

# The Practitioner's Expectation of Real-Time Reporting: Case of the eXtensible Business Reporting Language (XBRL)

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## Abstract

**Purpose** – Traditional reporting communicates without automated business reporting either via the Portable Document Format (PDF), HyperText Mark-up Language (HTML) or Excel and Word documents. On the other hand, real time reporting that has been applied by the eXtensible Business Reporting Language (XBRL) with automated business reporting has better extraction of data from websites and across databases. The rapid change to real time reporting could improve the financial reporting environment within the information supply chain. Thus, this study intended to explore the financial reporting environment's current and preferable exchange of information initiated by regulators. In addition, this study intended to uncover the expected costs, financial reporting benefits, information efficiency, audit process benefits and readiness to face pressures accrued from XBRL adoption.

**Design/ Methodology/ Approach** - The data were collected using the drop-off/pick-up method from a sample of 322 practitioners comprising auditors and accountants listed in the MIA directory as well as potential respondents who possess a background in XBRL and can provide valuable feedback relating to the XBRL concept. The instrument investigated issues related to benefits, costs, pressures and the readiness to adopt XBRL technology. In addition, the study also investigated preferences towards the reporting format, single submission, real-time reporting and the intention to use XBRL.

**Findings** - The findings from the 2015 study were different compared to findings of the 2012 study as the latter findings had described the practitioner's concerns. However, it is important to look into the changes in their concerns about XBRL. Perhaps the respondents might decide to adopt XBRL once they understood the concept and are ready to explore reporting technology. For understanding the cost, the study shows that practitioners were concerned about reducing the cost of auditing, generating financial reports and adopting XBRL. Moreover, they were also concerned on how XBRL could improve the efficiency of the financial reporting process, the accessibility of financial information and improving the audit process. Due to the lack of understanding about the XBRL concept, most of them preferred to attend any type of training in order to ensure their readiness. Perhaps, they believed that the pressure from government agencies would be a possible factor that ensured the future use of XBRL.

**Research limitations/ Implications** - This study has had a significant impact on the financial reporting environment in Malaysia. It could also assist regulators, information providers, analysts, accountants, auditors and consumers to decide on whether to adopt eXtensible Business Reporting Language (XBRL) in future.

**Keywords:** XBRL, Malaysia, adoption, reporting

## **Introduction**

### ***Internet Financial Reporting and XBRL***

Internet Financial Reporting is one way to disseminate financial data via internet using various formats such as PDF, Word or Excel files. Internet Financial Reporting involves different stages of disseminating data, which are referred to as traditional and second-generation reporting formats (Dune, Helliar, Lymer and Mousa, 2009). Currently, Internet Financial Reporting offers standardised data in real-time through the adoption of XBRL. The data will be exchanged throughout the supply chain much easier and efficiently as claimed by various researchers from countries such as the UK, UK HM Revenue and Customs and UK Companies House that have shown increasing use of XBRL filing (Mousa, 2011). Meanwhile, the U.S. Securities and Exchange Commission has mandated the use of XBRL (Debreceeny, Farewell, Piechochi, Felden, Graning and D'eri, 2010). However, the benefits accrued from XBRL adoption could be different based on the style of adoption by each country. Furthermore, some studies have shown that XBRL had improved the company's reporting and performance.

Traditional reporting, which involves printed versions of financial reporting, has been produced by innumerable companies. Then, the printed version of financial reporting came into existence with the introduction of the internet. Hereinafter the companies began to publish reports with the existence of HTML, which consisted of browsers and search engines. Then, the report was published through pertinent interactive tools and the information produced was more standardised via XML. However, companies faced difficulty in utilising data for analysis and decision-making purposes. XBRL is currently discussed around the world as another new reporting technology for internet financial reporting that provides real time data. The data can be shared, exchanged or utilised around the world in a convenient and prompt manner.

