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Enhancing corporate governance via XBRL: preparers' perception on compatibility expectation

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Abstract

This study examines the perception of financial reporting preparers on a financial reporting mechanism via digital known as Extensible Business Reporting Language (XBRL) in Malaysia. Using questionnaire survey on 150 Malaysian accountants as representative of financial reporting preparers of various organisations in Malaysia, this study found that most preparers perceived that XBRL is compatible and subsequently benefits the organisations for decision-making purpose. The findings in this study shed lights to regulators on the need to provide more awareness and knowledge to preparers before XBRL could come into full adoption.

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1. Introduction

The business reporting language known as Extensible Business Reporting Language (XBRL) has started to gain its position in the financial reporting chain as financial regulators and advocates trumpeted this tool as bringing huge benefits to all relevant parties (Kernan, 2008). XBRL was initially known as Extensible Financial Reporting Mark-up Language (XFRML) and later changed to XBRL due to the realisation that corporate reporting encompasses a broad range of reports which includes financial reporting (Wu and Vasarhelyi, 2004). XBRL provides the financial community a standard based method to prepare and publish corporate reports in a variety of formats depending on the software used to download XBRL documents for decision-making purposes. It comes from the mark-up language family which is similar to HTML that uses XML schemas to define concepts which can be viewed as entities in a

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relational database sense and in specifying its taxonomy. An XBRL document can be accessed with XBRL friendly software (XBRL, 2007). How the information is presented depends on the software used to access the document. Microsoft Excel software for example, allows users to select relevant information items from XBRL-based documents and subsequently copy and paste the relevant information items to Excel and perform various analytical tasks without the need to re-key the information items (Debreceeny and Gray, 2001).

Throughout the world, companies have started to adopt XBRL-based financial report and Malaysia is not an exception to such practices. The Malaysian regulators have also seen the importance of adopting XBRL in improving financial reporting among companies as it is seen to achieve the objectives of accounting framework. Due to such awareness, the Companies Commission of Malaysia (SSM) proposed a full adoption of XBRL on companies following the completion of a five-year XBRL initiative. The initiative was introduced by the Malaysia's Registrar of Companies developed under its Strategic Direction Plan II. SSM plans to implement XBRL-based financial reporting in phases starting with listed companies, their subsidiaries and non listed companies followed by private listed companies (Francis, 2012). SSM plans to kick-start the implementation of XBRL in 2014 which requires companies to fully adopt XBRL with the intention to promote corporate governance among the companies. However, one could pose a question, what is the preparers' perception on XBRL and what would be their level of readiness in XBRL implementation. Answering this question provides understanding and indication to regulators on the success implementation of XBRL in 2014. Therefore, using companies listed in the Bursa Malaysia as the sample study, this study examines preparers' perception on XBRL focusing on compatibility expectation.

The remainder of this paper is structured as follows. The next section provides a review of relevant literature. Section 3 discusses the research objective and research question underpinning this study and section 4 outlines the research design. The results are presented in section 5. A summary and conclusion are provided in the last section.

2. Literature Review

Examining users' perception of a technology is one of the themes that have emerged in the information technology literature. Studies that examined the users' perception of a technology often used subjective measures since perception has been argued to be an important determinant to decision in using a technology (Beach and Mitchell, 1978). The reason to this argument is that users often require certain knowledge of the technology before deciding to rely on it (Ghani, 2008). Several studies have examined users' perception of a technology by adapting two contexts definition of perception namely, perceived use of use and perceived usefulness of technology (Davis, 1989; Adams, Nelson and Todd., 1992, Subramaniam, 1994; Taylor and Brownfield, 2002). Davis (1989, p.320) defined perceived ease of use as "the degree to which a user believes that using a particular aid would reduce or be free of effort". He further defined perceived usefulness as "the degree a user believes that a particular aid would enhance his performance". Adams et al., (1992) noted that using subjective measures often provide insights to system designers on understanding the factors that influence users' decision to accept or not to accept a technology.

Davis (1989) and Adams et al. (1992) proposed that users often have similar perceptions on the usefulness and ease of use of technologies that share similar functions. The attribute to such proposal is that users often have similar perceptions of different technologies in a similar setting due to these technologies provide similar functions and therefore, would provide similar benefits (Adams et al., 1992). For example: Adams et al. (1995) examined users' perceptions of two technologies namely, voice mail and electronic mail. They found that their perceptions viewed these two technologies as somewhat similar. Such finding is understandable since both technologies provide similar functions. The users' perceptions however, may vary across time as the nature of a technology may change over time.

