Financial reporting preparer's satisfaction and intention to switch to XBRL reporting: A Model

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Abstract – The objective of this paper is to develop a conceptual framework for understanding financial reporting preparers' satisfaction and intention to switch from conventional to XBRL reporting. Based on the review and synthesis of relevant literature from prior XBRL adoption research, technology usage behavior, and the user satisfaction element in information system studies, gaps have been identified and a conceptual framework has been developed. This framework includes eight constructs, i.e., perceived ease of use, perceived usefulness, perceived compatibility, information quality, service quality, system quality, preparer's satisfaction, and the intention to switch to XBRL reporting. The framework can be used to conduct research and establish appropriate XBRL plans. Furthermore, by leveraging the benefits of XBRL, this framework will assist decision-makers in formulating strategies. Nevertheless, this study is limited to identifying gaps and to suggesting new conceptual frameworks based on previous literature and empirical studies. Thus, this paper implies that further empirical research be conducted to validate the suggested integrated model.

Keywords: XBRL, digital reporting, filing submission, preparer's satisfaction, intention, information system quality.

1.0 Introduction

Extensible business reporting language (XBRL), recognised as the leading open standard language for business financial reporting, was believed to be capable of improving business financial reporting information to become more digitalized, transparent, and reliable (Chong et al. 2017; Liu et al., 2017; Yang et al., 2016). To date, more than 190 organisations from across the world, including financial regulators, capital markets, tax authorities, business registrars, government oversight, standard business reporting, and

others, use XBRL for regulatory and supervisory purposes (XBRL International, 2021). This suggests that XBRL has quite certainly given functionalities that improve the effectiveness of business and management activities in the organisation.

There are numerous studies from the literature on XBRL adoptions, such as factors influencing the intention to adopt XBRL, issues and challenges in adopting XBRL, or the impact of XBRL adoptions. However, research has typically focused on firm (organisational) level to adopt XBRL into their reporting process, either from viewpoint of regulators or businesses. This study, however, focuses on user viewpoints (individuals), notably the financial reporting preparer's point of view, which has received little attention.

In the business financial reporting process, a financial reporting preparer, such as a professional accountant, is a key person who is directly involved with the preparation of information for business financial reports. Thus, the decision from authorities/regulators to utilise XBRL (by mandating filings submission using XBRL) particularly will give a major impact on the financial reporting preparer jobs (to prepare reports filings in XBRL format). Therefore, understanding their feedback is essential to ensuring the success of the authorities'/regulators XBRL reporting project to utilise XBRL as a business reporting information exchange in the digital environment. Additionally, previous research from countries such as Malaysia (Ghani et al., 2014; Ilias & Ghani, 2015), United Kingdom (Dunne et al., 2009) Jordan (Abed, 2018), South Africa (Nel & Steenkamp, 2008) and German (Felden, 2011) have found that the adoption of XBRL as business reporting format is less popular among companies/businesses. The preparers (who act on behalf of the companies) also seem not interested to use XBRL as a filing submission format even though authorities/regulators have taken several initiatives such as providing an XBRL tool template to ease generating filing submission reports in XBRL form format. As a result, the project to adopt XBRL by authorities/regulators often extends from its original plan or in the worst-case scenario, could possibly be pulled back, if the preparer as the user does not perceive the benefits (Cohen et al., 2018). Thus, information on the financial reporting preparer's satisfaction and its intention to switch financial reporting preparation from conventional to XBRL format must be understood. However, only a few studies have been undertaken to examine the environment of report preparers that use XBRL to generate financial reporting (Bartolacci et al., 2020). Therefore, previous XBRL adoption studies, technology usage behaviour, and user satisfaction element in information system studies were reviewed to develop a conceptual framework that can understand financial reporting preparers' satisfaction and their intention to switch to XBRL reporting. Besides, this framework can be used by decision-makers such as businesses or regulators to conduct research and develop appropriate plans for enhancing the use of XBRL as a business information interchange form of digital reporting.

