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The Level of Internet Adoption in Business Reporting:

The Nigerian Perspectives

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ABSTRACT

In recent years, a paradigm shift has occurred regarding the way firms report their activities. Instead of using the traditional approach, otherwise called paper-based reporting, the trend has switched into the use of a more sophisticated approach referred to as internet or web-based reporting. This study examines the extent of internet implementation in business reporting by emphasizing on the listed manufacturing companies in Nigeria. For the purpose of this study, all manufacturing companies listed on the Nigerian Stock Exchange constitute the population. The purposive sampling procedure was employed to select forty-five out of ninety listed companies. Primary data were obtained from a thematic questionnaire that uses validated scales. The data collected were analyzed using both descriptive and inferential statistics. Specifically, Principal Component Analysis (PCA) was the inferential statistic used to evaluate the extent to which manufacturing companies employ the internet in reporting their financial and non-financial activities. The results show that the listed manufacturing companies are at the exploratory stage. The internet is employed either as an extension activity or enrichment exercise to the hard copy business reporting model. This study offers a guide to stakeholders of the listed manufacturing companies to enhance their competitive advantage by employing technology in reporting their activities.

INTRODUCTION

The world in which we live today is dynamic. As a result, new ways of handling tasks are constantly evolving through creative thinking. Technology, arguably, is one of the finest outputs of such creative thinking. The modern world essentially depends on technology for almost every endeavour. Technology has changed the way business is conducted and operated. Reporting requirements become more complex as businesses grow. Organizations have to deal with the choice of media of reporting to face the complexities (Salaudeen, Ikhu-Omoregbe, Alayemi & Adeniyi, 2016). The best media of business reporting are essentially those which are capable of providing adequate, accurate, and timely information for the stakeholders. According to (Munther

& Rekha 2013), quality and timely information dissemination is considered the only means to mitigate potential issues related to information asymmetry and agency problem (Munther & Rekha 2013). Therefore, in recent years, a paradigm shift has occurred regarding the way firms report their activities. Instead of using hard copy model of reporting, the trend has switched into the use of a more sophisticated approach referred to as internet or web-based reporting (Salaudeen et al, 2016; Shukla & Gekara, 2010).

Studies have shown that factors such as globalization and demand for timely and accurate information are driving organizations to publish detailed financial and non-financial information using different (Salaudeen et al, 2016; Shukla & Gekara, 2010). Since it has the capability to deal adequately with the challenges that come with the demand for detailed and timely information, the internet, then, has become a de facto for corporate reporting.

Prior studies have shown that companies in the developed economies have reached an advanced stage in web reporting. The opposite reality, nevertheless, occurs in the developing economies (Salaudeen et al., 2016). The presence of relevant standards and regulatory pressures are important determinants of the extent of web reporting. However, in spite of the perceived effectiveness of technology-based reporting, developing countries have not paid significant attention to the subject matter. This is evident in the lack of appropriate standards geared towards enhancing web-based reporting practices in Nigeria. Efforts need to be redirected towards the web reporting model of the critical sectors in order to attract more foreign investments. Foreign investors desire accurate and timely information to make an investment decision. Technology-based reporting provides the much-needed platform for companies to disseminate accurate and timely information to the global audience instantaneously (Willis, Tesniere & Jones, 2003; Isenmann & Lenz, 2000).

The perceived effectiveness and increased focus on internet-based reporting have drawn the attention of researchers. However, most of the empirical studies conducted are essentially predicated on data from the developed economies. Firms in developing economies have significantly different characteristics compared to those in the advanced economies (Florio & Leoni, 2016). Consequently, it may be inappropriate or challenging to generalize the findings from such studies (Lu, Suhartanto, Gunawan & Chen, 2020). Therefore, there is a need for a study that will provide a basis to understand the field of internet reporting in a different context. The present study is an attempt to contribute to the literature by looking at the level in which companies employ the internet in their reporting using a dataset from a developing economy, which is Nigeria. The findings from this study will validate and complete the findings from prior studies.

