QUALITATIVE CHARACTERISTICS OF FINANCIAL INFORMATION BEFORE AND AFTER IMPLEMENTATION OF XBRL

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Abstract:

XBRL- Extensible Business Reporting Language as a tool for financial reporting is revolutionizing business world for meeting the information needs of stakeholders. XBRL increases transparency, accuracy and efficiency in financial reporting. The objective of the study is to study impact of XBRL on financial reporting. The qualitative characteristics of financial reporting are taken as dependent variables. They include understandability, availability, reliability, comparability and timeliness of financial information. Sample for the study include companies listed in recognized stock exchanges in India, which have been filing their annual statements to the Ministry of Corporate Affairs through XBRL. Primary data are collected from companies, about effectiveness of XBRL. Secondary data are collected from the Ministry of Corporate Affairs. The hypothesis tested in this study include XBRL has a positive impact on financial reporting in increasing availability, reliability,and comparability of financial information. Content analysis method is adopted for the study. Descriptive statistics and ANOVA is used for testing the hypothesis formulated for the study. The findings of the study would help companies to use XBRL for online financial reporting and also for different stakeholders to obtain financial information on real time basis.

Key Words: *XBRL, Financial Reporting*

1. Introduction

XBRL is a language for the electronic communication of business and financial data which is revolutionizing business reporting around the world. XBRL was conceived in 1998 by a CPA named Charles Hoffman based on Extensible Mark up language (XML). Later in that year, the AICPA High Tech Task force stepped in to propose creating a prototype set of financial statements using XML. In 1999, twelve companies including Microsoft Corporation, Free EDGAR.com and the big 5 accounting firms joined the effort to set up XBRL steering committee. The potential that XBRL offers quickly gained attention from regulatory bodies and businesses worldwide. In 2001, the first of the three international conferences on this took place in the UK, US, and Australia. In 2003, China became the first country to launch an XBRL voluntary filing program in their stock exchanges and made the filing mandatory in the following year. As of 2008, Stock Exchanges in Japan, Singapore, South Korea and the Netherlands have also made XBRL reporting a requirement. The global XBRL movement has ushered in a new age of financial reporting. XBRL often referred to as interactive data gives the financial community a standard based method to prepare, publish, exchange, search and analyse financial statements across all software formats and technologies. In India Reserve Bank of India capital adequacy reporting by banks as per Basel II norms in XBRL. The Ministry of Corporate affairs has taken a big leap forward by making mandatory for certain class of companies in XBRL format. From 1st April 2011 Ministry of corporate affairs has mandated e-filing of annual reports for certain specified class of companies in XBRL format. From 1st April 2012, Companies such as Banking, NBFC, Insurance and Power sector companies are required to file their annual

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reports in XBRL format. SEBI has an under development project – "Super-D" for XBRL filing by all Listed Companies and Mutual Funds in India. The Central Electricity Regulatory Commission (CERC) is also developing an XBRL based Regulatory Information Management System (RIMS) for power companies.

XBRL is here to stay which would revolutionize the way financial reporting is being reported. Former SEC Chairman Christopher Cox, believes XBRL will reduce reporting costs, increase transparency, improve supply of financial information and make the capital markets stronger.

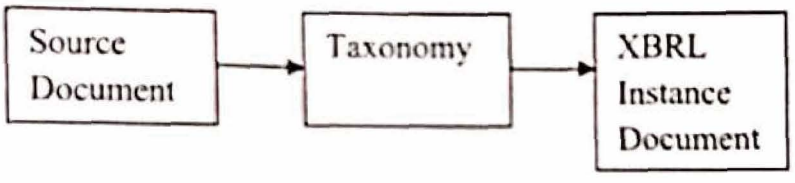
XBRL means Extensible Business Reporting Language. It is a language for transmitting information. It is a language for the electronic communication of business and financial data.

XBRL is an internet based document language that has been adapted for business and financial reporting. XBRL has been compared to bar-coding technology or the ISBN (International standard Book Number) number for books.

