

- **Digitalization:** The use of XBRL stimulates digitalization of financial data exchange between company and intermediary; and between sender (intermediary or company) and receiver (e.g. banks).
- **Standardization:** Due to standardization, it is easy to integrate different systems with each other.
- Safety: It checks the authority and authentication of the users and uses hashing and encryption
  methods for data that is being sent so it is safer method of digital communication with the
  government.
- Regulations: The government has decided to support XBRL in its project to reduce the
  administrative burdens. As a result, the new and changed regulations costs will be reduced and
  procedures will become easier.

# Drawbacks of XBRL

- Requirement of knowledge and skills for implementing XBRL at different levels of organization require to incur cost for new hardware- software and training.
- Digital storage of data has also a disadvantage. The information is exposed to cybercrime and should be protected. However, the need for physical protection is also required.
- In a situation where not all relative processes are fully XBRL enabled, the data has to be mapped before an XBRL instance are created. This is a process has to be repeated when the taxonomy or the data structure changes. This process increases much work in the current situation where the taxonomy is still in development.
- Standardization makes organizations less flexible to choose their own way of reporting.
- Organizations are faced with major changes in their original processes. It is questionable that how much organizations will decide to use XBRL and how they will maintain their execution of professional duties on longer term, when they decide to use XBRL

# Literature Review

According to the report on trusted and financial reporting by Price water house Cooper XBRL's strength lies in the fact that it is an interoperable platform neutral, and reusable financial information format. Recipients of reports in XBRL format are able to analyze and use precisely categorized information instantly without any need to convert the data into another format. According to conversion

with Nasdaq, Microsoft and Price water house Coopers." The road to better information: Making a case for XBRL." XBRL is not a set of accounting standards but it is a platform on which reporting standards content will reside and be represented. XBRL is about business reporting information, and not about data capture at the transaction level.

XBRL ranks relatively high in importance as an AIS topic. It follows the topics of Database software and Data extraction and manipulation. The Strategic Uses of XBRL is the XML/XBRL topic that is considered most important by respondents and is covered by the majority of the accounting and finance faculty members (Ashutosh Deshmukh, Khondkar Karim, Jeffrey Romine & Robert W. Rutledge, 2006).

**Troshani and Doolin (2007)** conducted a study among XBRL stakeholders such as, accounting firms and software developers in Australia, on the diffusion of XBRL and found that the attempts to increase awareness of XBRL had been ineffective. Early adopters of XBRL were unwilling to share their success stories in an effort to hold on to their competitive advantage of employing this new technology as long as possible. In an earlier study in 2005, Troshani and Doolin (2005) reported that the low level of adoption of XBRL in Australia could be attributed to a variety of factors.

According to the respondents in Pinkster's (2003) study, the benefits of XBRL of, say, effectiveness and efficiency, would occur in practice. Pinsker recommended that XBRL International should increase its efforts to make the potential benefits more widely known among the future user of XBRL. He also placed the onus on the shoulders of auditors to educate them on the issue of XBRL.

Robinson (2009) expressed that XBRL is an amazing new technology with a great chance for success. The main goal of XBRL is efficiency. He briefed the effects of XBRL on the financial reporting chain, key benefits and limitations of XBRL. The future of XBRL has great potential and quick access to financial information which can lead to much stronger and healthier financial markets and economies in the long run. He further explained the basic principles of XBRL systems- taxonomy and instance documents. He also highlighted the key benefit of XBRL like better, faster and cheaper. Robinson discussed the limitations and potential downfalls like no concrete backing from a reputable software company and since it is open source software so many hidden costs are associated with it.

### **Objectives of the Study**

- To study the impact on adoption of XBRL due to drivers of XBRL
- To study the impact on adoption of XBRL due to barriersof XBRL

## Scope of the Study

The paper analyses the views of 100 CAs and CFOs of listed Indian companies which are selected randomly.

## **Research Methodology**

A new language for financial reporting is Extensible Business Reporting Language (XBRL). This paper takes a closer look on the drivers and barriers of XBRL technology. An empirical data is collected by taking interview of Indian CFOs and practicing Chartered Accountants who are implementing and managing XBRL technology.

# Sample Size

The sample selected based on the universe of the study. The population of the study consist CFOs and CAs of selected listed Indian companies. The sample is of size 100 selected randomly.

# **Data Collection**

This study will be based on primary data. The data is collect from practicing chartered accountants and Chief Financial Officers of selected listed Indian companies.

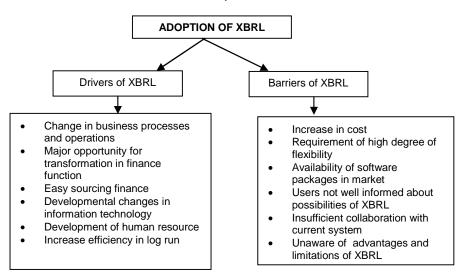
### **Statistical Tools**

Following Tools and Techniques are used for conducting a research

- Random sampling method
- Correlation Analysis
- Regression Analysis

#### **Data Analysis**

The adoption of XBRL depends on various parameters. In order to understand the impact of drivers and barriers on adoption practices of CAs and CFOs following factors have been proposed:



To analyze the above parameters of drivers and barriers of XBRL using Correlation and Regression following two models have been developed.