LITERATURE REVIEW

Internet Business Disclosure

Scholars in the field of corporate reporting have made several attempts to define Internet reporting. One of the notable definitions was given by the International Accounting Standards Committee (IASC) in 1999. It *defines web or internet disclosure as "the public reporting of operating and financial data by a business enterprise via the World Wide Web or related Internet-based communications medium"*. According to Salaudeen et al. (2016), internet reporting involves leveraging on technology to disseminate both financial and non-financial information to

stakeholders. These two definitions suggest that internet reporting is a deliberate attempt by the management of organizations to employ the internet in making their financial statements available to stakeholders.

The proponents of internet reporting have advanced various arguments or reasons as to the need for firms to embrace the internet in business reporting. The web has become an important medium for business reporting because it has the capacity to make information available to stakeholders instantaneously (Jones & Xiao 2004; Bryant & Street 2007). The web or the internet does not only enhance the standardization of information provided to the stakeholders but also reduces the efforts and cost of communicating such information (Isenmann & Lenz, 2000; Ashbaugh et al., 1999). The web or the internet is regarded as the most potent medium of corporate reporting in modern business. It is used to disseminate corporate information to shareholders, management, and other users of corporate information. With the web, anyone with a networked digital terminal can access the information connected to the network. This, therefore, allows the stakeholders to get the much-needed comfort, flexibility, and opportunity to download information for their intended usage (Salaudeen et al., 2016; Software AG, 2002).

Apart from creating a platform for businesses to advertise their services, the internet makes businesses more visible to the public. In terms of cost, it is also economical because companies will save money involved in printing and dispatching voluminous financial statements to shareholders and other interested stakeholders (Salaudeen et al., 2016; Software AG, 2002; Munther & Salah, 2006).

Extensible Business Reporting Language (XBRL)

Businesses have employed formats such as portable data format (PDF), Hypertext Mark-up Language, Adobe Acrobat Files, and so on to report their financial and non-financial activities (Salawu, 2014; ACCA, 2009). The emergence of Extensible Business Reporting Language (XBRL) is seen as the major step in the field of internet reporting. *"XBRL has been designed for the digital communication and representation of financial data to allow users throughout the world to access timely, accurate, and relevant information from world-wide business organizations"* (ACCA, 2009, p.5). The development of XBRL is a direct response to the desire for standardized technology-based reporting. The standardization will improve business reporting processes and enhance the quality of information disclosed. "*XBRL as a data description language enables the exchange of understandable, uniform business information based on Extensible Mark-up Language (XML) which permits the automatic exchange and reliable extraction of financial information across all software formats and technologies including the internet*" (Software AG 2002, p.5).

XBRL offers all the required flexibility over other formats such as HTML, PDF, and Adobe Acrobat files when data are to be shared between users (Software AG, 2002, p.1). Although these formats are best used in editing, they have no place when the data need to be shared between users as the information in these different formats will have to be re-entered for further processes (Salaudeen, et al., 2016). Using other formats other than XBRL makes the process of analyzing financial statements tends to be manual, error-prone, and time-consuming. For instance, when corporate information is published in PDF format, users will have to re-key the information manually for further processes. XBRL on the other hand allows the automatic exchange and reliable extraction of information across all software formats and technologies including the internet.

XBRL Adoption

Leading economies in the world such as the United States of America, the United Kingdom, China, Japan, France, Singapore, and several other European countries have taken the lead with respect to the use of XBRL in reporting (Lakovic & Vulic, 2018). Public companies in the United States of America and the United Kingdom, for instance, are mandated to file their reports and corporate tax return using XBRL format (ACCA, 2009, p.5). Specifically, HM Revenue and Customs (HMRC) of the UK favors the usage of iXBRL (inline eXtensible Business Reporting Language) format in filing financial statements and tax returns. With this development, Extensible Business Reporting Language is, no doubt, becoming the global technology standard for corporate reporting. Unfortunately, the developing economies are not in tune with the trend in corporate reporting. There is no specific standard or known effort on the part of the regulatory bodies in Nigeria geared towards enforcing technology-based reporting and XBRL adoption. The choice of the medium of reporting is at the behest of the organization management. This explains the reason for the non-standardization of web reporting of firms in Nigeria.