XBRL is defined as "a standard-based method with which users can prepare, publish (in

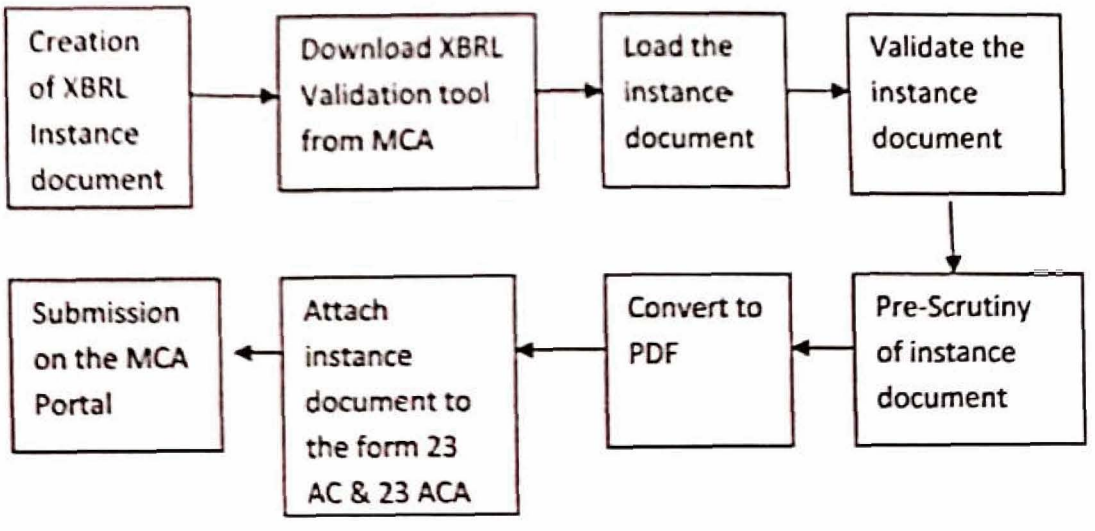
a variety of formats), exchange and analyze financial statements and the information they contain."

2. Working of XBRL



- The source document is the annual report of the company that is to be converted to XBRL.
- In general taxonomy means a catalogue or set of rules for classification. In XBRL, it means electronic dictionary of the reporting concepts containing computer readable definitions of business reporting.
- The process of mapping the financial data to unique element is called tagging.

XBRL filing process



Before implementation of XBRL it was a laborious process for the companies to report. The XBRL financial statements will be prepared according to the taxonomy. Then it will be converted to instance document which is electronic document in xml format. The same xml document can be submitted to different regulators which will avoid the unnecessary preparation of the financial statements and report to different regulatory authorities.

XBRL helps in more timely reporting, reduction in the preparation time, quicker decision making. For instance companies which was taking 10-12 days to file in the MCA Portal now can file within minutes.

With the full adoption of XBRL, companies can automate data collection. A company finance division, for example could quickly and reliably generate internal management reports, financial statement for publication, tax and other regulatory filings, as well as credit reports for lenders.

3. Review of Literature

Virendra K Vasal and Rajendra P Srivastava (2002) studied about how XBRL can be useful for India. The objective of the study was to investigate some of the major issues in delivery of business information through the web using the 'digital' language of business called the Extensible Business Reporting Language. The findings of the study are as a technology, XBRL was attempting to provide language (digital) to the (electronic) accounting statements so that they are able to talk. XBRL shall enable financial reports to converse across all software and technologies.

Rashmi Malhotra(2004)- points out that XBRL was a frame work based on XML that would be freely licensed and facilitate the automatic exchange and reliable financial information among various software applications in the world. The purpose of the study was conducted to explore the use of XBRL as a new common language for financial reporting electronically compared to other formats such as HTML, Web based sites, the SEC's Edgar system and Email. The study also told that 66% of companies surveyed by Association for investment management and research have a website and that 76% of those companies provide financial information on their website. The AIMR study showed that analysts preferred to use web sites to obtain information even though other sources exist. The Study found that by using XBRL a company will find it less costly to prepare and distribute its financial statements while improving access to its information. The paper also tells that in future XBRL will incorporate all accounting literature and research materials to make information easier to use and available to various users of information.