Little is known about users' perceptions of the technologies involving reporting formats in a digital reporting environment within the accounting discipline. Studies in the accounting discipline have often focused on the contents and details of the contents in the financial reports leaving examination on the format to disseminate financial information largely under-researched. Beattie and Pratt (2003) provide some evidences that users of financial reports perceived the reporting formats in the digital reporting environment as 'fairly useful'. Ghani (2008) extended Beattie and Pratt's study by examining three reporting formats namely, PDF, HTML and XBRL in her study. She found that users generally found all reporting formats as 'useful' and user-friendly. However, her study was conducted in a New Zealand setting. This study examines one financial reporting format by examining users' perception of XBRL in a Malaysian setting.

3. Research Objective and Research Question

The objective of this study is to examine financial reporting preparers' perception on the compatibility usage of XBRL in Malaysia. This study attempts to examine the objective by the mean of questionnaire survey. This objective is important because most studies that examine digital reporting format focuses on the information items that need to be included, leaving out the importance on how the information items should be presented (Hard and Vanecek, 1991; Ramarapu, Frolick, Wilkes and Wetherby, 1997; Hodge, 2001). Such scenario is even more apparent in the digital reporting environment. The lack in examining perception of a technology such as digital reporting format is important as it provides an issue to be resolved since perception influences acceptance and intention to use a technology (Beach and Mitchell, 1978; Davis, 1989). Such study is necessary in providing a comprehensive view of the importance of perceptions in the selection and usage of a technology, particularly in digital reporting format.

Such objective is examined because the way the information is presented should be given attention following the argument by Bertin (1983). Bertin argued that the most appropriate format for a particular question is the one that improve users' performance. The way the information is presented makes some aspects of the information displayed more apparent depending on the format. Furthermore, questions of different levels of complexity pertaining to difference characteristics or relationships within the information are also displayed differently depending on the format used. One format that is appropriate would enable the users to process information more accurately with less expense on cognitive effort (Mackay, Barr and Kletke, 1992; Hodge, Kennedy and Maines, 2004; Ghani, 2008). Arguably, one format cannot be said as a technology that can solve an issue, as certain formats can be used to achieve high performance in one task but not necessarily in other tasks.

Studies have extensively researched the areas in the digital reporting environment over the past decade such as Lymer and Tallberg (1997) and Hodge and Pronk (2006). These studies have examined various issues from factors influencing public and private organisations to adopt digital reporting (Craven and Marston, 1999; Allam and Lymer, 2003). More recently, the digital reporting literature has expanded its scope to include format (Beattie and Pratt, 2001; Hodge, 2001; Beattie and Pratt, 2003; Hodge et al., 2002; Hodge et al., 2004; Hodge and Pronk, 2006; Ghani, 2008). However, apart from Ghani (2008), these studies have not extensively examined users' perception of the digital reporting format. Studies in the information systems literature found that users often share similar perceptions of technologies having similar functions. Arguably, such findings may also apply to digital reporting format. Therefore, the following research question is developed:

RQ: How do the preparers in Malaysia perceive XBRL in terms of its compatibility?

4. Research Design

4.1 Sample

Accountants who are attached with various organisations and industries in the private sector are selected as the sample for the study. Such sample is chosen due to the vast experience and knowledge in the preparation of financial statement and therefore they would likely be among the first to be expose to new technologies that could improve decision-making and financial reporting. This study assumes that the accountants carry their profile as it is and the same profile remains throughout their career during the data collection process.

4.2 Questionnaire design

A questionnaire is developed for the purpose of this study. The purpose of the questionnaire is to obtain response on the questions related to preparers' perception of compatibility expectation on XBRL. The questionnaire is divided into three sections. Section A requests the respondents to provide their awareness on XBRL. Six questions were developed in this section which include familiarity on XBRL, plans to gain more knowledge on XBRL, organisation's plans to adopt XBRL in the near future, understanding on XBRL, attendance in XBRL course or training and the type of XBRL

course or training attended if any. The respondents are requested to complete the questions in this section based on multiple choice responses.

Section B requests the respondents to provide their opinion on their usage expectation upon using XBRL. Seven questions were developed in this section. The questions include whether XBRL is compatible with the organisation's current accounting systems, existing system infrastructure, difficulties in implementing XBRL due to inconsistent taxonomy, incur high cost of XBRL software development, limited software tools and support to integrate XBRL, problem of instability of XBRL specification and complexity of XBRL implementation. The respondents are requested to complete this section based on 7-point scale of '1' as strongly disagree and '7' as strongly agree.

