EXTENSIBLE BUSINESS REPORTING LANGUAGE (XBRL)
A PERCEPTUAL STUDY

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*P**URPOSE**
IN India Ministry of Corporate Affairs has mandated certain companies to file Balance Sheet and Profit & Loss Account using the Extensible Business Reporting Language (XBRL) taxonomy. The study highlights the preparedness of Accounting Community for the same. The purpose of this research is to empirically examine the impact of demographic factors on the perceived benefits and obstacles in adopting XBRL in India.*

Design/Methodology/Approach: *The data on these variables was collected by employing an online and hand filled survey questionnaire. Total 185 usable questionnaires were examined. Responses were collected from the accounting professionals, practicing chartered accountants, managers of reputed companies selected randomly. By conducting **EFA** factors of XBRL awareness, benefits from XBRL adoption and perceived obstacles in XBRL adoption were extracted. A comparison among the groups of respondents was done on the basis of demographics of **years of experience** and **nature of occupation**.*

Findings: *The awareness on XBRL is at nascent stage in India. There is difference in the perception of the accounting community on the basis of level of experience and type of occupation with regard to the Awareness and perceived obstacles in adoption of XBRL, though there is no difference in their perception with regard to its perceived benefits.*

Research Limitations/Implications: *The implications of the findings are discussed in the context of promoting the adoption of XBRL technology. More education and training needs to be imparted. XBRL should be taught in universities too as future language of accounting reporting.*

Key Words: eXtensible Business Reporting Language, XBRL, XML, Integrated Reporting.

Introduction

On April 16, 2013, the International Integrated Reporting Council (IIRC) issued its "Consultation Draft of the International Integrated Reporting Framework" (the CD) as a proposed framework for how to create an integrated report and what to include in that report. XBRL is mentioned explicitly in this section of the CD as a possible technology platform for integrated reporting as it is used around the world by regulators and agencies as the standard for structured digital disclosures of financial information. XBRL is a logical consideration for providing similar benefits to integrated reports that combine financial and non-financial information (Monterio, 2013). In India, XBRL taxonomies have been created and

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mandated by Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), and Ministry of Corporate Affairs (MCA). It is expected that many other regulatory and national jurisdiction bodies such as Sales Tax and Income Tax authorities will be coming up with their specific reporting requirement using XBRL (Essential Features of XBRL Reporting Software – Deloitte).

## XBRL as a Platform for Communication of Integrated Reporting

The Integrated Reporting framework makes explicit reference to XBRL as a "standardized technology platform that may be used for it." It goes on to say that "XBRL improves the way information is created, processed, distributed, and analyzed by providing standardized definitions, labels, calculations, references, and contexts applicable to individual numbers and narrative text." XBRL is a logical choice for integrated reports as it provides the same benefits to non-financial data as can be provided to financial data. An integrated report leads to a broader explanation of performance than more traditional corporate reporting by "describing, and measuring where practicable, the material elements of value creation and the relationships between them. In particular, it makes visible all the capitals (financial, manufactured, intellectual, human, social, relationship, and natural) on which value creation (past, present, and future) depends, how the organization uses those capitals and its effects on them" (Monterio, 2013).

Conceptual Framework of XBRL

In business, technology and process, improvement is viewed as making life easier, increasing efficiency, decreasing cost, or adding more consumer value. Similarly, the motivation behind changes in reporting technology and new standards is to improve the reporting process for accountants and their clients.

A challenge for the management of an enterprise that uses traditional EDI (Electronic Data Interchange) systems is that sharing data with other companies or different divisions within the same company may be thwarted by groups with each enterprise that use reporting system that adhere to their own communication standard (Bergeron, 2003).

As a result, each reporting group within the enterprise may be forced to exchange data using paper forms. When multiple vendor-specific communication standards are used within an enterprise, integrating the different systems is generally accomplished by installing a new enterprise-wide system. Alternatively, system interfaces can be developed that allow the existing or legacy systems to share data with each other. A traditional system interface provides for the communication of data from one legacy system to another at several levels. The highest level of an interface deals with the conversion of data formats and units. For example, the accounting system used by management in Milan office may handle payroll in euros, while the accounting system in New York records payroll in U.S. dollars (Bergeron, 2003).
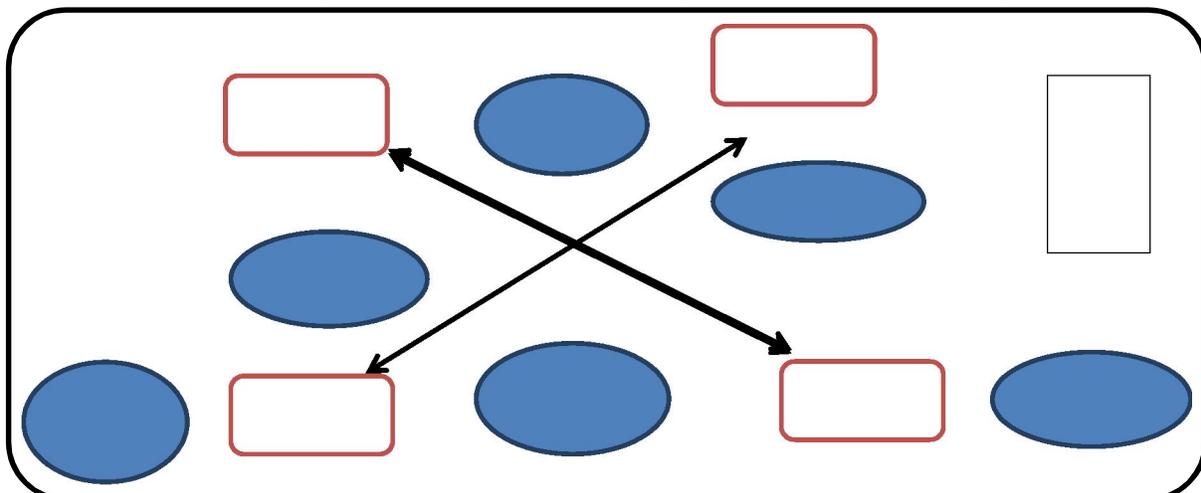
Various Interfaces Required for Communication between Systems.

Source: Primary Data.

To provide sharing between for example, for different systems – say company and its three recent aquired companies – six different interfaces have to be developed.

With the success of the internet as a conduit for e-commerce, e-mail, and general communications, the language used to make static Web pages, Hypertext Markup Language (HTML), became a de facto standard virtually overnight. However, when companies began to explore sharing transaction data in real time instead of simply creating online brochures, developers looked elsewhere. As a result, several languages were developed to allow integration of databases over the Internet. One of these languages, XML (eXtensible Markup Language), a relative of HTML, is rapidly gaining popularity in the information technology community. XML is gaining support across every industry that relies on e-commerce and on Internet for communications. As its name suggests, XML is extensible, or easily modified (Bergeron, 2003).

One of the evolving extensions or evolutions of XML is the eXtensible Business Reporting Language (XBRL). Reporting systems that communicate with each other through a common XML-based standard, such as XBRL, are much less complex than those communicating through multiple, dedicated interfaces. As an extension of XML, XBRL is itself an *extensible* language, meaning that its vocabulary can be easily modified to suit the changing needs of the finance industry. Although XBRL is a reporting language, its use extend beyond simple financial reporting (Essentials of XBRL: Financial Reporting in the 21st Century).