When adopting XBRL, there is a need to envisage practitioners' expectations instead of only relying on the benefits that have been claimed all around the world because the benefits might differ according to the country and stakeholders. These expectations might also help and assist regulators in ensuring the readiness towards XBRL adoption, particularly in Malaysia. On the other hand, the research had identified the practitioner's expectation from XBRL adoption, particularly those who have the intention to adopt XBRL in the future. The future adopters that have intention to adopt but have not yet making decision that rarely being investigated for their expectation from the intention of XBRL. Therefore, this research could be beneficial since it focuses on the expectation envisaged from XBRL adoption. The expectations are crucial for companies that wish to improve internet-based financial reporting, particularly from a Malaysian perspective.

Numerous studies have been carried out on factors that influence XBRL adoption (Premuroso and Bhattacharya, 2008; Henderson, Sheetz and Trinkle, 2011; Henderson, Sheetz and Trinkle; 2012) such as image and firm reputation (Bonson, Cortijo, and Escobar, 2009), perceived usefulness and absorption capacity (Pinsker, 2008) and technological factors (Gray and Miller, 2009). Besides factors that influence XBRL adoption, some researches have focused both on drivers and inhibitors

of XBRL adoption (Doolin and Troshani, 2007 and Cordery, Fowler and Mustafa, 2011). Research was also carried out on the awareness, understanding and acceptance of XBRL (Pinsker, 2003; Nel and Steenkamp, 2008; Dune, Helliar, Lymer and Mousa, 2009; Steenkamp and Nel, 2012 and Garner, Henderson, Sheetz, and Trinkle, 2013). However, few studies have investigated the expectations of potential adopters of XBRL such as Ghani and Muhammad (2014) in Malaysia. In previous researches, particularly in 2012, the authors had investigated the awareness and understanding of XBRL among various stakeholders in Malaysia (Ilias, Razak and Razak, 2014). Besides that, other researchers had investigated some of the XBRL issues in Malaysia. However, the issues on XBRL might vary in areas such as benefits, costs or pressure to conform. It is possible that expectations towards XBRL could change based on awareness and understanding. For example, a study CFA pertaining to CFA's awareness, understanding and acceptance of XBRL adoption (the Institute of Certified Financial Analyst (CFA), 2008, 2009, 2011). Thus, the authors believe that there is a need to investigate other issues pertaining to expectations accrued from adopting XBRL technology since regulators in Malaysia are expected to start XBRL filing for companies.

In this research, the respondents were based on Baldwin, Brown and Trinkle's (2006) criteria of respondents who are affected by XBRL adoption. The practitioners were classified as intermediaries and providers. In Malaysia, practitioners are those who practice accounting and auditing in the public sector. Thus, the study investigated practitioners on issues pertaining to the current exchange of information among various government agencies, preference of reporting formats, single submission and real-time reporting. It also investigated their intention to use XBRL in future since they are yet to adopt XBRL technology. Furthermore, the study investigated their expectation on the issues of cost, efficiency and readiness. The research is limited to exploring the preliminary expectations prior to any use of XBRL technology.

### ***XBRL in Malaysia***

XBRL is yet to be adopted by organisations in Malaysia as none of the Malaysian Public Listed Companies (PLCs) have taken to the XBRL reporting format (Ilias and Ghani, 2015). Furthermore, Suruhanjaya Syarikat Malaysia (SSM) is expected to adopt it on a voluntarily basis in 2017 (<http://www.ssm.com.my/en/xbrl-en>), the Securities Commission (SC) had started a pilot project on adopting XBRL as a medium of reporting across Malaysian capital markets in May 2015 (<http://www.sc.com.my/data-statistics/extensible-business-reporting-language-xbrl/>) and Bank Negara Malaysia (BNM) had adopted it for data compilation purposes in June 2012. Fortunately, SSM (November 2015) and SC (September 2015) have been a part of the XBRL Consortium. Therefore, since XBRL is yet to be widely adopted in Malaysia, several studies had explored XBRL adoption in Malaysia pertaining to aspects such as awareness, understanding and intentions for adopting XBRL based on various roles in the financial reporting supply chain (Ilias, Razak, and Rahman, 2015; Ilias, Razak and Rahman, 2015; Ilias, Razak and Razak, 2014 and Ghani, Said, and Muhammad, 2014). The studies mostly found low levels of awareness and understanding of XBRL benefits. This is in line with other researches that focused on awareness and understanding at the beginning stage of XBRL adoption, such as in the US (Pinsker, 2003), the Institute of Certified Financial Analyst (CFA, February 2008), South Africa (Nel and Steenkamp, 2008) and UK (Dune, Helliar, Lymer and Mousa (2009).