The last section, Section C requests the respondents to complete their demographic profile. The respondents are requested to provide their demographic profile such as age, gender, member of professional body, educational background and work experience.

4.3 Data collection

The data collection involves distribution of questionnaires to preparers of financial statements. The accountants attached from various industries in the private sector were approached personally by the researchers via telephone or email. Once the respondents provided their consent to participate in this study, a set of questionnaire with a self-addressed envelope provided were sent to the respondents via snail mail. The respondents were requested to complete and return the completed questionnaire within a period of three months. In total, 200 questionnaires were returned. However, only 150 questionnaires were usable providing a successful response rate of 75 percent.

5. Results and Discussion

5.1 Demographic profile

This section presents the descriptive statistics of the demographic profile of the accountants who participated in this study. Table 1 provides the demographic statistics of the respondents in this study. Panel A shows that the respondents of this study consists of 71 males and 79 females. Most of the respondents are between 31 to 40 years of age represented by 47 percent, followed by 20 to 30 years of age and 41 and 50 years of age as shown in Panel B. Sixty two percent of the respondents are degree holders with just 3 respondents having a PhD. This is expected since these respondents are attached to the private sector. Panel D of Table 1 shows that slightly less than half of the respondents have 5 to 10 years working experience (44 percent) and 23 percent of the respondents have 11 to 15 years of working experience. Twenty two percent of the respondents have more than 15 years working experience.

Table 1. Descriptive statistics

Panel A: Gender

Gender	Frequency	Percent
Male	71	47
Female	79	53
Total	150	100

Panel B: Age

Age	Frequency	Percent
20-30	42	28
31-40	71	47
41-50	34	23
Above 50	3	2
Total	150	100

Panel C: Education background

Education	Frequency	Percent
Degree	93	62
Postgraduate Diploma	16	11
Masters	26	17
PhD	3	2
Others	12	8
Total	150	100

Panel D: Working experience

Education	Frequency	Percent
Less than 5 years	16	11
5-10 years	67	44
11-15 years	35	23
16-20 years	22	15
More than 20 years	10	7
Total	150	100

Table 2 presents the results of the respondents' awareness and preference of XBRL. Panel A of Table 2 show the results of that only 37 percent of the respondents are aware that SSM plans to implement XBRL-based financial reporting in phases starting with listed companies in 2014. More than half of the respondents are not aware of SSM's plans to implement XBRL in Malaysia. This is an alarming signal to SSM and actions need to be taken in ensuring the success implementation and adoption of XBRL among listed companies in Malaysia.

Panel B of Table 2 shows the descriptive statistics of the respondents' awareness of XBRL in their organisation. The results show more than half of the respondents are not sure whether their organisation is going to adopt XBRL (63 percent). Twenty percent of the respondents noted that their organisation is going to adopt XBRL. Such results support the descriptive statistics in Panel A, Table 2 on the awareness of the respondents on the SSM's plans to implement XBRL in 2014. When asked on the respondents' preferred format in financial reporting in the digital environment, slightly more than half respondents prefer PDF (55 percent), followed by HTML (29 percent) and XBRL (16 percent). This result indicates that the respondents are not keen to adopt XBRL, again an alarming signal to SSM on their plans to adopt XBRL in 2014, which is thought would be successful.

Table 2: XBRL implementation awareness and preference

Panel A: Awareness of XBRL implementation in malaysia

Awareness	Frequency	Percent
Yes	55	37
No	95	63
Total	150	100

Panel B: Awareness of XBRL implementation in organisation

Awareness	Frequency	Percent
Yes	30	20
No	30	20
Unsure	90	60
Total	150	100

Panel C: Preference of XBRL

Preference	Frequency	Percent
PDF	82	55
HTML	44	29
XBRL	24	16
Total	150	100

5.2 Compatibility Expectation of XBRL

This section presents the respondents' mean score of the compatibility expectation of XBRL. There are 7 statements related to compatibility expectation of this technology. Table 3 presents the result based on the questionnaire in section A which requested the respondents to provide opinion for each statement using a 7-point scale of '1' as strongly disagree and '7' as strongly agree.