Definition

eXtensible Business Reporting Language is an open, platform-independent, international standard for the timely, accurate, efficient, and cost-effective electronic storage, manipulation, repurposing, and communication of financial and business reporting data.

Even though XBRL has backing from Microsoft, IBM, Adobe, Sun Microsystems, and other industry leaders, it is a non-proprietary, open language. As a result, the definitions within the XBRL standard are freely available.

Another characteristic of XBRL, which it inherits from XML, is that it is *platform independent*. Just as English is the accepted language of business for most of the world, XML runs on all of the major computer hardware under the most common operating systems.

XBRL vis-à-vis EDI

Electronic data interchange is an entrenched technology throughout the world for business transactions. Large corporations that can afford to invest in EDI systems have traditionally realized significant savings over doing business with paper invoices, receipts, and related tracking documents. EDI systems differ from XML-based systems primarily in their difficulty to learn and the time involved in editing and modifying forms and reports. Making changes in an EDI system typically requires programmer's familiarity with BASIC, COBOL, or some other compiled programming language. Furthermore, since every EDI system is different, every programming task involves new challenges and uncertainties that result in an extended development and maintenance cycle.

From a financial reporting perspective, EDI systems are limited because they are primarily transaction based and not designed to track historical financial data.

Timely, accurate financial reporting data is invaluable to management and to corporate decision making, regardless of the underlying business model. XBRL is fundamentally about efficient information sharing with increased speed and efficiency. Its also about enhanced distribution and rapid analysis of business data (Bergeron, 2003). For the accounting professional, the benefits of computerizing a paper-based practice are obvious: fewer errors of omission and commission potentially lower cost (depending on reporting volume), and a computing infrastructure that can be used to perform additional analysis and provide customers with service beyond basic reporting (Bergeron, 2003). For the corporate manager, the payoff of moving to XBRL-based reporting is predominantly in the timely access to business intelligence

Table 1: Comparison between XBRL and Traditional EDI

Feature	XBRL	Traditional EDI
Extensibility	High	Low
Penetration	Low	Low
Network	Internet	VAN
Security	Moderate	High
Cost/Installation	Low	High
Geographical extent	Unlimited	Unlimited
Web compatiblity	Yes	No
Open system	Yes	No
Infrastructure	XML	C/BASIC/COBOL
Stability	Evolving	Stable
Flexibility	High	Low
Interfaces	Single	Multiple
Standards	Industry	Corporation
Transaction sets	Variable	Fixed
Standards evolution	Moderate	Slow
Fixed costs	Low	High

Source: (Bergeron, 2003).

and the ability to use a variety of web-enabled tools to help in making operational decisions. These tools can be used to compare, e.g., the performance of public companies in the same market. Using Microsoft's XBRL-enabled Office suite of tools, including the Excel spreadsheet and Access database applications, managers have the ability to take in near-real-time data from their operations and perform what-if analysis, graph the results, and save the analysis for future reference.

Just as the Unique Product Code (UPC) and bar code transformed the retail goods business, XBRL is positioned to transform the financial reporting business by providing timelier, accurate, efficient, and cost-effective reporting (Bergeron, 2003). Just as a UPC bar code allows every item to be automatically entered into the checkout register in a goods store, every piece of financial transaction data stored in XBRL format needn't be manually rekeyed (Deloitte, 2011). As long as the systems communicate via the same dialect of XBRL, there will be no keying errors and data will be transferred from one system to another at an equivalent speed of light.

In the Figure 1, the documents exchanged between corporate headquarters and the subsidiary is guaranteed to be readable by the other party, since the document shared an industry-wide schema.

XBRL is an electronic language; a royalty-free open specification developed by XBRL International Inc., a not-for-profit consortium of 500 leading companies and agencies from around the world. The
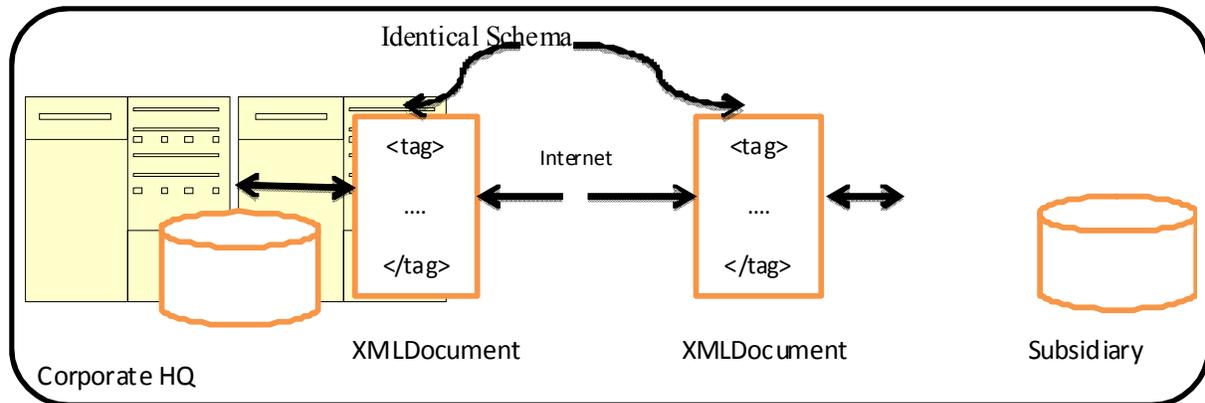
Figure 1: Faster Communication using Industry wide Common Schema.

Source: Primary Data.

organizations of XBRL International are driving XBRL adoption to ensure greater transparency, efficiency, and agility in business reporting.

XBRL, an XML based language, is used to express business-reporting content. It facilitates the automatic exchange and reliable extraction of business information across diverse software applications (XBRL: eXtensible Business Reporting Language).

Currently, financial statements or other information prepared in Word, Excel or HTML formats can be read but not automatically analyzed or processed according to the user's needs. XBRL enables source data to be tagged electronically, making the data machine-readable. XBRL makes the data machine readable with the help of two documents-taxonomy and XBRL instance document.

XBRL is a derivative of XML and as such it takes advantage of the 'tag' notion which associates contextual information with data points in financial statements. When formatted with tags, financial statements are called XBRL **instance documents**. The tags themselves are based on accounting standards and regulatory reporting regimes and are defined in XBRL taxonomies (XBRL: eXtensible Business Reporting Language).

Taxonomy defines the elements and their relationships. Using the relevant taxonomy, a company can map data and create an XBRL document. The Taxonomy contains the definitions and relationships of the items in the financial statement, e.g., relationships between concepts such as Revenue, Sale of Goods, Sale of Services, Expenses, etc. (KPMG, 2008).

Benefits of XBRL

- *Greater Accuracy:* Analysis and exchange of corporate financial information can be more reliable because the computer application accesses data directly. Since data need not be re-entered, the possibility of error is reduced.

- *Better Data Management:* The XBRL framework allows systematic management of data. Information can be monitored in real time, enhancing validation.

- *Time saving:* Information can be accessed and collected from any point and across the globe, with relative ease. For example, Regulatory reports can be filed easily, resulting in increased productivity.

- *Reusing Data:* XBRL-tagged reports can be shared and used both within organizations and by multiple external organizations (since it is platform neutral) and this process can be repeated. Applications can take advantage of the self-describing nature of XBRL tags to process information automatically for further reporting and analysis.

- **Data Validation:** XBRL tagged reports can be validated for consistency and inter-relationships between various data elements.