The few that report via web do so with the help of PDF, Adobe Acrobat files, and HTML, which offer no advantage to photocopied documents when it comes to exchanging data on the computing platform.

The usefulness of XBRL

Literature has advanced the reasons a firm should consider employing XBRL in corporate reporting. Some of the reasons are:

1. Efficiency and effectiveness in data manipulation. With XBRL, the time required to process data will be reduced significantly because XBRL permits automatic exchange and reliable extraction of information across all software formats and technologies including the internet.
2. Effective Data Analysis. Since information presented in XBRL format could be reliably extracted and exchanged automatically, it is convenient to create a standardized output. Again, the XBRL platform is flexible as it allows for timely and effective manipulation of multiple reports concurrently. With this, the process of data analysis by the management for internal use, financial analysts, and other interested stakeholders will be more effective and more rewarding.
3. XBRL facilitates paperless financial reporting. Previously, ledgers were the major sources or databases for financial information. Information mined from the ledgers were subjected to multiple processes, depending on the needs of the users. This sequence of processes involved the use of lots of papers, but with XBRL, this process is avoided because the information is stored and retrieved electronically.
4. Major software developers have developed XBRL incorporated financial packages. This implies that XBRL enabled packages are readily available.

Application of XBRL

Loan Processing

Creditworthiness is one of the major criteria for banks to grant loans. It takes banks a longer period than necessary when verifying clients' documents for the purpose of ascertaining their

creditworthiness. This is because every single action involved in loan processing is done manually. In this case, XBRL will improve the loan processing activities of banks. Specifically, XBRL eliminates tasks such as manual accumulation of information and document verification.

Preparation of Consolidated Accounts

Subsidiaries of multinational corporations may inevitably present financial statements in different formats (Software A.G., 2010). With XBRL, the information from subsidiaries is streamlined and this will impact on the preparation of consolidated accounts.

Theoretical Underpinning

The study relies on the LoTi Framework, the upper echelon theory, and the Diffusion of Innovation theory. Studies have used these theories to study the level of adoption of innovation (Bello, 2014; Rambocas & Arjoon, 2012; Pease & Rowe, 2007; Wejnert, 2002; Mosely, 2000). This justifies the use of these theories in this study.

The Upper Echelon Theory

Decision making by individuals is influenced by a number of factors. Demographic characteristics are some of the key factors that impact the decision making processes of individuals. Hambrick and Mason (1984) use the upper echelon theory to explain the effect of demographic characteristics of top-level individuals on decision-making of firms. The theory presumes that the demographic characteristics of the individuals at the upper echelon are associated with cognitive base, values, and perceptions. Demographic characteristics of individuals such as age, sex, tribe, marital status, level of education, and so on have the capacity to significantly influence their perception, thinking, or mental processes. The perception and conscious mental processes form the base of the decision making of these individuals. Since the decision to either employ technology in corporate reporting or not rest with the management, demographic features of the top-level management impact the decision making with respect to the use of the internet in corporate reporting.

Level of Technology Implementation (LoTi) Framework

The LoTi framework was developed by Moersch in 1995 to model the factors that influenced the use of computers and its applications. This framework was originally designed to study the behaviors of teachers towards technology interventions. The foundation of the study was based on self-efficacy model, which presumes that all things are equal, individuals are more comfortable with innovations that he or she can operate and handle. Consequently, workers will tend to kick against the implementation of innovations that they assume to beyond their capacity, even if the company will be better with such implementation. The present study relies on the self-efficacy model to examine the extent of implementation of the internet in business reporting. The researchers argue that the extent of innovation acceptance in corporate reporting is a function of self-efficacy of those responsible for corporate reporting.