2.0 The popularity of XBRL

Previously, financial reporting formats were frequently created in printed paper versions utilising a simple electronic format such as Portable Document Format (PDF), Microsoft

Word, and Microsoft Excel. However, this fundamental or basic electronic format has limited features and is incompatible with internet data transmission. The (basic electronic) format will signal a copying and pasting problem and will require a significant amount of clerical work, cost, and time to transform the data into a different platform (Liu et al., 2014; Abed, 2019). Since many organizations, including businesses and regulators, are interested in using internet platforms to exchange business financial information, this format is no longer suitable, and more digitalized, readable formats must be used to facilitate data interchange or transmission over the internet. However, Charles Hoffman's 1998 development of XBRL has the ability to resolve these issues. Furthermore, XBRL have had a significant impact on the field of digital reporting due to their ability to read and transmit the data into different platforms, making XBRL more popular and distinct from the prior basic electronic format (Uyob et all., 2019c). XBRL was an expanded application version of Extensible Markup Language (XML) that was utilised in the business reporting environment. By applying XBRL, it is possible to eliminate the common error when attempting to transfer the data into a different platform, particularly data interchange over the internet. This makes the format more user-friendly, readable, digitalized, and capable of making the operational process more effective and efficient, especially in the process of filing submissions to business registrars (Bai et al., 2014; Dong et al., 2016).

Furthermore, XBRL can alleviate accounting comparability issues (Yang et al., 2016), which can be defined as the degree to which financial statement information is comparable across companies and time periods (Gross & Perotti, 2017). Previously, basic electronic format such as PDF and Hyper Text Markup Language (HTML) were unable to provide a unique mechanism for standardizing electronic communication comparisons (Birt et al., 2017; Uyob, 2019). In addition, when attempting to transmit data through various electronic devices, this format will signify an error. Investors and analysts on the other hand, can easily compare companies and industries across time by using XBRL (Ling, 2019). This consistent tag technology can standardize a report and enable it to communicate with wide range of electronic devices (Tohang & Lan, 2017; Uyob et al., 2019a). As a result, XBRL is able to contribute key qualitative characteristics of meaningful financial accounting information by providing a comparison element (IFRS, 2018).

Often known as "barcode for reporting", XBRL allows decision-makers to quickly extract, use, and analyse financial data from companies' organizations in a few seconds. (Choi, 2016; Uyob et al., 2019b). Therefore, many countries have mandated XBRL filing submission to improve the filing requirement process. More than 20 countries have adopted XBRL in their business registrar submission system, with approximately 8 million applications using it on a voluntary or mandatory basis (XBRL International, 2021). For financial reporting preparers (who are responsible to act on behalf of the companies) to submit XBRL filing requirements, a dedicated XBRL submission platform project, such as the Malaysian Business Reporting System (MBRS) in Malaysia and Electronic Disclosure for Investors Network (EDINET) in Japan, has been developed. Despite the fact that

XBRL reporting has garnered a lot of attention and has been mandated by a lot of regulators, the use of XBRL for submission purposes has not been very popular. Only about 3.6% of Malaysian audited companies use XBRL through MBRS for online submission reports (SSM, 2019). In Singapore's first year of implementation, however, filing via XBRL was deemed to be lagging, with just a quarter of the 40,000 companies willingly submitting complete XBRL reports (Chen, 2012; Majid & Koo, 2008). No entities in Australia, have expressed interest in or voluntarily decided to file using XBRL for submission purposes (Parker, 2020). This condition is a little alarming in the effort to transform the reporting process into a digital platform (by using XBRL). The authorities, therefore, need to take urgent steps such that its implementation (i.e. the project to adopt XBRL) needs to be streamlined.

3.0 Literature Review

This paper discussed three different but overlapping streams to explore financial reporting preparers' satisfaction and intention to switch to XBRL reporting. First, previous XBRL adoption studies have been reviewed from both the firm's (organisational) and user's (individual) perspectives. Following that, the pertinent literature on technology usage behaviour models and user satisfaction elements in information system studies is evaluated. Finally, the research gap is discussed to establish a new proposed conceptual framework.