## **Literature Review**

### ***Real Time Reporting and XBRL***

The future of reporting via internet will provide more real-time data throughout the financial reporting supply chain. Coffin (2001) stated that the future of internet reporting, also known as real-time commerce, links with XBRL to produce real-time reporting, real-time operations, real-time pricing and real-time management. XBRL is capable of eliminating the manual process or the re-keying in of data and produce real-time and online reporting (Wild, 2002). Willis (2005) mentioned that users could use the real-time data produced through the XBRL platform by using the internet language. Pinsker (2003) stated that the new reporting model is called real-time or continuous reporting. Thus, real-time data would provide benefits for every adopter who plays an important role throughout the financial reporting environment.

### ***The Impact of XBRL***

XBRL is a tool used for improving the quality of characteristics affiliated to financial reporting, which includes relevance, reliability, comparability and consistency, materiality, cost and benefits, decision usefulness and understandability. In the earlier stages of XBRL adoption, Baldwin, Brown and Trinkle (2006) had developed a research framework that was in line with the quality of financial information set by the Financial Accounting Standard Board (FASB). The characteristics of financial information are also related to every entity involved in the information supply chain such as the XBRL Consortium, accounting standard setters, regulators, organisations and individuals, auditors, financial publishers and end-users. The XBRL is believed to provide changes to the financial reporting landscape as seen from experiences faced by adopters. Besides Baldwin, Brown and Trinkle (2006), several previous researchers had discussed how XBRL influences financial reporting. For example, Bovee, Srivastava, and Mak (2003) investigated how XBRL could ensure overall information quality. They had developed a framework based on the qualitative characteristics of financial information set by the Financial Accounting Standard Board (FASB) for assessing online information quality that focused on accessibility, interpretability, relevance and integrity.

Wang and Wang (2015) agreed that most previous researches over the last 10 years had discussed the taxonomy design but not much on the effects of XBRL. The development of XBRL taxonomy is an important issue when ensuring the quality of XBRL financial reports. This is because the XBRL taxonomy needs to reflect the accounting standard as taxonomy development is crucial in every discussion (Piechocki and Felden, 2007 and Piechocki, Felden, Gräning and Debreceny, 2009). Numerous researchers have agreed that taxonomy is the main component in XBRL development for producing accurate and good quality information (Bovee, Ettredge, Srivastava, and Vasarhelyi, 2002, Baldwin, Brown and Trinkle, 2006 and Bonsón, Cortijo and Escobar, 2009). Thus, the XBRL tagging can improve the quality of financial information by enhancing the consistency, comparability, reliability, relevance, and decision usefulness. Baldwin and Trinkle (2011) discovered that XBRL would most likely impact the concept of accessibility, easily compliance, information availability, continuous reporting and enhanced the efficiency of investment and decision making.