Table 3. Compatibility expectation of XBRL

No	Statement	Mean	Standard Deviation
1	XBRL is compatible with your organisation's current accounting systems	4.480	1.32177
2	XBRL is compatible with your organisation's existing system infrastructure	4.400	1.31041
3	Your organisation has difficulty in implementing XBRL due to inconsistent taxonomy	3.950	0.82112
4	Your organisation incur high cost of XBRL software development	4.300	0.85870
5	Your organisation has limited software tools and support to integrate XBRL	4.180	0.89194
6	Your organisation has problem of instability of XBRL specification	4.220	0.88283
7	Your organisation has complexity of XBRL implementation	4.330	0.96457

The results show that all the respondents agree that XBRL are compatible to the existing system in the organisation of the financial statement preparers. Among the 7 statements related to compatibility expectation, most respondents perceived that XBRL is compatible with their organisation's current accounting systems where the highest mean score of 4.480 was given. This is followed by respondents' opinion that XBRL is compatible with their organisation's existing system infrastructure. Such findings provide some indications that the organisations are ready to implement XBRL since their existing accounting systems and infrastructure could be integrated with XBRL. However, such findings seem perplexing because even though the respondents perceived that XBRL is compatible to the organisation's current accounting system and infrastructure, they are not keen to adopt XBRL.

The results, however show that despite that the respondents perceived that XBRL is compatible with the organisation's existing accounting system and infrastructure, their organisation may face some complexity in the implementation phases (mean score: 4.330) and also be incurring high cost in developing the XBRL (mean score: 4.3000). The respondents' opinions were somewhat mixed on the difficulty in implementing XBRL due to inconsistent taxonomy (mean score: 3.950). Such findings provide some indication that the respondents may be aware of the existence of standardised taxonomy throughout the world and are unlikely to worry about the lack of standardised taxonomy.

5.3 Additional analyses

This study provides further analysis examining whether there is significant difference between the respondents' preferred digital format and their perceived compatibility expectation of XBRL. Table 4 presents the results of ANOVA analysis. The results show that the mean score for the respondents preferring XBRL is the highest being 4.6156 for perceived compatibility expectation. This is followed by respondents that prefer PDF provide mean score of 4.2125 and

respondents preferring HTML provide mean score of 4.1717. Such findings seem logical since users would often prefer an object that would provide them benefits upon relying on the object (Beach and Mitchell, 1978; Davis, 1989).

Table 4. Preferred format on perceived compatibility expectation

Panel A: Digital format				
Digital format	N	Mean	Std. Deviation	
PDF	82	4.2125	0.64024	
HTML	44	4.1717	0.43743	
XBRL	24	4.6156	0.49895	

Panel B: ANOVA analysis				
	df	Mean Square	F	Sig.
Between Groups	2	1.185	3.682	0.029
Within Groups	147	0.322		

This study also examined whether the respondents' plan to adopt XBRL has any link to their preferred compatibility expectation. ANOVA analysis was used and the results are shown in Table 5. Basing on panel A, Table 5, the results show that the respondents that are sure to adopt XBRL have the highest perceived compatibility expectation with a mean score of 4.3780 but such score is not significantly higher than those respondents who are not willing to adopt XBRL (mean score: 4.0635). Those respondents who are not sure whether they are going to adopt XBRL or not in future provide a mean score of 4.2948 on their perceived compatibility expectation. Such results indicate that such respondents may have plans to adopt XBRL.

Table 5. Plan to adopt XBRL and perceived compatibility expectation

Panel A: Plan to adopt XBRL				
Plan to Adopt XBI	N	Mean	Std. Deviation	
Yes	30	4.3780	0.62714	
No	30	4.0635	0.42675	
Not sure	90	4.2948	0.60427	

Panel B: ANOVA analysis				
	df	Mean Square	F	Sig.
Between Groups	2	0.560	1.674	0.193
Within Groups	147	0.335		

6. Conclusion

This study examines the perception of financial reporting preparers on XBRL in Malaysia. Specifically, this study examines the financial reporting preparers' compatibility expectation of XBRL for their organisations. The result shows that all the respondents agree that XBRL is compatible with the organisations' accounting information system and infrastructure. Although the respondents viewed that they may be facing some difficulty in implementing XBRL and it would involve a huge amount of expenditure to implement XBRL, they believed that XBRL is useful in promoting corporate governance. Such results are consistent with the previous findings that XBRL does improve efficiency of organisations' performance (Debreceeny and Gray, 2001; Ghani, 2008).

This study is not without limitations. First is the number of respondents involved in this study. There were only 150 respondents which may not be sufficient to provide a more robust result. Having a larger sample may improve the validity of the results. Secondly, the awareness of the respondents on XBRL may be quite vague which might impair the understanding of what XBRL is among the respondents. Perhaps, given some more time, the understanding of XBRL among the preparers of financial statement in Malaysia could be enhanced before embarking on a future study related to usage expectation of XBRL. The findings in this study shed lights to regulators on the need to provide more awareness and knowledge to preparers before XBRL comes into full adoption in achieving corporate governance.

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