The Diffusion of Innovation Theory

The theory was propounded by Rogers in the year 2003. It states that the acceptance of technology by individuals is not an instantaneous act but rather a gradual and continuous process. The theory is concerned with the rate and stages of adoption of innovation (Pease & Rowe, 2007). According to Rogers (1995, p.11), *"Innovation is an idea, practice or object that is perceived as new by an individual or other unit of adoption".* The theory postulates that the degree of willingness of individuals to accept a given innovation progresses over time. At the introduction stage, individuals will resist a given innovation, but such resistance will reduce over time as they become more knowledgeable and aware of the innovation. According to Wejnert (2002), *"Adoption process of innovation is not uniform and differs based on the nature of the innovation itself, the innovators, and the environmental context within which the organization is placed".* The diffusion of innovation theory is the best model to explain the level of adoption of innovation (Pease & Rowe, 2007). Relying on this theory, the present study proposes that the level of adoption of innovation in reporting progresses over time, and it is influenced by factors such as organizational readiness, attitude to risk, knowledge and experience with innovation, and the environment within which a firm operates.

Empirical Review

Bello (2014) examined the impact of technology interventions on student performance in Mathematics and English Language. The study employed the Level of Technology Implementation (LoTi) framework as an attempt to understand the effect of teacher's level of technology implementation on students' performance. Data were sourced from the examination scores of students in both Mathematics and English language. Multivariate analysis of variance (MANOVA) was used in analyzing the data. The study found that technology intervention impacts significantly on students' performance.

Al-Jabri and Sohail (2012) also examined the determinants of mobile banking adoption in Saudi Arabia. A questionnaire was the instrument used in data gathering. The data were analyzed using regression and principal component analysis. The study found that relative advantage, compatibility, and observability significantly impact mobile banking adoption.

Rambocas and Arjoon (2012) modeled customer loyalty for internet banking using the diffusion of innovation theory. The study explored the reasons for the low usage of internet banking among customers. The study employed Structural Equation Modeling analysis techniques in analyzing the data. It found that that perceived relative advantage and government support are two fundamental determinants of internet banking loyalty while trust, compatibility, and awareness are driven by the perceived benefits of the medium offered to customers' lifestyles

RESEARCH METHOD

This study examines the extent of internet implementation in business reporting with emphasis on the listed manufacturing companies in Nigeria. For the purpose of this study, all manufacturing companies listed on the Nigerian Stock Exchange constitute the population. The purposive sampling procedure was employed to select forty-five out of the ninety listed companies. The sample size satisfies the rule of thumb proposed by Roscoe (1975). According to Roscoe (1975), a

sample size larger than 30 and less than 500 is appropriate for most researches. A thematic questionnaire was used in gathering primary data. Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity (BTS) were conducted to test the adequacy of the sample used and the appropriateness of PCA while Cronbach alpha test was employed to assess the internal consistency of the instrument. The study employed PCA in analyzing the data.

RESULT AND DISCUSSIONS

Table 1. Demographic characteristics of the respondents

Characteristics	Description	Frequency(162)	Percentage (%)
Age	25-35 years	68	42
	36-45	61	38
	46 and above	33	20
Sex	Male	121	75
	Female	41	25
Qualification	Diploma/ND/NCE	12	7
	B.Sc/HND	63	39
	M.Sc./MBA/PhD/ACA	87	54
Cognate Experience	1-5 years	37	23
	6-10 years	73	45
	11 years and above	52	32
Position	Accountant	88	54
	I.T. Personnel	71	44
	Chief Finance Officer	3	2

Source: Authors Computation, 2019

Table 1 above contains the demographic features of the respondents. The largest portion of the respondents falls between the ages of 25-35 making it 42%, followed by those within the age of 36-45 representing 38%, while those at the age of 46 and above represent 20%. With respect to the sex of the respondents, male constitutes the larger portion with a frequency of 121 which represents 75% of the total respondents. A larger portion (54%) of the respondents has the additional qualifications (i.e. M.Sc./MBA/PhD/ACA) while 39% other has either B.Sc./HND. In total, 93% of them are graduates. It suffices to conclude that the respondents have sufficient education and, therefore, will be knowledgeable to appropriately respond to the questionnaire. The majority of the respondents has between 6 to 10 years of cognate experience, representing 45% of the total respondent, followed by those with 11 years and above which constitutes 32%. The analysis of respondents' working experience indicates that a larger portion of the respondents has a minimum of 6 years of working experience. It is, therefore, assumed that they have a better understanding of the reporting requirements and technology needs of their companies. With regards to the position, the chief finance officer is the least while accountants and Information Technology personnel occupy the first and second positions respectively.