The effects of XBRL adoption include the enhancement of quality and improvement in the transparency of reports (Bonson, 2001; Bizarro and Garcia, 2010; and Debreceny, et.al, 2010), improving the quality of real-time information (Baldwin, Brown and Trinkle, 2006), reducing the cost of capital (Pinsker and Li, 2008), reducing the aggregation costs across a group of investors

(Blankespoor, Miller and White, 2013), reducing cost of compliance (Weber, 2003) and Troshani and Doolin (2007), more effective governance (Premuroso and Bhattacharya, 2008 and Roohani, Furusho and Koizumi, 2009), innovative reporting (Efendi, Smith and Wong, 2011), advancement of continuous auditing and assurance (Alles and Gray, 2012 and Shan and Troshani, 2014), effectiveness in analysing forecasts (Liu, Wang and Yao, 2014), information supply chain (Liu, Wang and Yao, 2014) and also reducing errors and re-keying of data (Bartley, Chen and Taylor, 2011 and Du, Vasarhelyi and Zheng, 2013). As mentioned by Hannon (2006), the cost saving will benefit companies if they understand the XBRL concept and need to look beyond financial reporting to ensure data accuracy and accessibility. Thus, this current research will explore the expectation of practitioners based on the impact mentioned by previous researches.

### ***The Theories Adopted for XBRL Adoption***

Research related to the adoption, intention and use of XBRL had applied various theories and models such as DOI, TOE, TAM, TRA, TPB, Institutional theory, signalling theory and stakeholder's theory. The IS theories commonly utilised at individual (Pinsker and Wheeler, 2009; Pinsker, 2008 and Pinsker, 2007) and organisational levels (Mousa, 2011; Troshani and Doolin, 2005 and Troshani and Rao, 2007, Henderson, Sheetz and Trinkle, 2012 and Doolin and Troshani, 2007) are those most suitable for XBRL research. The prominent theory currently utilized in research that investigates adoption is DOI theory and in research on adoption that consist of three contexts is the TOE theory (Oliveira and Martins, 2011). Meanwhile, TAM is a prominent model that focuses on the acceptance and continued use of IT (Premkumar and Bhattacharjee, 2008). The research mostly utilized the attributes of innovation by Rogers (2003), which consists of relative advantage, compatibility, complexity, trialability and observability with other factors. Most of the researches utilised the five attributes of innovation of adoption by DOI with the combination of other relevant factors related to the technological, organizational and environmental context and the investigation of intention to adopt (such as Rostami and Nayeri, 2015)

Some of researches had focused on individual and organisational intentions. As suggested by Pinsker and Wheeler, (2009), the IS research, particularly on XBRL, should focus on both individual IT use as well as the organisation that produces the financial report using XBRL technology. Since this research does not mainly focus on organizational intention, it is in line with factors suggested by some researchers (Rawashdeh, and Selamat, 2013) such as costs, benefits and readiness of individuals involved in XBRL adoption. This research might contribute to the perceived benefits suggested by Iacovou et al.'s (1995) model as well as benefits of XBRL suggested by Pinsker and Li (2008) and Dunne, Helliard, Lymer, and Mousa (2009). The cost of adoption in this research is in line with the organizational context suggested by Baldwin and Lin, (2002). Readiness was also in line with the organizational context, whereby every individual need training and exposure to ensure readiness to adopt XBRL as suggested by Miller (2008) as well as in other IS researches such as Kamhawi (2008); Johnson (2010) and Arachchi, Chong and Lakshanthi (2015). Besides readiness, other matters such as pressure by the government, sources of financing and auditors, were also in line with the environmental context, as suggested as Cordery, Fowler and Mustafa, (2011). It should be emphasized that this current research did not empirically test any model for every factor mentioned and it was only a preliminary research about XBRL in Malaysia. Thus, only the factors that suited this research were in line with factors that were explored and suggested by previous researchers, as mentioned earlier.



## Research Methodology

### *Respondents*

The respondents were selected based on the random sampling method. The list of practitioners was gathered from the MIA directory and the researcher had approached them through emails and phone calls. The respondents comprised practitioners who were mainly auditors and accountants. They were selected because they were involved and played a role in the financial reporting supply chain. Based on Baldwin, Brown and Trinkle (2006), intermediaries consist of auditors and financial data publishers, providers consist of organisations or individuals that provide financial data and software providers and users consist of organisations and individuals who use data. Baldwin, Brown and Trinkle (2006) suggested that these entities are crucial and have an immense impact on the financial reporting environment. Thus, accountants and auditors in public firms are classified as practitioners. Furthermore, their expectations were important for this research, especially when concerning current practices of reporting and XBRL.