- **Easier Document Reading:** XBRL taxonomies enable the computer to read any document, e.g., if the user is using say French, he can collect and reassemble data from documents written, say in Finnish or Welsh, if they are XBRL-tagged.

- **Transparency:** XBRL allows for increased transparency of financial information to stakeholders, at a granular level, e.g., companies reporting under a common taxonomy provide specific details that are immediately comparable by investors and analysts in investment decision making (XBRL: eXtensible Business Reporting Language).

This can benefit the organization in various ways, such as improved investor relations, investor coverage, and access to capital markets.

Though, India has started late in adopting XBRL, it has gained significant momentum in recent times. The Ministry of Corporate Affairs, The Securities and Exchange Board of India, The Reserve Bank of India, and the Institute of Chartered Accountants of India have been responsible for the current set of Initiatives.

Literature Review

XBRL evolved over time as a response to corporate and regulatory challenges. Specification has been extended to cover real business complexities, and each one of these corresponds to specific recommendations published by XBRL International (Gonzalbez and Rodriguez, 2012). The use of the most advanced and rigorous standards in taxonomy development will help to a better assurance of future XBRL reports, as pointed out by many authors (Cohen, 2009); (Lymer and Debreceny, 2003); (Boritz and Wo, 2008); (Plumlee and Plumlee, 2008); (Shrivastava and Kogan, 2009); (Gonzalbez and Rodriguez, 2012). As a result, new specifications have been developed. Rawashdeh et al., (2011) examined the impact of demographic factors upon the XBRL adoption among consumers that provide insights to XBRL adopters and non-adopters. These include age, gender, education, experience, type of industry, and country. The research suggested that experience level was a good predictor of XBRL adopters and non-adopters. The study concluded that most of the adopters were experienced people (Rawashdeh et al., 2011). According to (Doolin and Troshani, 2007) benefits of XBRL are not expected to be immediate but will accumulate over time. Further, more organizations are influenced by other stakeholders (network effect) in the adoption decision and may see the risk of adverse actions by competitors and other parties based on the more detailed information provided via XBRL (Wagenhofer, 2003).

Several authors agree that the implementation of a relatively complex innovation like XBRL requires specific expertise which is not necessarily available in organizations (Gray and Miller, 2009).

Doolin and Troshani (2007) found that education is the essential driver of XBRL adoption, it is suggested that education can be used as an independent variable that provides details on the divergence between XBRL adopters and non-adopters (Rawashdeh et al., 2011).

There is a broad consensus on the fact that XBRL significantly improves the distribution of financial information among stakeholders. The basic financial information only needs to be prepared once and can be provided in a wide range of formats and languages through different communication channels (e.g., web reporting). Additionally, electronic formats facilitate the consumption and reuse of the information. Stakeholders can easily satisfy their information needs. Each stakeholder can have the information in the preferred format and through the desired channel (Wickop et al., 2012).

Objectives of the Study

The study was conducted with the following objectives:

1. To have an insight on functioning on XBRL.

2. To study whether level of experience and the nature of occupation of accounting professionals affect the level of awareness on XBRL (AWXBRL), perceived benefits (BENXBRL), and obstacles (OBXBRL) in implementation of XBRL in India.

Hypotheses

The following two hypotheses were made:

1. "H01"- AWXBRL, BENXBRL and OBXBRL do not significantly vary among the groups made on the basis of experience of the respondents.

2. "Ha1"- AWXBRL do vary significantly among the groups made on the basis of experience of the respondents.

3. "H02"- BENXBRL do not significantly vary among the groups made on the basis of experience of the respondents.

4. "Ha2"- BENXBRL do vary significantly among the groups made on the basis of experience of the respondents.

5. "H03"- OBXBRL do not significantly vary among the groups made on the basis of experience of the respondents.

6. "Ha3"- OBXBRL do vary significantly among the groups made on the basis of experience of the respondents.

7. "H04"- AWXBRL do not significantly vary among the groups made on the basis of occupation of the respondents.

8. "Ha4"- AWXBRL do vary significantly among the groups made on the basis of occupation of the respondents.

9. "H05"- BENXBRL do not significantly vary among the groups made on the basis of occupation of the respondents.

10. "Ha5"- BENXBRL do vary significantly among the groups made on the basis of occupation of the respondents.

11. "H06"- OBXBRL do not significantly vary among the groups made on the basis of occupation of the respondents.

12. "Ha6"- OBXBRL do vary significantly among the groups made on the basis of occupation of the respondents.

Research Methodology

For the purpose of meeting the research objectives, a survey method through questionnaire was used and data were collected from accounting professionals. It was assumed that the respondents were suitably exposed to the literature, research papers and various seminars related to the research idea. Thus, they fairly represent the accounting professionals bodies in India.

Based on intense review of past literature a questionnaire was designed which was pretested for **content validity** on the sample of 33 respondents, which included Chartered Accountants, Academicians, and industry experts. Each statement was measured on a 5 point Likert scale ranging from 'Strongly Disagree to Strongly Agree'.

The final questionnaire was circulated online and offline to the Chartered Accountancy firms. **Stratified random sampling** method for data collection was adopted. Though the number of offline questionnaires circulated was quite high, only 190 could be collected, 48 questionnaires were received online, which

included responses from CAs and Accounting Professionals outside Delhi also. Out of the total 238 questionnaires 185 were deemed fit for analysis. The time period for the data collection was March, 2013 to December, 2013.

Research Tools and Techniques

Statistical Package for Social Sciences (SPSS) version 20 for windows was applied in the process of data input and compilation. For further analysis, **AMOS 20** and **Statistical Tool Package** were used. The multivariate statistical technique of **Exploratory Factor Analysis** was used to condense the information contained in a number of original variables into smaller set of composite dimensions with minimum loss of information (Hair, 2010). It has been long recognized that the precision (reliability) and the accuracy (validity) of verbal instruments are determined to a large degree by the design and construction of scales. Therefore, we have calculated **Cronbach's Alpha** to test the reliability of the variables under the present study.

Demographic Profile of Respondents

Online survey and hand filled questionnaires administered mainly to qualified Chartered Accountants, as it is the CA community through which the change can get implemented, so their opinions were tested.

Sample Size- 185 respondents working in CA firms in Delhi, NCR, Kolkata, and Mumbai.

Table 2: Case Processing Summary

	Case					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Occupation1* Experience	174	94.1%	11	5.9%	185	100.0%

Table 3: Occupation* Experience Crosstabulation

Count

		Experience				Total
		Less than 5 years	5-10 years	11-16 years	More than 16 years	
Occupation	Practicing Chartered Accountant Accounting	17	28	6	35	**86**
	Professional (Employed)	45	5	2	2	**54**
	Manager	3	3	2	2	**10**
	Other	14	5	3	2	**24**
	Total	**79**	**41**	**13**	**41**	**174**

Data Analysis and Findings

To proceed first reliability of the instrument was determined by using Cronbach's alpha that was found to be greater than 0.7 (i.e., 0.738) which is commonly accepted threshold (Nunnally and Berstein, 1994), hence laying foundation for further analysis.

Table 5: Reliability Statistics

Cronbach's Alpha	No. of Items
0.738	22

Next, the appropriateness of factor analysis is examined in terms of presence of significant correlations among variables. For this, the Bartlett test of spherecity and Kaiser-Meyer-Olkin measure of sampling adequacy is used. The overall KMO is found to be 0.769 (greater than required 0.50) depicting that the factor analysis is feasible on the basis of sampling adequacy. The Bartlett's test is found to be highly significant as shown in Table 6.