Preliminary Diagnostic Tests

Table 2. Testing the reliability of the research instrument

Test scale = mean (Unstandardized items)	
Average inter-item covariance	0.200
Number of items in the scale	25
Scale reliability coefficient	0.818

Source: Authors computation, 2019

In order to examine the reliability and internal consistency of the instrument, the Cronbach Alpha technique was used. There is no specific benchmark value for the alpha coefficient, but as a rule of thumb, the higher the alpha coefficient, the more reliable the instrument. In this study, a reliability coefficient of 0.50 was used as a benchmark for acceptability. The Cronbach's Alpha (α) reliability test score is 0.818 as presented in Table 2. This implies that the internal consistency level of the research instrument is at an acceptable level and therefore reliable.

Table 3. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity (BTS)

Kaiser-Meyer-Olkin (KMO) Measures of sampling Adequacy	0.737
Bartlett's Test of Sphericity Approx Chi-square	1419.243
Degree of freedom (diff)	300
P-Value (Sig)	0.000

Source: Authors Computation, 2019

To determine whether the use of Principal Component Analysis (PCA) is appropriate and valid for this study, Bartlett's Test of Sphericity (BTS) was employed. According to Field (2005), PCA is considered appropriate and valid only if the probability associated with Bartlett's Test of Sphericity is less than the significance level. Bartlett's Test of Sphericity as presented in Table 3 shows a probability value (p-value) of 0.000 which is less than the significance level of 0.05 and, thus, satisfies the conditions as suggested by Field (2005). This condition validates the use of principal component analysis for this study. Furthermore, the study has to be sure of the adequacy of the sample size, and the Kaiser-Meyer-Olkin (KMO) test was employed for that purpose. Again, Field (2005) states the conditions that must be met before a given sample could be deemed adequate for a given study. A sample is considered adequate only if the measured KMO for the set of a variable is >0.50 (Field, 2005). The overall KMO measured of sampling adequacy as shown in Table 3 is 0.737. It is >0.50 and, therefore, satisfies the conditions as suggested by Field (2005). This implies that the sample size is adequate for factor analysis and, therefore, considered suitable for the study.

Horn's Parallel Analysis, a technique of principal component analysis, was employed in components retention. Literature has endorsed this Horn's Parallel Analysis as one of the most reliable techniques for components retention (Field, 2005). According to this technique, a component will be retained if its adjusted eigenvalue is greater than one. In line with the criterion, five key components are retained as shown in Table 4. Levels 2 (exploratory) and 0 (non-use) have two components each while Level 1 (awareness) has one out of the five components retained. The two components at the exploratory level are the most important components with the highest adjusted eigenvalues of 4.430 and 2.008.

Table 4. The results of PCA using Horn's Parallel Analysis for principal components.

Component	Adjusted Eigenvalue	Unadjusted Eigenvalue	Estimated Bias
1	4.430	5.256	.826
2	2.008	2.729	.721
3	1.574	2.122	.548
4	1.297	1.730	.433
5	1.111	1.459	.348
6	.965	1.275	.310
7	.948	1.150	.202

Criterion: retain adjusted components > 1
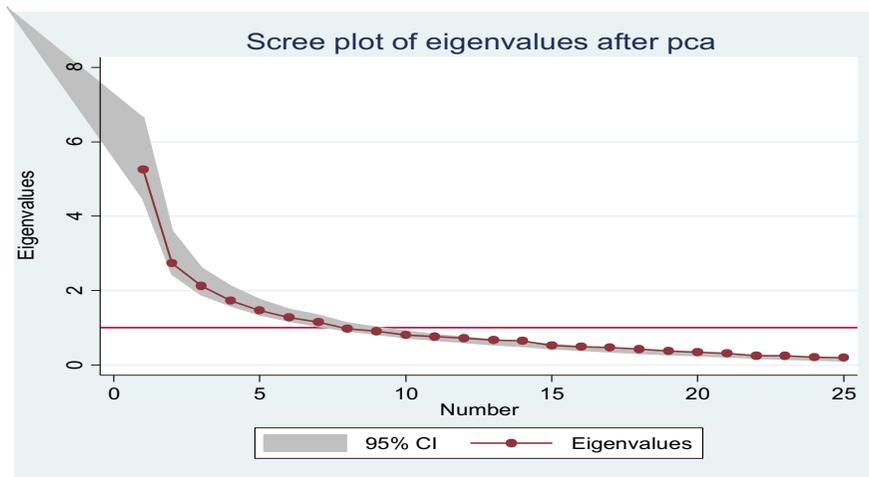
Source: Authors Computation, 2019.