Table 1: Respondents' Profile

Highest Level of Education	Number	Percentage
Certificate	5	1.55
Professional certificate	60	18.63
Diploma	27	8.39
Degree	216	67.08
Master Degree	13	4.04
Doctor of philosophy	1	0.31
<b>Age</b>		
22 – 30 years	245	76.09
31 – 40 years	63	19.57
41 – 50 years	10	3.11
51 – 60 years	3	0.93
61 – 70 years	1	0.31
<b>Gender</b>		
Female	198	61.49
Male	124	38.51

### *Data Collection*

This research had identified a list of potential respondents, particularly 322 practitioners comprising auditors and accountants listed in the MIA directory as well as potential respondents who had acquired a background in XBRL. Finally, in 2015, the data collection was initiated and data were collected over a three-month period. The researcher had applied the drop-off/pick up method, which proved to be convenient for all the respondents. Furthermore, this method was applied in marketing surveys and showed a much better cooperation and response rate (Steele, Bourke, Luloff, Liao, Theodori, & Krannich, 2001 and Lovelock, Stiff, Cullwick, & Kaufman, 1976). Furthermore, Lovelock, Stiff, Cullwick, & Kaufman, 1976) also highlighted that the personal delivery and collection method could be used for both industry and academic research. However, the three-month period was delayed due to unavailability of respondents and thus was extended for another month.

### ***Instrument***

The researcher has utilised the questionnaire survey method for collecting data and the instrument was adopted and modified based on Garner, Henderson, Sheetz, and Trinkle (2013), who had investigated issues related to benefits, costs, pressures and readiness to adopt XBRL technology. The survey instrument was divided into three parts consisting of respondents' information, preferences on the reporting format, single submission, real-time reporting and intention to use XBRL. The final part dealt with issues related to XBRL.

### **Findings**

#### ***XBRL from a Practitioner's Perspective***

The findings of this research were obtained using a descriptive analysis, which was in line with a research that intends to explore the concept of reporting formats, cost expectations, financial reporting benefits, information efficiency, audit process benefits, readiness and pressures of XBRL adoption. The analysis only focused on the frequency of agreement levels for each item related to concepts discussed in previous researches (Pinsker, 2003, Nel and Steenkamp, 2008, Dune, Helliard, Lymer and Mousa, 2009, Steenkamp and Nel, 2012 and Garner, Henderson, Sheetz, and Trinkle, 2013). This is important because it shows the number of practitioners who could possibly contribute to future adoption and use of XBRL technology.

Table 2: Submission, Preferences, Awareness and Familiarity of the Reporting Format from a Practitioner's Perspective

<b>Rating on the current exchange of information and submission format of financial reporting among various government agencies.</b>		
	<b>Frequency</b>	<b>Percent</b>
Excellent	14	4.35
Very Good	39	12.11
Good	177	54.97
Fair	76	23.60
Poor	16	4.97
Total	322	100

  

<b>Preference on single submission for financial reporting.</b>		
	<b>Frequency</b>	<b>Percent</b>
Yes	288	89.44
No	34	10.56
Total	322	100

  

<b>Preference on real-time information exchange for financial reporting.</b>		
	<b>Frequency</b>	<b>Percent</b>
Yes	295	91.61
No	27	8.39
Total	322	100

  

<b>Awareness on XBRL adoption in Malaysia.</b>		
	<b>Frequency</b>	<b>Percent</b>
Yes	155	48.14
No	167	51.86
Total	322	100

  