Table 6: KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	0.769
Bartlett's Test of Sphericity	Approx. Chi-Square	1106.294
	Df	105
	Sig.	0.000

Table 7: Awareness of XBRL

S. No.	Items	Factor Landings
1.	My awareness about XBRL (eXtensible Business Reporting Language) is reasonably high.	-0.441
2.	As compared to traditional, paper-based disclosures, IFR (Internet Financial Reporting) allows companies to disseminate information to a broader audience on a timelier basis.	0.604
3.	With XBRL, all financial data are represented using elements (or tags) so that stakeholders can easily find the tagged data, extract or transform the data, and analyze the data with analytical applications.	0.577

Table 8: Benefits of using XBRL

S. No.	Items	Factor Landings
1.	Accelerates and facilitate the comparison of financial reports.	0.628
2.	Save time when searching for financial information.	0.739
3.	XBRL strengthens the value of information to be more credible.	0.714
4.	Enables the company to produce reports that contain financial and non-financial information.	0.702
5.	Contribute to avoid errors in transcribing the data.	0.658

Table 9: Obstacles in adoption of XBRL

S. No.	Items	Factor Landings
1.	Lack of experts in the field reduces the chances of implementation and application of XBRL in companies.	0.701
2.	Diversity and multiplicity of elements and components of XBRL, makes it difficult to enforce.	0.834
3.	The need for time and effort to learn the language of XBRL.	0.741

Hypothesis 1

To test the H01 ("H01"- AWXBRL, BENXBRL, and OBXBRL do not significantly vary among the groups made on the basis of demographic variable of experience of the respondents), test of Normality of AWXBRL,BXBRL, and OBXBRL was carried out and as per **Kolmogorov Smrinov**and **Shapiro-Wilk** Test data was **not Normal.** Therefore, rather than applying 'ANOVA; **Non Parametric Test, Kruskal Wallis** was used.

The Kruskal-Wallis test is the **nonparametric** test equivalent to the one-way ANOVA, and an extension of the **Mann-Whitney U** test to allow the comparison of more than two independent groups. Using the Kruskal-WallisTest, we can decide whether the population distributions are identical.

Table 10: Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1.	H01:AWXBRL do not significantly vary among the groups made on the basis of **experience** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.043	Reject the null hypothesis.
2.	H02: BENXBRL do not significantly vary among the groups made on the basis of **experience** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.164	Retain the null hypothesis.
3.	H03: OBXBRL do not significantly vary among the groups made on the basis of **experience** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.014	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is 0.05.

Table 10, shows that there is significant difference between the various experience categories of respondents in terms of Awareness of XBRL and Obstacles of XBRL, but no significant difference was found among these groups in terms of Benefits of XBRL.

Figure 2, shows the distribution of respondents in terms of Awareness on XBRL.

Inependent-Samples Kruskal-Wallis Test

Total N	185
Test Statistic	8.144
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.043

1. The test statistic is adjusted for ties.
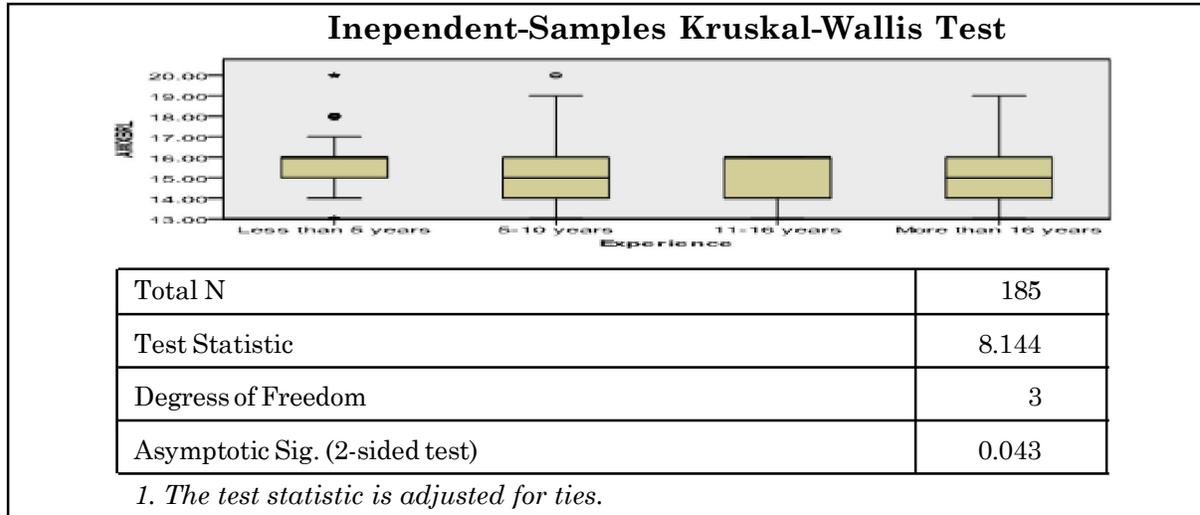
Figure 2

Source: Primary Data.

To see which two categories of respondents significantly vary from each other, further pairwise comparison was done using Post hoc Analysis as is shown in Figure 3.

Pairwise Comparisons of Experience

Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
More than 16 years – 11-16 years	6.212	16.444	0.378	0.706	1.000
More than 16 years – 5-10 years	16.221	11.154	1.454	0.146	0.875
More than 16 years – less than 5 years	26.854	9.805	2.739	0.006	0.037
11-16 years – 5-10 years	10.009	16.267	0.615	0.538	1.000
11-16 years – less than 5 years	20.642	15.373	1.343	0.179	1.000
5-10 years – less than 5 years	10.633	9.505	1.119	0.263	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance lelve is 0.05.

Figure 3

Source: Primary Data.

Pairwise comparison signifies that there is significant difference in the level of awareness between categories of experience More than 16 years and less than 5 years.

Figure 4, given below shows the distribution of responses on the perceived benefits of XBRL. No significant variation was reported, so we retain the null hypothesis.

Inependent-Samples Kruskal-Wallis Test

Total N	185
Test Statistic	5.110
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.164

1. *The test statistic is adjusted for ties.*
2. *Multiple comparisons are not performed because the overall test does not show significant differences across samples.*
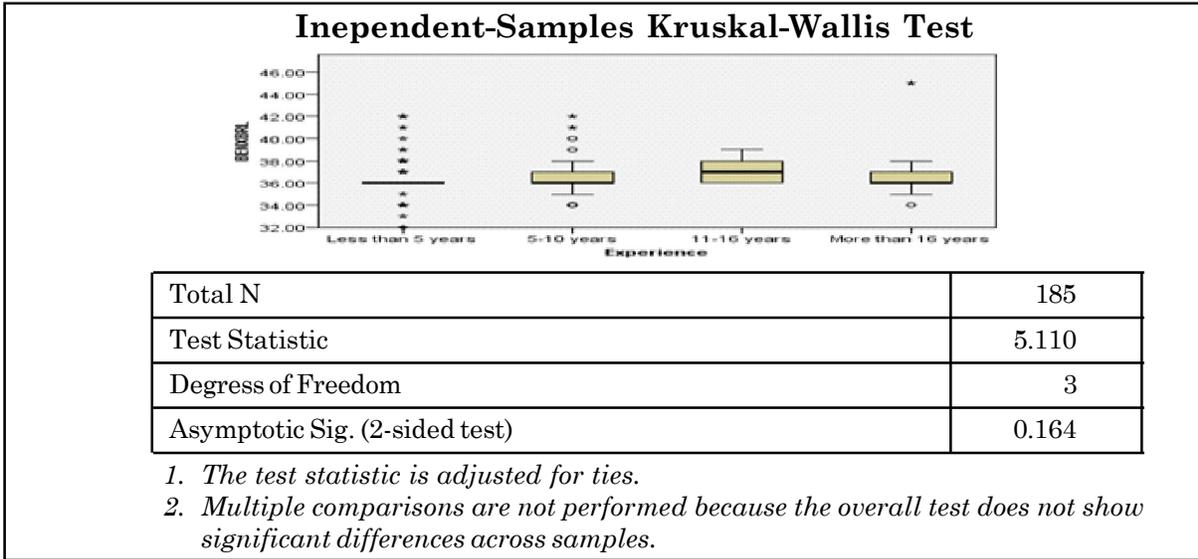
Figure 4

Source: Primary Data.