Jap Efendi (2010)-The authors had made an empirical analysis with two objectives in purview that is one provide an overview of the benefits and global development of XBRL and the other to evaluate the extent of XBRL adoption following the implementation of the voluntary filing program. SEC established voluntary filing program for XBRL reporting in March 2005. 82 companies which have filed by the voluntary filing program through EDGAR were selected it is found that number of voluntary adopters was increasing. The voluntary adoption rate is slightly above 2% of approximately 4500 companies listed in NYSE and NASDAQ. The findings of the study was that the unexpected decrease in reporting lines may be explained by companies increasing familiarity with XBRL and related efficiencies in XBRL reporting. The study also reflects the gap for further research XBRL is expected to have a positive effect on accounting and financial reporting worldwide. Particularly used in conjunction with IFRS.

Jap Efendi, Jing Dong Park and Chandra Subramaniam(2009)- The authors investigated with three objectives in sight firstly if XBRL reporting format has information content beyond the SEC quarterly and annual reports submitted to the legacy EDGAR system which uses HTML or ASCII format, Secondly whether the extent of investor response can be explained by characteristic of the reports and the firm information environment, Thirdly to examine the magnitude and the relative magnitude of information content in these XBRL filings. For this to achieve a sample of 342 observations from the SEC XBRL voluntary filing program in 2005 to June 2008 Patel's Procedure (1976) and Regression analysis was used as the statistical tool. This was the first empirical study of xbrl from the perspective of capital market research. The main limitation was on the nature of the data.The major contribution of the study is that incremental information content in XBRL surpasses that of EDGAR filings especially in the later years.

Chunhui Liu, Tawei Wang, Lee J. Yao(2011)- Here the authors focused on the impact of the XBRL mandate on the quantity and quality of the financial information environment, as reflected in analyst forecast behavior. It had been conducted with three reasons in perspective financial analysts are important and influential users of financial reports (Mikhail et al. 1999; Yu 2010) and play important roles as information intermediaries and economic agents whose actions affect security pricing (Rock et al. 2001). Second a key objective of the SEC's program is to develop an ecosystem that supports the production, collection, and distribution of accurate data to information consumers (Cox 2008). Third, implications from research on the value realization from XBRL adoption have immediate benefits for regulators, filers, information consumers, accountants and other stakeholders. A sample of 1430 firms over a period of 2005-2010 which is listed in the U.S were selected. For analyzing the data Descriptive statistics and Pearson's correlation were used.The major findings of the study are firstly quality and reliability of information in the XBRL format are expected to be better after the transition period, secondly the usefulness of XBRL formatted information needs to be improved thirdly effective promotion and the curriculum design will definitely help users understand XBRL.

4. Need for the study

XBRL is here to stay. The need of XBRL is felt in almost in all the domains, with the paper based format of financial reporting taking more time to report to the regulators and the too much forms to be entered and also it was difficult to understand and to make interpretation of that, so there felt a need to have the electronic system of financial reporting which gave birth to XBRL. The companies felt difficult to understand the traditional formats which were PDF or HTML based but XBRL is based on the XML langugaes where we can report the same format to multiple regulators.

5. Objectives of the study

To study the qualitative characteristics of financial information before and after implementation of XBRL in India.

6. Hypothesis

H0-There exists no significant difference in understandability, comparability, reliability, and availability of financial information before and after implementation of XBRL in India

H1-There exists significant difference in understandability, comparability, reliability, and availability in financial information before and after implementation of XBRL in India.