<b>Preferences on financial reporting format.</b>		
	<b>Frequency</b>	<b>Percent</b>
PDF	296	91.93
HTML	18	5.59
XBRL	8	2.48
Total	322	100

  

<b>Familiarity on financial reporting format.</b>		
	<b>Frequency</b>	<b>Percent</b>
PDF	300	93.17
HTML	17	5.28
XBRL	5	1.55
Total	322	100

  

<b>Intention to use XBRL in future.</b>		
	<b>Frequency</b>	<b>Percent</b>
Yes	234	72.67
No	88	27.33
Total	322	100

According to Baldwin, Brown and Trinkle (2006), accountants and auditors play an important role and are affected by XBRL adoption. In this current study, expectations on XBRL were explored based on different roles. In Malaysia, the submission of financial reports by companies comes in various formats and are sent to various government agencies. Moreover, accountants and auditors are also involved in the preparation and submission of financial reports. According to Table 2, the findings show that most of them are satisfied with the current method; however, they are dissatisfied with the need to prepare submissions in different formats and methods. Even though both accountants and auditors were satisfied with the current submission method, they still preferred a single submission format (N= 288). Thus, the purpose of XBRL is to provide a single financial report submitted by organisations to government agencies. The single submission of reports would reduce the cost of compliance, as suggested by Weber (2003) and Troshani and Doolin (2007).

By comparing the previous study on XBRL in Malaysia (Ilias, Razak and Razak, 2014), this study found that accountants and auditors were more aware about XBRL. Hence, for preferences to a reporting format, both accountants and auditors preferred and were familiar with PDF compared to HTML or XBRL. According to this research, even though both accountants and auditors did not really prefer XBRL because they have no experience in using XBRL, they were aware (N= 155) and intended to adopt XBRL (N= 234) in future. Hence, they possess the expectation to adopt XBRL.

Table 3: Cost Issues from a Practitioner’s Perspective

Cost benefits toward XBRL technology (%)				Cost adoption towards XBRL technology (%)	
Using XBRL reduces financial statement/ audit costs.	Using XBRL lowers our organisation’s cost of capital.	Using XBRL makes it easier for our organisation to obtain new capital.	Using XBRL reduces the cost of generating financial reports.	Our organisation has the financial resources readily available to implement XBRL.	Implementing XBRL consumes a large portion of our organisation’s accounting budget.
52.17	42.55	47.20	51.55	42.24	45.03

\* Percentage is based on agree and strongly agree

As for cost issues, XBRL also affects the financial reporting supply chain and the evidence might vary depending on its role and the eventual outcome. As shown in Table 3, practitioners mainly agree and expect XBRL adoption to provide benefits such as reducing auditing costs (N=168), reducing financial reporting costs (N=166) and facilitating new capital (N=152). Practitioners also expected the cost of adopting XBRL technology (N=145) to be high and less than half the practitioners (N=1) believe that their organization is well equipped and ready to implement XBRL. These expectations were in line with the suggestions made by Pinsker and Li (2008). Hence, although both groups have the intention to adopt, most are unsure whether the financial resources and the organisation’s budget permit preparations towards XBRL adoption. Hannon (2006) agreed that adopters have no doubt on the claim that XBRL would increase costs for companies. Thus, there is a possibility that some respondents understand that XBRL could cause cost issues to firms or organisations.



Table 4: Financial Reporting Benefits and Information Efficiency from a Practitioner's perspective.