To check if there is significant variation in different categories of respondents on the basis of years of experience in terms of perceived Obstacles in adoption of XBRL, we proceeded with the Kruskal Wallis and found the following distribution in Figure 5.

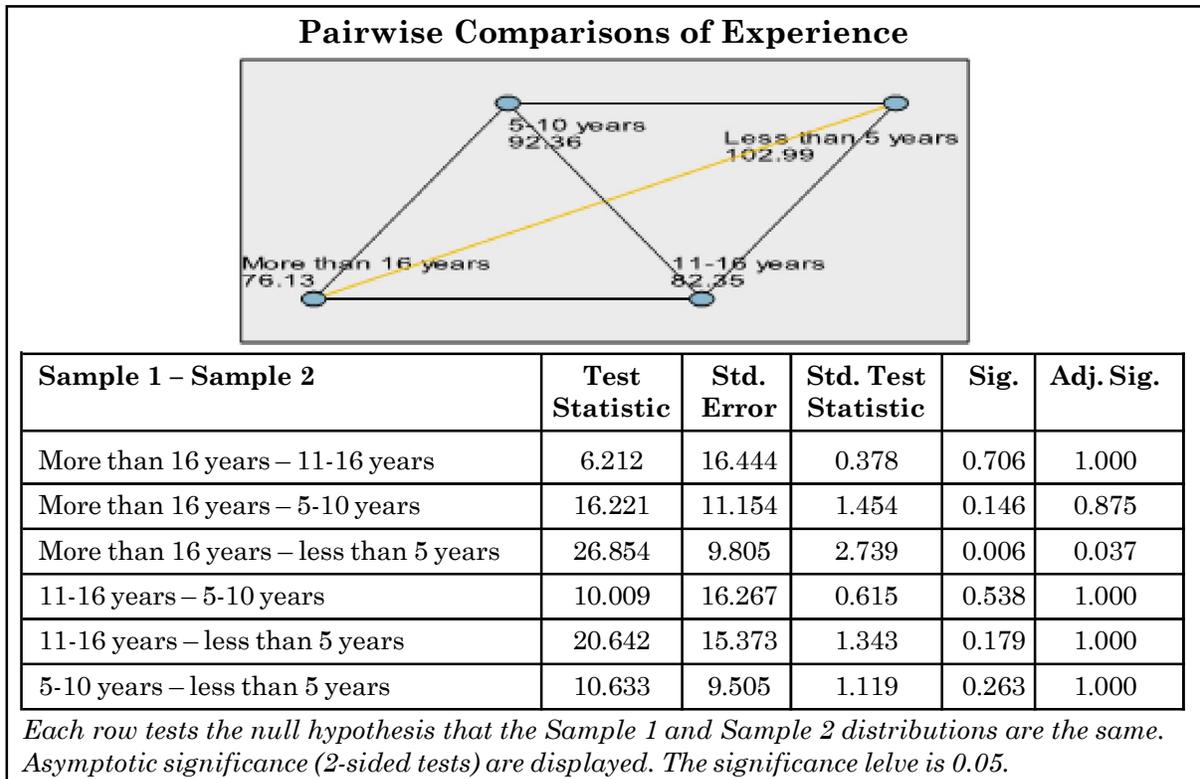**Inependent-Samples Kruskal-Wallis Test**

Total N	185
Test Statistic	10.626
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.014

1. *The test statistic is adjusted for ties.*

Figure 5

Source: Primary Data.

The significant difference was found in at least one of the categories of respondents. To check which group differ, pairwise comparison was done using Post hoc Analysis which is shown in the following Figure 6.

Pairwise Comparisons of Experience

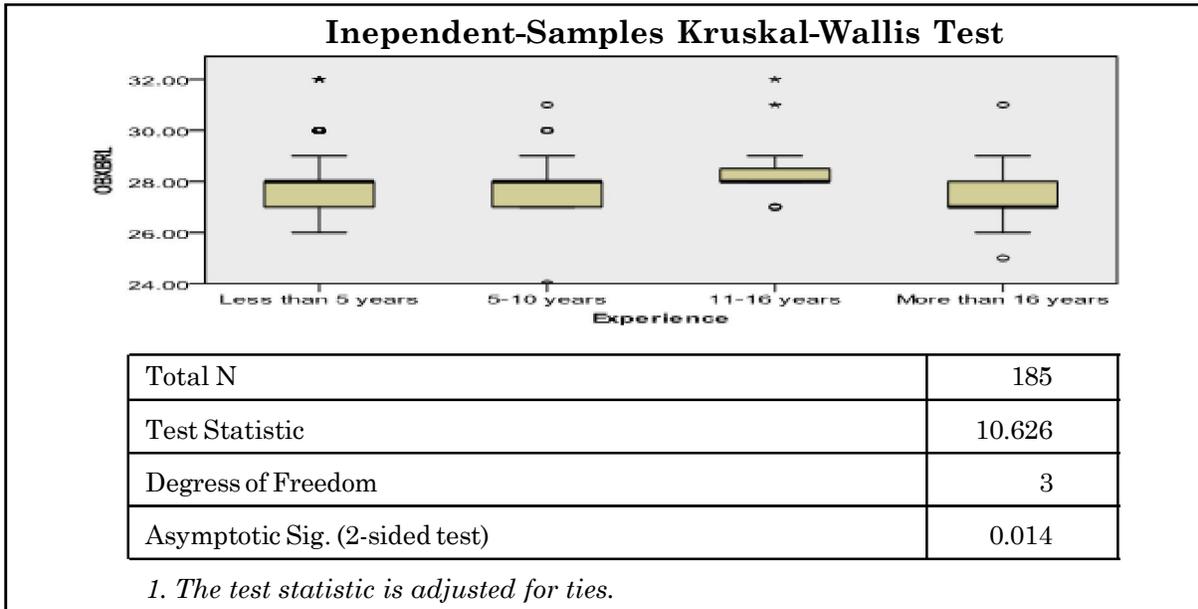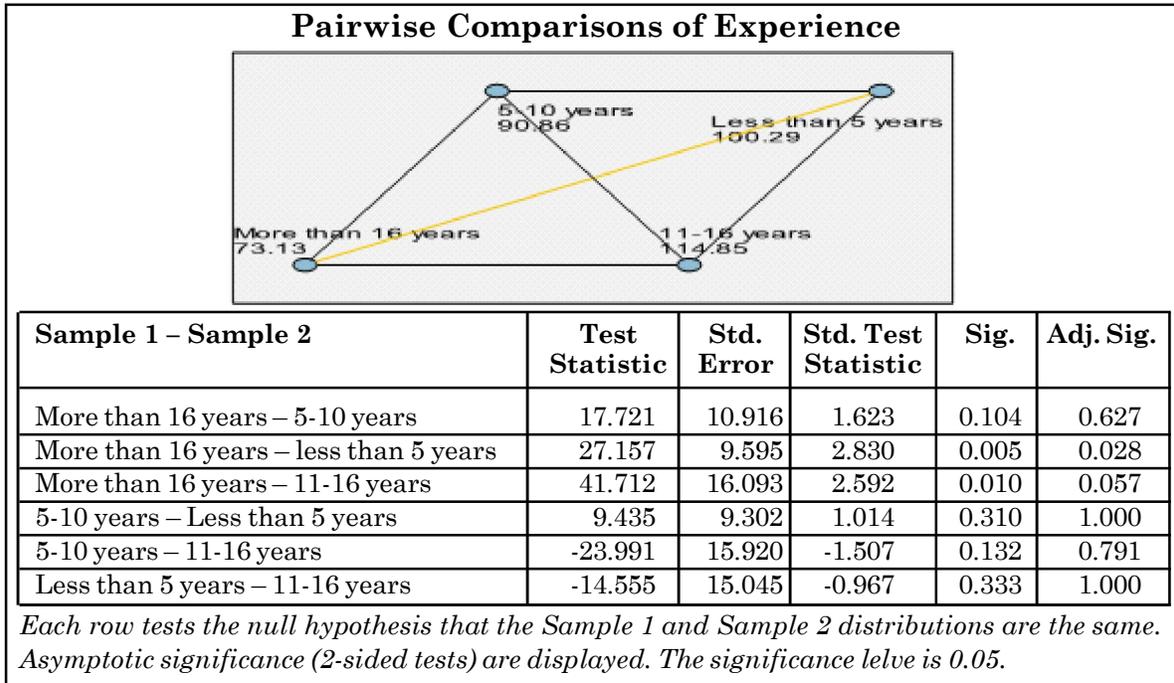| Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
More than 16 years – 5-10 years	17.721	10.916	1.623	0.104	0.627
More than 16 years – less than 5 years	27.157	9.595	2.830	0.005	0.028
More than 16 years – 11-16 years	41.712	16.093	2.592	0.010	0.057
5-10 years – Less than 5 years	9.435	9.302	1.014	0.310	1.000
5-10 years – 11-16 years	-23.991	15.920	-1.507	0.132	0.791
Less than 5 years – 11-16 years	-14.555	15.045	-0.967	0.333	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance lelve is 0.05.