7. Methodology

a) Sample for the study: Three companies have been taken for the study. The companies selected for the study

1. Columbia Asia Hospitals Private Limited
2. Denso Kirloskar Industries Private Limited
3. Samhrutha Habitat Infrasturcture Private Limited

b) Period of the study: Two years have been taken for the study. Data of 2009-10 were related before implementation of XBRL. These data were collected from the annual reports. Data of 2010-11 were collected from the XBRL Filings of sample companies to the Ministry of Corporate Affairs, Government of India.

c) Research Instrument: A research instrument was constructed consists of fifteen questions stratified into four qualitative characteristics of financial reporting. They include understandability, comparability, reliability and availability. These variables are taken for the comparison of XBRL before and after implementation. Five point Scale has been used for the study. 1-Strongly Disagree, 2-Disagree, 3-Neither Agree or Disagree, 4-Agree, 5-Strongly Agree.

d) Data Collection and Analysis: Content analysis method was used to collect the data.Descriptive statistics and analysis of variance (ANOVA) was used for data analysis using SPSS.

8. Results and Discussion

The primary objective of financial reporting is to provide high quality financial reporting information concerning economic entities, primarily financial in nature useful for economic decision making. Providing high quality financial reporting information is important because it will positively influence capital providers and other stake holders in making investment and credit decisions.

To assess the financial reporting, the qualitative characteristics of financial reporting has to be studied namely Understandability, Comparability, Reliability, Availability, Relevance, Timeliness, Verifiability and Faithful Representation. This section presents the results of XBRL before and after implementation of three companies. The results have been done taking only four qualitative characteristics of financial information that is Understandability, Comparability, Reliability, Availability . The disclosure shows that mean score is more than 1.00 in all the qualitative characteristics of before and after implementation that is Before Understandability-2.5, Comparability-1.75, Reliability-3.17, Availability-1.00 and After Understandability 4.06, Comparability-3.75, Reliability-4.83, and availability-5.00.From this we can analyze that financial information after implementation is better.

Table 1: Table showing qualitative characteristics of financial information before and after implementation of XBRL

		XBRL			
	Qualitative Characteristics	**Before Implementation (Manual)**		**After implementation (XBRL)**	
		Mean	**S.D**	**Mean**	**S.D**
1	**Understandability**	**2.5**	**0.11**	**4.06**	**0.70**
	1.1. The information presented in the annual report is well organized	2.67	0.57	5.00	0.00
	1.2. The notes to the Balance sheet and income statement are clear and precise	3.00	0.00	4.00	1.00
	1.3 Narrative explanations helps to increase the understandability of information	3.67	0.57	4.00	1.00
	1.4The presence of graphs and tables will make the information clear	2.00	0.00	4.33	0.57
	1.5 Use of glossary is necessary to understand technical words	1.00	0.00	3.00	1.00
2	**Comparability**	**1.75**	**0.00**	**3.75**	**0.00**
	2.1Comparison is easier between pre and post implementation of XBRL	1.00	0.00	3.00	0.00
	2.2Uniform accounting policies and procedures are followed	4.00	0.00	5.00	0.00
	2.3 Inter firm Comparison is possible between entities	1.00	0.00	5.00	0.00
	2.4In making companies performance ratio and index numbers are effectively used.	1.00	0.00	2.00	0.00

3	**Reliability**	**3.17**	**1.84**	**4.83**	**0.33**
	3.1Auditor's report is qualified	5.00	0.00	5.00	0.00
	3.2Neutrality is followed in presenting information	4.33	0.57	5.00	0.00
	3.3Corporate Governance information is reported in annual report.	2.33	0.57	4.33	0.57
	3.4Taxonomies are followed in preparation of financial statements.	1.00	0.00	5.00	0.00
4	**Availability**	**1.00**	**0.00**	**5.00**	**0.00**
	4.1Industry Specific taxonomies are available	1.00	0.00	5.00	0.00
	4.2With industry specific taxonomies, the preparation of financial statements are easier.	1.00	0.00	5.00	0.00

Testing of Hypothesis

One way ANOVA was used to test whether there is a significant difference in understandability, comparability, reliability and availability in XBRL before and after implementation of XBRL

H0- There exists no significant difference in understandability, comparability, reliability, and availability in financial reporting Before and After implementation of XBRL

H1-There exists significant difference in understandability, comparability, reliability, and availability in financial reporting Before and After implementation of XBRL

Table 2: ANOVA Table of Financial Reporting Before and After implementation of XBRL

	Sum of Squares	df	Mean Square	F	P-value
Between Groups	31.335	1	31.335	21.152	.000*
Within Groups	41.479	28	1.481		
Total	72.814	29			

*p-value is significant at 0.01 level

Only four qualitative characteristics have been taken for the study, the results of which are as follows:

Understandability: It refers to when the quality of information that enables users to comprehend the meaning. As we have seen from Table 1 Before implementation of XBRL the mean score is 2.5 and After implementation it is 4.06. This indicates that understanding of reports after implementation is better. Out of the five points in understandability the information presented in the annual report is well organized is having a higher mean value. This means that stakeholders are in a position to understand the XBRL financial statements in much better way.