<b>Section a: Financial reporting benefits on XBRL technology (%)</b>				
Using XBRL allows data from disparate accounting information systems to be reconciled more efficiently.	Using XBRL makes it more difficult to issue misleading financial statements.	Using XBRL makes it easier to convert financial data from different forms of accounting standards.	Using XBRL improves the efficiency of the financial reporting process.	Using XBRL facilitates continuous reporting.
48.45	42.24	46.89	<b>50.93</b>	46.27

\* Percentage is based on agree and strongly agree

<b>Section b: Information efficiency on XBRL technology (%)</b>					
Using XBRL increases the relevance of financial information.	Using XBRL makes financial reporting to external stakeholders easier.	Using XBRL increases the reliability of financial information.	Using XBRL increases the accessibility of financial information.	Using XBRL leads to improvements in internal controls.	Using XBRL improves decision-making.
49.07	47.20	46.27	<b>50.93</b>	48.76	44.72

\* Percentage is based on agree and strongly agree

<b>Section c: Audit process benefits on XBRL technology (%)</b>	
Using XBRL improves the audit process.	Using XBRL facilitates continuous auditing.
48.45	45.03

\* Percentage is based on agree and strongly agree

XBRL technology is expected to provide greater efficiency as proven in other countries that have adopted it. XBRL might provide benefits to whoever prepares, audits and uses financial reporting. Table 4 (Section A) shows that since practitioners expect XBRL to lead to efficient preparation of financial reporting (N= 164), data from different accounting information systems could be easily reconciled (N= 156) and that data could be easily converted from different accounting standards (N= 151). In using information provided through XBRL technology (Table 4, Section B), practitioners expect users to increase ways to access financial information (N= 164), relevant information (N= 160) and improved internal control (N= 157). Table 4 (Section C) shows that besides preparing and using financial reporting, XBRL technology is expected to provide benefits to the auditing process (N= 156) and facilitate continuous auditing (N=145).

Since the scope of practitioners is related to the preparation and validation of financial reporting data, it is evident that some of them are aware of how XBRL could facilitate their task in preparing financial reports. As suggested by Pinsker (2003), XBRL would impact auditors and accountants by reducing management earnings and improving accountability through continuous auditing such as real-time auditing. On the issue of converting financial reporting data, Taylor and Dzurani (2010) stated that XBRL was capable of converting formats that suited users' need such as for decision-making purposes. However, it is possible that they lack the understanding on how this process materialises in relation to the Malaysia scenario.

Table 5: Readiness from a Practitioner’s Perspective

Adequate knowledge on XBRL (%)								
Seminar and Roadshows	XBRL International	XBRL US	Webinars	Video / Audio	Employees from others’ organisations	Reading text and reference books	XBRL consultants	Adequate training
66.15	61.18	56.21	59.94	61.80	61.49	59.32	66.15	66.77

\* Percentage is based on agree and strongly agree

Even though other studies have explored ‘practitioner’s expectations’, there is still a need to identify the changes in their understanding. Thus, knowing their preferences would help in preparing them for future XBRL adoption. Based on their needs, it could be ascertained whether accountants and auditors need seminars, roadshows, audio-video presentations or reference books related to XBRL. They also believe there is a need to consult XBRL International and their counterparts in other organisations as well as having adequate training (Table 5).

Table 6: Pressure Organisations to Use XBRL

Pressure to use XBRL (%)		
Government agencies	The sources of financing, e.g., banks.	External auditors
47.83	47.52	45.03

\* Percentage is based on agree and strongly agree

Pressure is also important in identifying the decision to adopt and use XBRL in future. The findings (Table 6) show that practitioners expect the main pressure to use XBRL to come from government agencies (N=154), sources of financing (N=153) and external auditors (N= 145). It is possible that one of the factors that encourage organisations to use XBRL is the requirement by government agencies that organizations submit financial reports. This is because most government agencies started with voluntary submissions and continued with it when XBRL submission was mandated. Besides making it mandatory, as supported by Doolin and Troshani (2007), government agencies that act as trading partners are in agreement and encourage organisations to submit financial reports using the XBRL format. Furthermore, Cordery, Fowler and Mustafa (2011) and Garner, Henderson, Sheetz, and Trinkle (2013) mentioned that government agencies and regulators do influence XBRL use. However, Garner, Henderson, Sheetz, and Trinkle (2013) found that banks, suppliers and customers or trading partners were not under any pressure to use XBRL.