Figure 6

Source: Primary Data.

Figure 6 shows that groups more than 16 years and less than 5 years differ in their perception on the perceived obstacles of XBRL, so we reject the null hypothesis.

Hypothesis 2

To test the H02 ("H02"- AWXBRL, BENXBRL, and OBXBRL do not significantly vary among the groups made on the basis of demographic variable of occupation of the respondents), Kruskal Wallis test was applied, and the following results were drawn.

Table 11: Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1.	H04: AWXBRL do not significantly vary among the groups made on the basis of **occupation** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.007	Reject the null hypothesis.
2.	H05: BENXBRL do not significantly vary among the groups made on the basis of **occupation** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.505	Retain the null hypothesis.
3.	H06: OBXBRL do not significantly vary among the group made on the basis of **occupation** of the respondents.	Independent-Samples Kruskal-Wallis Test	0.023	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is 0.05.

Table 11 shows that there is significant difference between the various Occupation categories of respondents in terms of Awareness of XBRL and Obstacles of XBRL, but no significant difference was found among these groups in terms of Benefits of XBRL.

Figure 7 shows the distribution of respondents in terms of Awareness on XBRL.
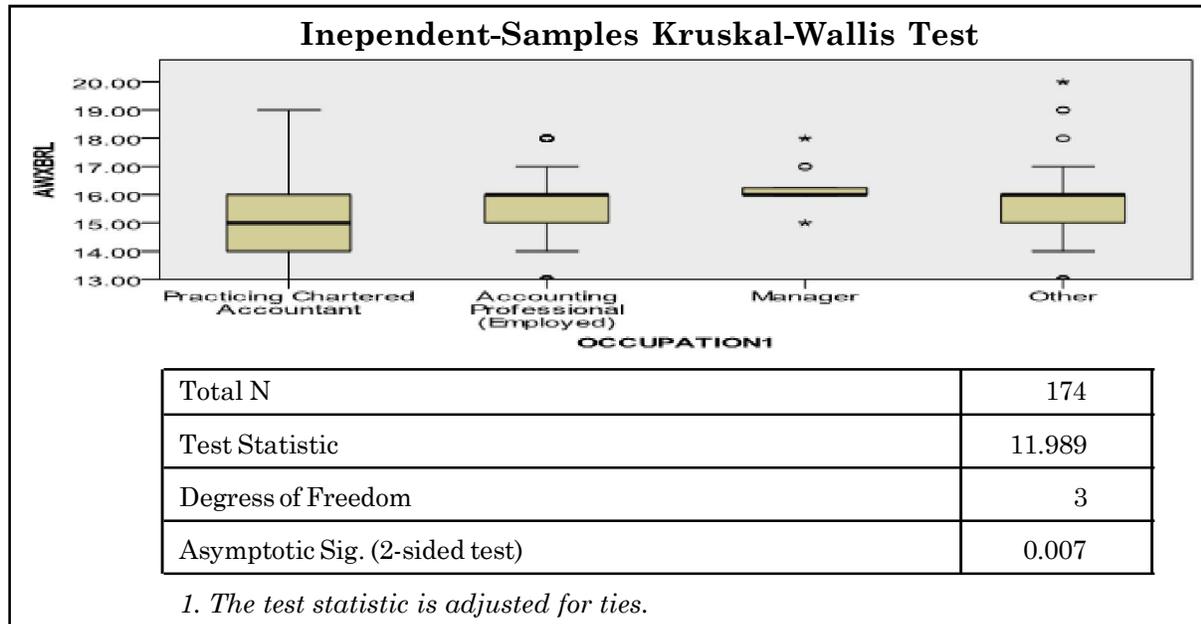

Inependent-Samples Kruskal-Wallis Test

Total N	174
Test Statistic	11.989
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.007

1. The test statistic is adjusted for ties.

Figure 7

Source: Primary Data.

To see which two categories of respondents significantly vary from each other, further pairwise comparison was done using Post hoc Analysis as is shown in Figure 8.

Pairwise comparison signifies that there is significant difference in the level of awareness between categories of Practicing Chartered Accountants and Manager.

Figure 9 shows the distribution of responses on the perceived benefits of XBRL. No significant variation was reported, so we retain the null hypothesis.

To check if there is significant variation in different categories of respondents on basis of the Occupation in terms of perceived Obstacles in adoption of XBRL, we proceeded with the Kruskal Wallis Test and found the following distribution in Figure 10.

The significant difference was found in at least one of the categories of respondents. To check which group differ, pairwise comparison was done using Post hoc Analysis which is shown in the Figure 11.

Figure 11 show that groups Practicing Chartered Accountants and Managers, and Practicing Chartered Accountants and Other differ in their perception on the perceived obstacles of XBRL, so we reject the null hypothesis.