3.1 Analysis on past XBRL adoptions studies

To provide insight into the factors influencing the intention to adopt XBRL, a bibliometric analysis has been conducted. A bibliometric analysis is an informetric analysis that can provide a general overview of the selected research field (Bar-Ilan 2017; Uyob, 2020). Previous scholarly publish articles were extracted from the Google scholar database as a methodology for conducting bibliometric analysis. Only articles with the keyword "XBRL adoption" and published between 2014 and 2019 were selected. 76 articles were discovered throughout the search process. These articles have been extracted into Mendeley software for screening (by reading article abstracts). However, only articles that focus on XBRL adoption factors and are empirical in nature were selected for this analysis. Following the screening process, only seven articles remained for further evaluation. Then, the article has been synthesised to identify its unit analysis (either organisation or individuals) and theory. These articles have been classified into two categories based on unit analysis and theory: firm (organisations) and user (individuals) perspectives. These two perspectives were concluded and presented in the next sections.

3.1.1 Past XBRL adoptions studies from firm (organisational) perspectives

XBRL is able to provide accurate, reliable and transparent information. Many countries including the United States, Japan, and the United Kingdom are encouraging businesses to adopt XBRL into their reporting systems. However, to adopt XBRL it incurred costs such

as installation and training costs which give huge concern on the issue of cost versus benefits whether the investment into XBRL is worth it or not. Thus, a crucial decision after considering several factors is needed before they decided to adopt XBRL. To understand management (organisational) technology adoptions, Depietro et al. (1990) introduced the technological, environmental, organisational (TOE) framework, which explain how technological, environmental, and organisational factors can influence organisations' decision to embrace and adopt certain technologies. This TOE framework has been used by many previous XBRL researchers to understand firm (organisational) XBRL adoptions. The technological factors are concerned with perceived technological characteristics, while organisational factors are concerned with organisation characteristics that may influence adoption decisions, and environmental are concerned with aspects of the surroundings factors in which the company conducts business that may influence adoption decisions. Thus, the article that used the TOE framework was classified as firm (organisational) categories. Table I below summarizes previous XBRL adoption studies conducted from the viewpoint of firm (organisational) perspectives.

Table I: The summarization of previous study from firm (organisational) perspectives.

Studies	Objective	Respondent	Theory	Findings
Ayob et al. (2019)	Investigate the effects of human factors on the successfulness of XBRL adoption by smalls to medium sized firms in Lebanon	78 smalls to medium sized firms in Lebanon	TOE framework	i. The successful adoption of XBRL was significantly affected by human factors.
Lakovic et al. (2019)	Identified the impact of technical, organisational, and environmental factors on XBRL adoptions in Montenegro.	Regulators, government bodies and financial companies in Montenegro	TOE framework and institution al theory	ii. Environmental factors have given biggest influence, followed by technical and organisational factors.
Slehat (2018)	Explore the ability of Jordanian companies to adopt XBRL.	public listed companies in Jordan	TOE framework	i. Pressure from external agencies, competitive environment, Support from top management, system ease, interpersonal skills,

				knowledge, qualify, expert and experience of staff influence XBRL adoptions.
Rostami and Nayeri (2015)	Examine factors on XBRL adoption in Iran firms.	Financial firms in Iran	TOE framework and knowhow construct	Pressure from external agencies and competitive environment influence XBRL adoptions in environmental factors. successful model implementation, available resource, interpersonal skills, and experience of staff influence XBRL adoptions in organisational factors. It easy to understand the system and compliance with previous system influence XBRL adoptions in technological factors. Understand the excess benefit versus cost, management attitudes, staff training, and awareness influence XBRL adoptions in knowhow factors.

Even though previous firm (organisational) perspectives studies shared some insightful information due to intention to adopt XBRL has been taken at the management level after considering factors involving their staff (preparers) such as staff qualifications, experience, and skills. But it does not accurately represent the behavioural intention of financial reporting preparers to adopt XBRL reporting due to different contexts of studies (organisational context vs individual context). In addition, on regulators' sides, they also provide a free XBRL tool template (to ease converting business reports into XBRL format) as an initiative for those businesses who do not want to integrate XBRL technologies into their reporting system. Thus, it is not a necessity for businesses to change their reporting system by adopting XBRL technologies into their company reporting system. However, all required financial reporting information must be fully prepared and identified early by preparers before they can manually key into the XBRL tool template to generate reports in XBRL file format. Therefore, this study argues that the decision from regulators/authorities to utilise XBRL does rather give a more impact on financial reporting preparer jobs in the context of users (individuals) rather than on the business (organisational) as a whole. Regulators, therefore, need to further understand the behaviour of preparers from the contexts of individuals to enhance the usage of filing submission using the XBRL submission platform.