Model 1: The Impact on Adoption of XBRL due to the Drivers of XBRL Correlation Analysis: Drivers of XBRL and Adoption of XBRL

		Adoption of XBRL	Drivers of XBRL
	Pearson Correlation	1	.963**
Adoption of XBRL	Sig. (2-tailed)		.000
	N	100	100
	Pearson Correlation	.963**	1
Drivers of XBRL	Sig. (2-tailed)	.000	
	N	100	100

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

There is very high degree of positive correlation between Drivers of XBRL and Adoption of XBRL. The correlation was found to be significant. In order to estimate the relationship Drivers of XBRL and Adoption of XBRL regression analysis is done and the results are as under:

# Regression Analysis: Drivers and Adoption of XBRL

(a) Model Summary: Drivers of XBRL and Adoption of XBRL

ſ	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	1	.963°	.928	.927	.16586

a. Predictors: (Constant), Drivers of XBRL

# (b) ANOVA<sup>a</sup>: Drivers of XBRL and Adoption of XBRL

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	34.570	1	34.570	1256.620	.000 <sup>b</sup>
1	Residual	2.696	98	.028		
	Total	37.266	99			

a. Dependent Variable: Adoption of XBRL b. Predictors: (Constant), Drivers of XBRL

(c) Coefficients<sup>a</sup>: Drivers of XBRL and Adoption of XBRL

Model		Unstandardize	d Coefficients	Standardized Coefficients T		Sig.	
		В	Std. Error	Beta			
1	(Constant)	.201	.055		3.659	.000	
	Drivers of XBRL	.781	.022	.963	35.449	.000	

a. Dependent Variable: Adoption of XBRL

Here,  $R^2$  is 0.928which indicates that 92.8% variation in adoption of XBRL score is due to Drivers of XBRL. Anova table shows that the Regression model is significant (F is 1256.620, P <0.05).

# Adoption of XBRL = 0.201 +0.781 (Drivers of XBRL)

Model 2: The Impact on Adoption of XBRL due to the Barriersof XBRL Correlation Analysis: Barriers of XBRL and Adoption of XBRL

		Adoption of XBRL	Barriers of XBRL
	Pearson Correlation	1	963 <sup>**</sup>
Adoption of XBRL	Sig. (2-tailed)		.000
	N	100	100
	Pearson Correlation	963	1
Barriers of XBRL	Sig. (2-tailed)	.000	
	N	100	100

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

There is a high degree of negative correlation between Barriers of XBRL and Adoption of XBRL. The correlation was found to be significant. In order to estimate the relationship Barriers of XBRL and Adoption of XBRL regression analysis is done and the results are as under:

# Regression Analysis: Barriers of XBRL and Adoption of XBRL (a) Model Summary: Barriers of XBRL and Adoption of XBRL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
2	.963ª	.927	.927	.16626	

a. Predictors: (Constant), Barriers of XBRL

(b) ANOVAa: Barriers of XBRL and Adoption of XBRL

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	34.557	1	34.557	1250.196	.000 <sup>b</sup>
2	Residual	2.709	98	.028		
	Total	37.266	99			

a. Dependent Variable: Adoption of XBRL. b. Predictors: (Constant), Barriers of XBRL

Here, R<sup>2</sup>is<sup>0.927</sup> which indicates that 92.8% variation in adoption of XBRL score is due to Barriers of XBRL. Anova table shows that the Regression model is significant (F is 1250.196, P <0.05).

# Adoption of XBRL = 0.438 -0.701 (Barriers of XBRL)

#### **Findings**

Based on primary data analyses by adopting statistical tools Correlation and Regression, it is observed that, Drivers of XBRL have a strong and positive impact on adoption of XBRL. However, barriers of XBRL may cause very low impact on adoption of XBRL which instigates that when the combined effect of Drivers and Barriers of XBRL are implemented the effect of drivers of XBRL may dominate the adoption XBRL decision.

## Conclusion

In today's business environment, XBRL generated financial information creates reliability and accuracy which can play an important role in the success of XBRL as a business-reporting vehicle. Indian government uses XBRL as technology solution in order to reduce reporting burden for the organizations, by allowing them to use one report to fulfill severable porting requirements and move the paper-based financial supply chain to an electronically one. The use of XBRL does indeed improve decision accurately and efficiently compared too the rifle formats. XBRL brings another dimension to the already difficult accounting harmonization and comparability problems. As long as there is flexibility in the accounting standards themselves, and as long as financial statement preparers can extend the standard XBRL taxonomy to fit the iron needs, there will be severe comparability and interoperability problems between XBRL financial statements. The paper concludes that early adoption of digitalized reporting language may create a global chaos due to lack of awareness among users; but the success factor of XBRL may lead it to the next generation's digital reporting language of business and may be considered as 21<sup>st</sup> century's ardent need.