### Conclusion and Future Research

This research is a descriptive research that only describes the current environment related to financial reporting, the need for XBRL, cost and efficiency issues and the need for learning XBRL for future XBRL adoption. It could contribute relevant knowledge to related agencies, accounting bodies and associations so that they could envisage future actions to enhance ways to propagate XBRL knowledge based on the respondent’s needs.

This research will provide an in-depth understanding by identifying factors that might be important for organizations and individuals involved in XBRL adoption in Malaysia. Moreover, this research found that the expectation of benefits accrued from adopting XBRL technology would help regulators to identify initiatives that encourage future use of XBRL such as better training on XBRL and exposure (as suggested by Miller, 2008). The findings on these benefits had identified

the concern of individuals involved in this research even though the benefits have not been proven by any organization or individual in Malaysia.

This current research emphasizes the findings of the previous research carried out in 2012 (Ilias, Razak and Razak, 2014 and Ilias, Razak and Rahman, 2015), which had added the readiness and pressures factors. The current research also identified the preferences for single submission and real-time reporting that are related on XBRL objectives. It has proven that most practitioners had preferred the single submission and real-time reporting due to XBRL's financial reporting objectives.

This is because most practitioners have the intention to adopt and prefer single reporting. It is evident that XBRL is encouragingly viewed for future adoption although some are concerned about the issues and training that they might need. Most respondents are not seen as rejecting this concept since they have the intention to adopt but it is a matter of understanding what XBRL is. They need to be ready before embarking on XBRL adoption in the future since government agencies such as SSM will start using it by 2017 and the SC has progressed in its XBRL adoption. Hence, changes within the financial reporting environment needs the cooperation of every employee who would be eventually affected by XBRL.

The findings from the 2015 study were different from that carried out in 2012, since the findings described the concerns of practitioners. However, it is important to consider the changes in their concerns about XBRL. In 2015, the awareness level was higher compared to 2012, whereby in 2012 only a few accountants and auditors were aware and understood XBRL (Ilias, Razak and Razak, 2014). However, by 2015, the practitioners had adequate training, exposure from XBRL consultants as well as seminars and roadshows to ensure adequate knowledge. Based on the 2012 research, most of the respondents had not attended any training in XBRL and were unsure about the type of training they needed for XBRL (Ilias, Razak and Razak, 2014). Hence, due to increasing awareness of XBRL technology in 2015, compared to 2012, the intention to use XBRL among practitioners had also increased in 2015 as well as the need to attend training and exposure about XBRL.

Most respondents in the 2012 research had shown a lack of awareness towards the XBRL concept in relation to the relative advantage of audits, corporation and compliance, preparation of financial reporting and use of financial reporting (Ilias, Razak and Rahman, 2015). Comparatively, the current research had shown more awareness and expectations. These results would contribute to the encouragement of future research needed to determine the opportunities to propagate XBRL technology in Malaysia. Perhaps, the respondents might decide to adopt XBRL once they understood the concept and are ready to explore reporting technology. However, there is a need to identify the factors of innovation, the time taken and the process of innovation to ensure the spread of innovation in Malaysia. Thus, this research could encourage future researchers to understand both the driving force and inhibitors of innovation, which are the consequence of inexperienced organizations and individuals in Malaysia. However, the benefits have been proven by past researchers, whereby XBRL as a form of real-time reporting might produce real-time data, as mentioned by Hunton, Wright and Wright (2003). In a country like Malaysia, XBRL is not widely adopted voluntarily; changes in the level of awareness and understanding are needed to realize the readiness and efforts that should be made by regulators and professional bodies.

Since, the current research is limited to practitioners who are readily involved in this research, the study cannot be generalised to cover the entire organisational spectrum or individual consumers. In the future, we might focus more on practitioners' opinions, particularly auditors, on what

assistance they expect from XBRL, pertaining to their auditing process because auditing is a crucial scope that could be affected by XBRL adoption.

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