3.1.2 Past XBRL adoptions studies from user (individuals) perspectives

From user (individuals) perspectives, prior studies conducted to understand the behavioural intention to adopt XBRL were very limited. To the best of the author's knowledge, only three studies have been conducted related to the user (individuals). Table II below summarizes XBRL adoptions studies conducted from the viewpoint of user (individuals) perspectives.

Table II: The summarization of previous study from end-user (individuals) perspectives.

Studies	Objective	Respondent	Theory	Findings
Pinsker & Felden(2016)	Investigate normative pressure and professional role effect on XBRL adoption in Germany	101 finance and IT manager	Technology framing theory, and Institutional theory,	 i. professional role and normative pressure have positive relationships with XBRL adoption. ii. Professional role does not affect the normative pressure
Chouhan and Goswami (2015)	Examine the acceptance of XBRL technologies in India.	105 financial professionals in various companies in NCR region of North India	Technology acceptance model (TAM)	iii. perceived ease of use is an important factor for formulating perceived usefulness. iv. Both perceived usefulness and perceived ease of use significantly influence the attitude. v. But attitude was not significantly influence intention to use XBRL.
Ogundeji et al. (2014)	Investigate the acceptance of XBRL technologies in Nigeria.	124 various practitioners from a big four audit firm in Nigeria	TAM2	i. subjective norm, perceived usefulness and perceived ease of use significantly influence the intention. ii. Subjective norm has positive effect on the company image but no effect on perceived usefulness.

	iii. Result demonstrability,
	output quality and job
	relevant has positive
	effect to perceived
	usefulness. But image
	has no effect to
	perceived usefulness.

Even though these previous studies shared some useful information on the intention to adopt XBRL from the perspectives of the users (individuals), but the sample of the studies is too general and involves various users including internal users such as accountants, and external users such as investors. Since different users use XBRL for different purposes, the results might be different for different types of users. Besides most of the studies only adopted solid previous technology acceptance model frameworks such as TAM to understand behavioural intention to use XBRL. Even though this framework has predictive power, but this original framework also has several limitations (Bukhari et al., 2013). Thus, a more robust framework that considers other elements is needed to better understand the financial reporting preparers' satisfaction and their intention to switch from conventional financial reporting to XBRL reporting.

3.2 Technology usage behaviour models

Over the years, many researchers have used Theory Reasoned of Action (TRA), Theory of Planned Behaviour (TPB), Diffusion of Innovation Theory (DIT) and Technology Acceptance Model (TAM) to understand the user behaviour in diverse study settings. All of these theories have been proven to be useful in predicting and explaining a wide range of human behaviours in various study contexts. TRA, TPB, and TAM have been more focused on predicting individual behaviour, whereas DIT has been more focus on predicting organisational behaviour to embrace an innovation (Lai, 2017). When it comes to information systems, TAM and DIT are exclusively concerned with beliefs about technology and innovation, however TRA and TPB is general belief theories which integrate the belief of perceived outcomes when forecasting certain behaviour. All of these theories take a one-way approach to a causal link, in which environmental factors influence cognitive beliefs, which in turn drive attitudes and actions (Taherdoost, 2018).

According to the TRA, TPB and TAM theories, an individual's behaviour is determined by his or her cognitive intention (Gangwar et al., 2015; Shiau et al., 2016). In other words, the higher an individual's intention to engage in a certain behaviour, the more likely that individual will engage in that behaviour (Fishben & Ajzen, 1975). DIT on other hand is management level theories which explain on how five factors such as relative advantage, complexity, compatibility, observability, and trialability could drive adopters to adopt

certain innovation (Rogers, 1995). Even though DIT is more likely relevant to be used in the context of organisations rather than individual usage behaviour, but DIT also emphasis on the system features characteristics such as relative advantage, complexity and compatibility which give significant influence on individuals usage behaviour to prefer use certain technology compared to others.