Conclusion

The Integrated Reporting Framework makes overt mention to XBRL as a "standardized technology platform that may be used for Integrated Reporting". It goes on to say that "XBRL improves the way information is created, processed, distributed, and analyzed by providing standardized definitions, labels, calculations, references and contexts applicable to individual numbers and narrative text". The very
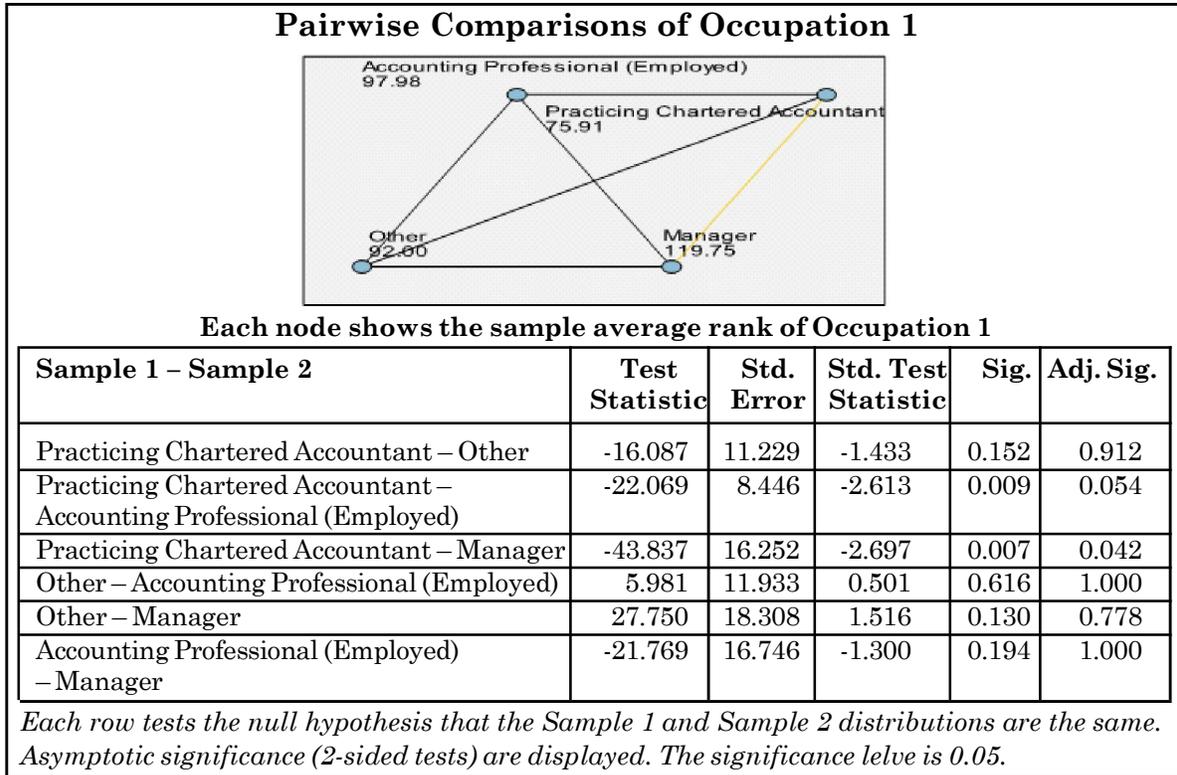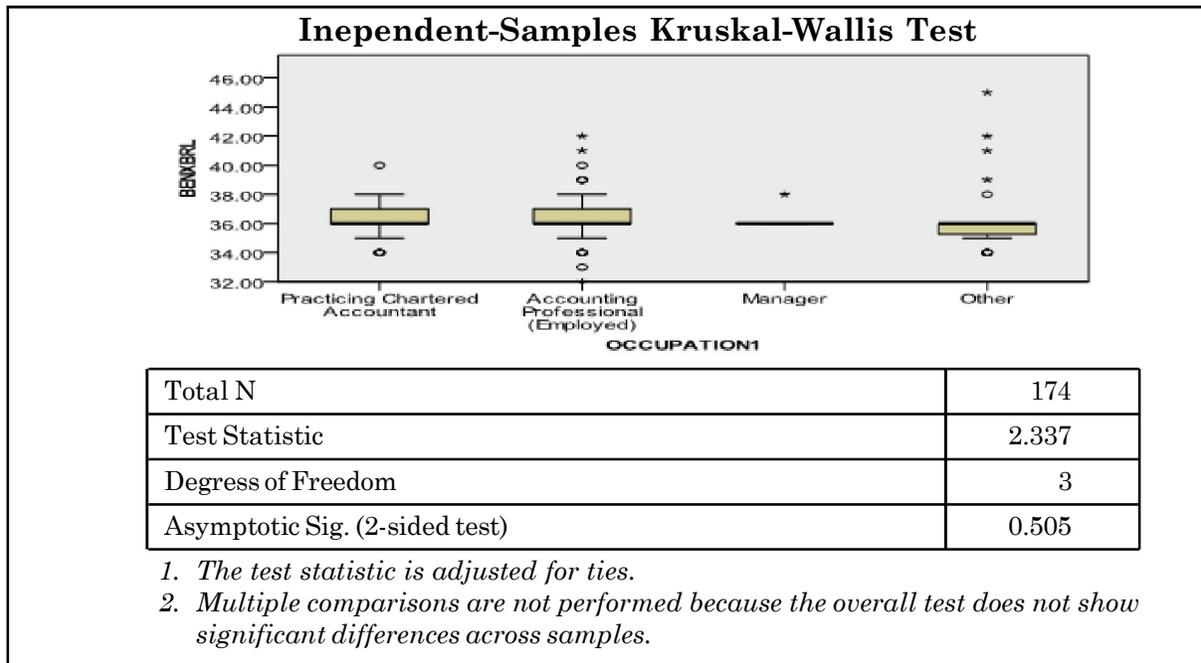
Pairwise Comparisons of Occupation 1

Each node shows the sample average rank of Occupation 1

Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Practicing Chartered Accountant – Other	-16.087	11.229	-1.433	0.152	0.912
Practicing Chartered Accountant – Accounting Professional (Employed)	-22.069	8.446	-2.613	0.009	0.054
Practicing Chartered Accountant – Manager	-43.837	16.252	-2.697	0.007	0.042
Other – Accounting Professional (Employed)	5.981	11.933	0.501	0.616	1.000
Other – Manager	27.750	18.308	1.516	0.130	0.778
Accounting Professional (Employed) – Manager	-21.769	16.746	-1.300	0.194	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance lelve is 0.05.

Figure 8

Source: Primary Data.

Inependent-Samples Kruskal-Wallis Test

Total N	174
Test Statistic	2.337
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.505

1. *The test statistic is adjusted for ties.*
2. *Multiple comparisons are not performed because the overall test does not show significant differences across samples.*

Figure 9

Source: Primary Data.

Inependent-Samples Kruskal-Wallis Test

Total N	174
Test Statistic	9.543
Degress of Freedom	3
Asymptotic Sig. (2-sided test)	0.023

1. The test statistic is adjusted for ties.

Figure 10

Source: Primary Data.