Figure 1. The results of Eigenvalues

DISCUSSION OF THE RETAINED COMPONENTS

In analyzing the results from PCA using Horn's Parallel Analysis, the adjusted eigenvalues associated with individual items are of paramount importance. The importance of each item is determined by the value of its adjusted eigenvalue in descending order. That is, the item with the highest adjusted eigenvalue is considered more important, followed by the next highest value and so on.

The results as presented in Table 4 suggest that companies are at Level 2 (i.e. exploration) in adopting internet/web reporting. The principal components with the highest adjusted eigenvalues of 4.430 and 2.008 are under the exploration stage. The simplest explanation to this is that companies are:

1. currently seeking major modification of present innovation (i.e. the use of PDF, HTML, Adobe file etc) to achieve increased impact in web reporting; and
2. currently employ the web either to extend or enrich the hard copy reporting model.

From the results, it is also very clear that the respondents have good knowledge of web reporting because they are very much aware of the usefulness of technology in corporate reporting.

Implications for Practice

The findings of this study may provide some implications for the stakeholders of listed manufacturing firms such as management, shareholders, and regulators. For the management, the finding might provide them with an insight into the benefits associated with technology-based reporting. The management will be adequately guided in deciding the appropriate technology to be deployed as well as the steps to be taken when implementing a given technology. This may put companies in a competitive advantage and, thus, help improve their performance.

Adopting technology in business reporting might mitigate pollution that comes along with the use of papers, toners, etc. It, thus, enhances the environment and improves the quality of air and water which leads to a high quality of life. Regarding this purpose, the board of directors, who are the eagle eye of the shareholders, may be guided in their strategic decision making with respect to their responsibility towards the environment. Furthermore, since regulatory bodies are also interested in the quality of the environment, this study may be useful for them in coming up with policy documents fashioned towards protecting the environment.

Contribution to Knowledge

While the upper echelon theory has been employed in an attempt to explain voluntary disclosure practices of firms, no attempt has been made to explore the possibility of this theory to explain how the demographic characteristics of top-level individuals affect the level of web adoption in reporting. Equally, studies such as Pease & Rowe (2007) and Wejnert (2002) have employed the diffusion of innovation theory to study the rate and stages of innovation acceptance, but most of the empirical assessments of this relationship have been predicated on data from developed countries. Importantly, to the best of our knowledge, none of these studies employed the use of Principal Components Analysis (PCA) which, according to Field (2015), is the best technique for the study of this nature. These facts, therefore, represent the significant contributions of the present study to the field of web reporting.

CONCLUSION AND RECOMMENDATION

From the data analysis and interpretations, the study reveals that the sampled manufacturing firms are at the exploration stage. The firms are exploring technology-based reporting even though they are aware of what the web or the internet can do in the area of reporting. Most of the manufacturing firms communicate their financial and non-financial activities to the stakeholders through the traditional model of reporting. Equally, almost all the firms host their financial activities on their webpage, largely in a PDF format, to complement the paper-based reporting. The study concludes that since an individual's decision to adopt a given technology occurs over time, the adoption of web-based reporting could be said to be progressing. Importantly, the level of adoption could be said to be influenced by the environment within which an organization operates. The study, then, recommends that management should leverage technology to gain a competitive advantage. The practitioners could achieve this by constant training of their staff, targeting at entrenching the culture of technology in their routine. The Nigeria Stock Exchange (NSE), Nigeria Securities and Exchange Commission (SEC), Corporate Affairs Commission (CAC), and other relevant regulatory agencies need to come up with policies that will encourage firms to embrace

technology in reporting with more emphasis on extensible business reporting language as this will help reduce environmental pollution.