Individual attitudes and subjective norms, according to TRA, drive behaviour intention (Ajzen, 1991; Fishbein & Ajzen, 1975). However, in the context of information system studies, TRA required volitional, systematic and rationale study settings which sometimes involved misunderstanding on the survey questionnaire. To overcome TRA limitations TPB expands on TRA by including perceived behavioural control (PBC) as a factor that determines an individual's intention to perform a behaviour. The availability and perceived significance of resources, opportunities, and skills to achieve outcomes is referred to as PBC which relevant in non-volitional study settings. However, TRA and TPB, on the other hand, might be called broad theory studies (Momani et al., 2017). TRA and TPB are quite general, thus it depends on the information system researchers itself to suit which technology belief suit in the context of these theories which give inconsistent technologies belief due to different of studies context.

Whereas TAM was mainly focus on information system studies. TAM extends TRA to technology studies, however due to TRA's ambiguous theoretical and psychometric status, it ignores the subjective norm in forecasting intention to utilise technologies (Taherdoost, 2018). In TAM, attitude is formed by an assessment of two technologies belief which is perceived ease of use and the perceived usefulness of the technology. Both perceived ease of use and perceived usefulness being influence from the external variable. However, Venkatesh & Davis (2000) discovered that both perceived usefulness and perceived ease of use had a direct influence on intention to use technologies, thus removing attitude factor from the original TAM framework. TAM investigates the aspects of the technologies processes that lead to the user's intentions to utilise it. Based on it, it is possible to anticipate whether technology will be used, accepted, or rejected (Muñoz-Leiva et al., 2017). Nevertheless, these two factors have not been shown to be sufficient in predicting the behaviour of technologies (Bukhari et al., 2013). Davis (1989) itself has suggests that other variables or factors should be explored to better predict the future technological acceptance.

TAM has been studied extensively, and researchers have expanded into new technology acceptance theories such as TAM2 (Venkatesh & Davis,2000), TAM3 (Venkatesh and Bala, 2008) and UTAUT (Venkatesh et al.,2003). Venkatesh & Davis (2000) expand TAM theory by focusing on antecedents of perceived usefulness and behavioural intention to use the systems in TAM2. TAM3 extents TAM by identifying constructs that influence on perceived ease of use, with two major constructs, the adjustment group and the anchors group, identified as antecedents of perceived use in TAM3 (Venkatesh & Bala, 2008). Whereas UTAUT compared the similarities and differences between eight previous models, including TAM, TRA and TPB and introduced four key concepts, including

expected performance, expected effort, social influence and facilitating conditions, as well as four significant variables which include gender, experience, age, and voluntariness of use, to predict technology usage behaviour (Venkatesh et al., 2003). However, while the UTAUT model may be a strong model due to its parsimonious structure and higher explanatory power (R²), UTAUT did not observe direct effects that could reveal novel associations or significant factors that were left out by considering only existing predictors (Bagozzi, 2007). Besides, many variations of TAM could cause theoretical confusion on which version of TAM is the best commonly accepted one. Besides, it also failed to expand the theory in the sense of explaining the fundamental principles in greater depth (Otieno et al., 2016).

3.3 User satisfaction element in information system studies

In information systems, user satisfaction was associated with the user's engagement with specific technology applications (Rawashdeh & Rawashdesh, 2021). User satisfactions define a user's level of satisfaction with information system quality characteristics (DeLone & McLean, 2016), and an increase in user satisfaction leads to a greater intention for them to use technologies on a frequent basis (Islam et al., 2015; Ilyas et al., 2020). Furthermore, a growth or decrease in the potential use of such systems was influenced by user satisfaction element (Veeramootoo, et al., 2018), which is strongly related to the measurement of the good system (DeLone & McLean, 2016).

According to Cohen et al. (2018), in the current technology juncture, an exclusive performance measurement for a good system, such as its ability to increase processing speed and accuracy, is insufficient to interpret satisfaction element for a good system. Non-performance measurement such as its less complexity to performed required tasks and its compatibility with other hardware/software and compatibility in overall work process are equally important in determining satisfaction element for a good system (Cohen et al., 2018). Besides, DIT also approved and highlighted that compatibility and complexity is a factor that could influence innovation uptake (Rogers, 1995). If the innovation appears incompatible or too complex, it will not be adopted.