Comparability: It is the quality of information that enables users to identify similarities in and differences between two sets of economic phenomena. From Table 1 we can interpret that the mean score before implementation of XBRL is 1.75 and after implementation it is 3.75. Comparison is easier across entities and between entities because XBRL financial statements are prepared according to Commercial and industrial taxonomy. The C & I taxonomy is based on Indian Accounting standards and Companies Act.

Reliability: It is the degree to which the same scores can be repeatedly produced overtime. Reliability is therefore about consistency. From Table 1 we can say that the mean score before implementation of XBRL is 3.17 and after implementation it is 4.83. The main reason for the higher mean value after implementation of XBRL is that XBRL financial statements are based on the taxonomy which is of a standard nature to be followed by all the industries.

Availability: It is the quality of information that enables users that necessary information is readily available in the preparation of financial statements. From Table 1 we can say that the mean score before implementation of XBRL is 1.00 and after implementation it is 5.00. The reason for this is that Industry specific taxonomies are readily available and it is easier to prepare the financial statements with the industry specific taxonomies. The C & I taxonomy was released in 2011. Now the Banking Taxonomy and Power sector taxonomy has been released.

The results of ANOVA is given in the above Table 2. The ANOVA result rejects the null

hypothesis and accepts the research hypothesis as the p-value associated with the mean difference between before and after implementation of the XBRL is <0.01. The results shows that there is significant difference before and after implementation of XBRL. The F-ratio is 21.152 this indicates that there is more in understandability, comparability, Reliability, and Availability after implementation of XBRL.

9. Limitations of the study

a) The Study concentrated only on the qualitative characteristics that is Understandability, Comparability, Reliability and Availability.

b) Only Three companies have been taken for the study.

10. Conclusion

As the Regulators and other stake holders are interested in the financial data, XBRL is a boon where information for financial reporting is very quick. From this study it is found that after implementation of XBRL that Understandability, Comparability, Reliability and Availability has been more in the financial reporting. It is also found that with XBRL comparison between entities was easy, also the industry specific taxonomies is easily understood where by companies can save the time in filing the reports.

11. Suggestions

From this study we can suggest further about XBRL from the practice point of view and from the research point of view.

From the practice point of view the study can be done from the various stake holders point of view. The stake holders include Regulator's, Preparer's and User's. As Regulator's are interested on the compliance part a further study can focus on that. From the preparer's and user's point of view further study must be done on the other qualitative characteristics like Relevance, Timeliness, Verifiability and Faithful Representation.

From the Research point of view a larger sample of companies can be a part of the study.

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Appendix

Questionnaire

1. Understandability

1.1 The information presented in the annual report is well organsied

1.2 The notes to the Balancesheet and income statement are clear and precise

1.3 Narrative explanations helps to increase the understandability of information

1.4 The presence of graphs and tables will make the information clear

1.5 Use of glossary is necessary to understand technical words

2. Comparability

2.1 Comparison is easier between pre and post implementation of XBRL

2.2 Uniform accounting policies and procedures are followed

2.3 Comparison is possible between entities

2.4 In making companies performance ratio and index numbers are effectively used.

3. Reliability

3.1 Auditor's report is qualified

3.2 Neutrality is followed in presenting information

3.3 Corporate Governance information is reported in annual report.

3.4 Taxonomies are followed in preparation of financial statements.

4. Availability

4.1 Industry Specific taxonomies are available

4.2 With industry specific taxonomies, the preparation of financial statements are easier