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Appendices

SECTION A   : DEMOGRAPHICS
INSTRUCTION   : Please thick the column that appropriately represents your view.
1. Age   : (a) 25-35 [   ]   (b) 36-45   [   ]   (c) 45 and above [   ]

2. Gender   : Male   [   ] Female   [   ]

3. Academic Qualification :
   (a) Diploma/ND/NCE   [   ]
   (b) B.Sc./HND   [   ]
   (c) ACA/M.Sc./MBA/PhD   [   ]

4. Cognate Working Experience : (a) 1- 5 [   ] (b) 6-10 [   ] (c) 11 and above [   ]

5. Where do you classify yourself in the following groups?:
(a) Chief Financial Officer   [   ]
(b) Financial manager   [   ]
(c) Accountant   [   ]
(d) IT Personnel   [   ]

SECTION B: Level of Adoption Of Web in Business Reporting Using Level of Technology Implementation (LoTI) Framework.

Using a relative scale of 1 to 5, please circle the number that indicates your level of disagreement/agreement with the following statements.

Scale	Ratings
(1) Neither agree nor disagree	1
(2) Fairly disagree	2
(3) Strongly disagree	3
(4) Fairly agree	4
(5) Strongly agree	5

1. Non-Use(Level 0)

- I have a little or no knowledge of internet based reporting in my company   1   2   3   4   5
- I have no involvement with it   1   2   3   4   5
- I am doing nothing toward becoming involved   1   2   3   4   5
- I feel there is lack of access to technological based tools for web reporting   1   2   3   4   5
- I feel there is lack of time to pursue electronic technology for web reporting and implementation   1   2   3   4   5

2. *Awareness (Level 1)*

- I am aware that business reporting can be done through the internet   1   2   3   4   5
- I am seeking information about technologies in business reporting   1   2   3   4   5
- Business reporting through the web has little or no relevance in the field of reporting   1   2   3   4   5
- I am aware of what technology can do for my company in the area of reporting   1   2   3   4   5

3. *Exploration (Level 2)*

- There is a need to examine the effectiveness of web based reporting   1   2   3   4   5
- I do re-evaluate the quality of use of information technology in web reporting   1   2   3   4   5
- I seek major modifications of present innovation to achieve increased impact in web reporting   1   2   3   4   5
- I seek major alternatives to the present innovation to achieve increased impact in web reporting   1   2   3   4   5
- web is employed either as extension activity or enrichment exercise to business reporting   1   2   3   4   5

4. *Infusion (Level 3)*

- Every staff in accounting unit is required to performed his/her tasks with the help of information technology   1   2   3   4   5
- Corporate reporting is solely done through the web in my company   1   2   3   4   5
- The full potentials of web based reporting has been embedded within the organization's accounting and reporting system   1   2   3   4   5

5. *Refinement (Level 4)*

- Technology based tools have been integrated in a manner that provides a rich context for staff understanding the processes in my company.   1   2   3   4   5
- For my firm, internet has become a standard/ or provides a seamless medium for corporate reporting.   1   2   3   4   5
- Staff have access to and a complete understanding of a vast array of technology-based tools for web reporting   1   2   3   4   5
- The firm reports its financial activities through printed media only   1   2   3   4   5
- I vary the use of information technology in corporate reporting to increase the expected benefits within the firm   1   2   3   4   5
- Web is used in reporting only financial highlights   1   2   3   4   5

- The firm makes a full disclosures on the web.   1   2   3   4   5

- The firm cannot go back to the old ways of perform   1   2   3   4   5
  accounting task

Results of Horn's Parallel Analysis for principal components 750 iterations, using the mean estimate

Component or Factor	Adjusted Eigenvalue	Unadjusted Eigenvalue	Estimated Bias
1	4.4297784	5.2557141	.82593572
2	2.0077285	2.7290731	.72134459
3	1.5741085	2.1223771	.54826856
4	1.2966497	1.7301438	.43349409
5	1.1112094	1.4593518	.34814239
6	.96526471	1.275442	.31017733
7	.94827479	1.1502392	.20196438

Criterion: retain adjusted components > 1