Pairwise Comparisons of Occupation 1

Each node shows the sample average rank of Occupation 1

Sample 1 – Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Practicing Chartered Accountant – Accounting Professional (Employed)	-11.104	8.245	-1.347	0.178	1.000
Practicing Chartered Accountant – Other	-23.653	10.962	-2.158	0.031	0.186
Practicing Chartered Accountant – Manager	-39.265	15.865	-2.475	0.013	0.080
Accounting Professional (Employed) – Other	-12.549	11.649	-1.077	0.281	1.000
Accounting Professional (Employed) – Manager	-28.161	16.348	-1.723	0.085	0.510
Other – Manager	15.612	17.873	0.874	0.382	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significance (2-sided tests) are displayed. The significance lelve is 0.05.

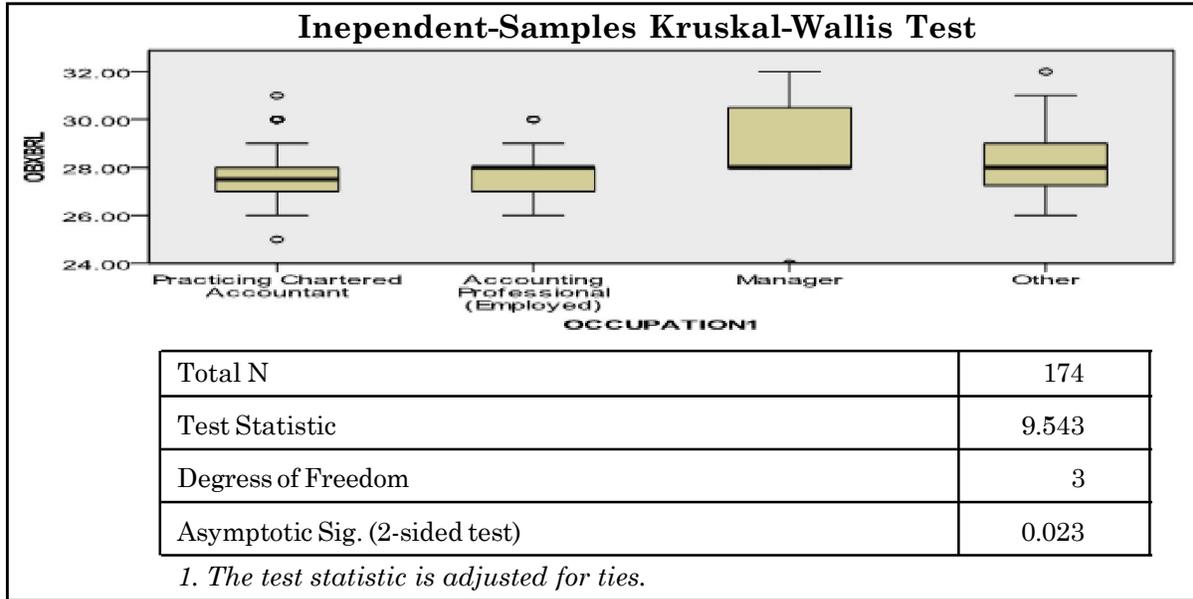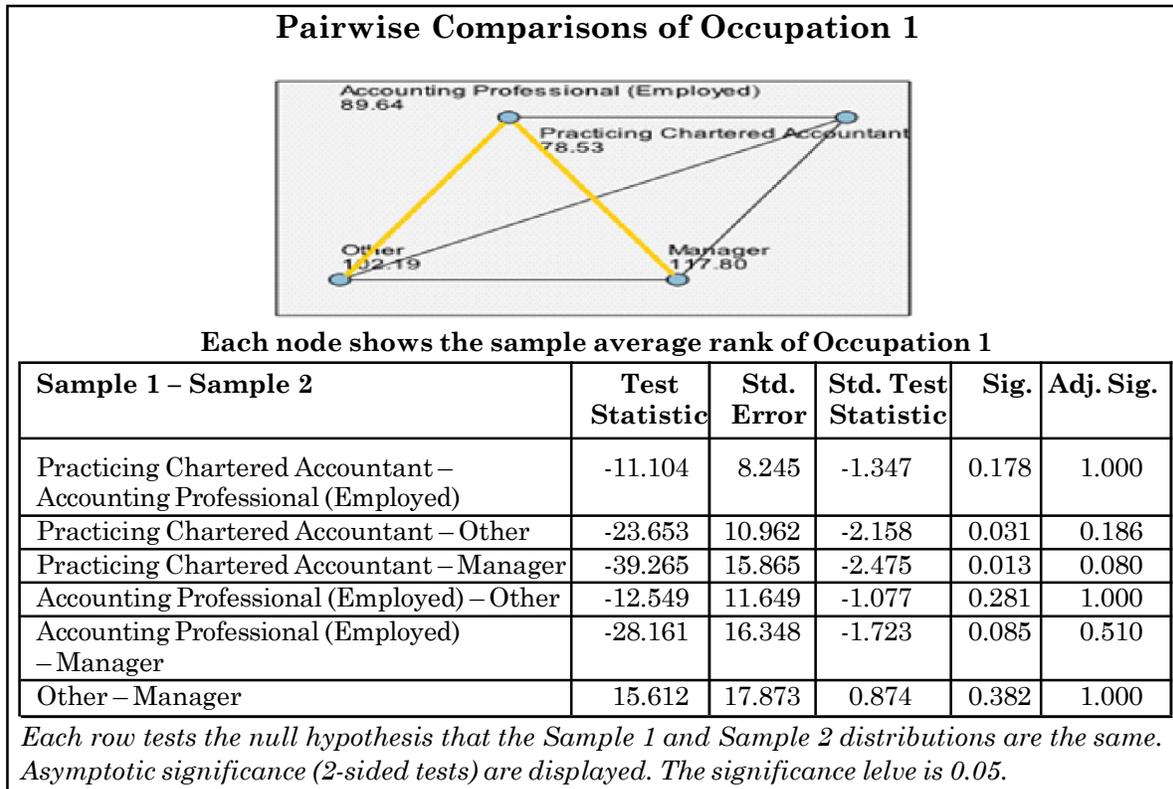**Figure 11**

Source: Primary Data.

same benefits XBRL provides to financial data are possible for non financial data; it is, therefore, a logical choice for integrated reports.

In India, vide general circular no.: 16/2012 dated 6th July 2012, Ministry of Corporate Affairs (MCA) has mandated that companies (except banking companies, Power companies, Non-Banking Financial Companies (NBFC) and Insurance companies) falling in the following categories will have to file their Balance Sheet and Profit & Loss Account using the Extensible Business Reporting Language (XBRL) taxonomy for financial year commencing on or after 01.04.2011:

1. All companies listed with any Stock Exchange(s) in India and their Indian subsidiaries; or

2. All companies having paid up capital of Rupees five crore and above; or

3. All companies having turnover of Rupees one hundred crore and above; or

4. All companies who were required to file their financial statements for FY 2010-11, using XBRL.

For this, new Form 23AC-XBRL (For Balance Sheet) and 23ACA-XBRL (For Profit & Loss Account) have been made available on the MCA portal (Ministry of Corporate Affairs, Government of India). Through this paper, the authors have found out the Level of Awareness and our preparedness for the same. It has been found that the Knowledge of XBRL is more in the new generation of Chartered Accountants, the reason for this may be that they are more updated with the recent developments or they are more exposed to the seminars, etc., conducted by ICAI for dissemination of knowledge on the same. It is time for the Indian universities to keep pace with developments taking place in the field of Accounting and Reporting in India and rest of the World and to make inclusion of XBRL and Non-financial reporting in its curriculum.

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