#### References

- Arndt, H.-K., Isenmann, R., Brosowski, J., Thiessen, I., & Marx-Gomez, J. (2006). Sustainability Reporting Using the eXtensible Business Reporting Language (XBRL) 8.
- Badua, F.A. (2005). Pondering Paradigms: Tracing the Development of Accounting Thought with Taxonomic and Citation Analysis (Ph.D. Dissertation, Rutgers University).

- Inspira- Journal of Commerce, Economics & Computer Science: Volume 04, No. 01, Jan.-Mar., 2018
- Bergeron, B. (2003). Essentials of XBRL: Financial Reporting in the 21<sup>st</sup>Century. Hoboken: John Wiley and Sons.
- Boritz, J. E. & No, W. G. (2003). Assurance Reporting for XBRL: XARL (eXtensible Assurance Reporting Language). In S. J. Roohani (Ed.), Trust and Data Assurances in Capital Markets: The Role of Technology Solutions (pp. 17-31). Smithfield, RI.
- Bricker, R.(1989). An Empirical Investigation of the Structure of Accounting Research. Journal of Accounting Research. 27(2): 246-262.
- Burkey, R. E., &Breakfield, C. V. (2000). Designing a total data solution: technology, implementation and deployment: Auerbach Publications.
- Cohen, B. A., &Brint, S. M. (2009). Make Sense Of Financial Reporting With Xbrl. Pennsylvania CPA Journal, 80(1), 4.
- Debreceny, R. and G.L., Gray (2001). The Production and use of semantically rich accounting reports on the Internet: XML and XBRL. International Journal of Accounting Information Systems.2 (1) 47-74.
- Deshmukh, A. (2005). Digital Accounting: The Effects of the Internet And ERP on Accounting: Idea Group Publishing.
- Doolin, B. &Troshani,I. (2007), Organizational Adoption of XBRL. Journal Electronic Markets,
   Vol. 17 Issue 3, Routledge, an imprint of Taylor & Francis Books Ltd. pp.199-209.
- Hunton, J., Wright, A. & Wright, S. (2003). The Supply and Demand for Continuous Reporting.
   7-16. In S. J. Roohani (Ed.), Trust and Data Assurances in Capital Markets: The Role of Technology Solutions. Smithfield, RI. [IASB01] Website of the International Accounting Standards Board.
- Lara, R., Cantador, I., & Castells, P. (2006). XBRL Taxonomies and OWL Ontologies for Investment Funds Advances in Conceptual Modeling - Theory and Practice (Vol. 4231, pp. 271-280). Berlin / Heidelberg: Springer.
- Phillips, M. E., & Colvard, R. G. (2007). XBRL: The New Financial Reporting Language has Arrived. Tennessee CPA Journal, June, 3.
- Pinsker, R., & Li, S. (2008). Costs and Benefits of Xbrl Adoption: Early Evidence.
   Communications Of The Acm, 51(3), 4.
- Ramin, K. P., Prather, D. A., Warner, P. D., & Smith, L. M. (2003). BUILDING AN XBRL IFRS TAXONOMY. CPA Journal, 73(5), 5
- ~ Rezaee, Z., & Hoffman, C. (2001). XBRL Standardized Electronical Financial Reporting. Internal Auditor, 58(4), 5.
- Robinson, K.(2009). XBRL: Financial reporting for the new millennium. XBRL –Emerging Language in Business Reporting, Published by ICFAI University Press, 3 – 9
- Shah K ..P. (2017) .'A Study of XBRL (Extensible Business Reporting Language) and Its Practices in Indian Listed Companies'. Thesis - A document submitted to earn a Doctoral degree at Rai University, Gujarat, India.
- Shah, K. P., Japee, G. P. (2017). Impact of XBRL in selected companies of India. Knowledge Consortium of Gujarat - Journal of Multi-Disciplinary. Issue-18, 1-14.
- Shah, K.P., Japee, G. P. (2015). XBRL. Commerce Window: An International Peer Reviewed Bi-Annual Journal. 1(3): 49-55.
- Shah, K.P., Japee, G. P. (2017). XBRL (Extensible Business Reporting Language) -21st Century 's Ardent need. Commerce Window: An International Peer Reviewed Bi-Annual Journal. 1(6),75-88.
- Shrivastava, R.P. and Kogan ,A.(2010). Assurance on XBRL Instance Document: A Conceptual Framework of Assertions. Internation Journal of Accounting Information Systems, 11(3),261-273.
- Troshani, I. & Doolin,B. (2005). Drivers and Inhibitors Impacting Technology Adoption: A Qualitative Investigation into the Australian Experience with XBRL. 18th Bled e Conference Integration in Action Bled, Slovenia, June 6 8, 1-16.