Isaac et al. (2018) and Islam et al. (2015) suggesting two dominating factors, which is perceived usefulness and perceived ease of use characteristics of information system as important factors in evaluating user satisfaction element for information system. However, this element seems insufficient due to its only focus on internal ability factor of the information system to performed required task and ignores the external element such as support system services. DeLoan & Mclean (2016) on other hand, propose more comprehensive characteristics by suggesting evaluating system quality, service quality, and information quality element to estimate user satisfaction element for information system. System quality specific to the desirable features of an information system, such as its usability, ease of use and flexibility. The amount of support provided to system users by the information systems organisation and IT support employees is referred to as service quality. Meanwhile, information quality is characterized as the idle features of system

output, for example, the system delivering an accurate and timely report result. However, the nature and purpose of the systems being examined influence these success dimensions and their specific measurements (DeLone & McLean, 2016).

4.0 Research Gap

Measurement of the overall surrounding quality characteristics of information systems including its support system is considered by this study as the most valuable factor that might influence the behaviour of the user to use a certain technology compared to others. Besides, in the long-term usage, the satisfaction over the quality characteristics that user feels will influence them either to continue to use the technology continuously or not. However, only a few studies investigate the overall surrounding quality of information systems and satisfaction elements with the behaviour studies in the contexts of user XBRL adoption. The gap between the perceptions of the preparers (as users) on the authorities/regulators' project to utilise XBRL (by mandating the XBRL submission using the XBRL platform system) and the perception of the preparers on the quality of the free XBRL tool template provided by authorities/regulators as support tool (to generate the XBRL file format) needs to be explored further. More recently, Rawashdeh & Rawashdeh (2021) try to understand the intention of the user to use XBRL tools. However, these studies focus more on commercial XBRL tools whereas the influence of the XBRL tools template provided by authorities/regulators on the intention of the preparers to use XBRL reporting was not been covered by these studies.

In addition, most previous research on behaviour and information systems, notably on XBRL studies, has relied on established and well-known conventional theories. In order to develop more reliable measurement techniques, many academics believe that a new dimension must be discovered by fusing components from other disciplines (Bukhari et al., 2013, Dennis et al., 2009). The creation of integrated models including various algorithms and ideas from other fields, such as psychology, consumer behaviour, and computer science, as well as getting input from business professionals and end users, should serve as a roadmap for future study.

For the aforementioned reasons, it is obvious that the development of a new conceptual framework that considers various disciplines as well as particular industrial participants such as professional accountant is both necessary and logical to comprehend financial reporting preparers' satisfaction and their intention to switch from conventional to XBRL reporting.

5.0 Development of conceptual framework and hypothesis

Considering the study objective and after reviewing previous studies, the below hypothesis and conceptual framework are being proposed for future testing. This study proposes to integrate two different angles which are from the perceptions of the preparers on the authorities/regulators' project to utilise XBRL in improving business communication and

from the view of the free XBRL tool template quality that the preparers feel to understand preparers' satisfaction and their behavioural intention to switch to XBRL reporting. Besides that, this study also argues that the financial reporting preparer satisfaction is the main precursor for the intention to switch to XBRL reporting. This study argues that the more the preparers satisfy the more the intention of financial reporting preparers to switch to XBRL reporting. Furthermore, studies on user satisfaction and its influence on the intention to use a particular technology have been used in many areas of information system technology including e-commerce (Ilyas et al., 2020), research database system (Islam et al., 2015) e-learning (Nagy, 2018) and internet banking (Abd Ghani et al., 2017). According to these studies, user satisfaction has a significant influence on their intention to use technology. Previous studies conducted by , Rawashdeh & Rawashdeh (2021) also proved that user satisfaction has strong effect to the intention to use XBRL tools. Thus, the following hypothesis has been proposed:

H₁: Preparer satisfaction has given a significant influence on the intention of financial reporting preparers to switch into XBRL reporting.

According to Delone & Mclean (2016), to identify quality of the information system, the three elements which are system quality, information quality, and service quality need to be evaluated. Therefore, this study proposes to use these three elements in evaluating the preparer's satisfaction with the quality of free XBRL tool template given by regulators. Thus, the below hypothesis has been proposed:

 H_{2a} : Information quality of free XBRL tool template has given a significant influence to the financial reporting preparers satisfaction to use XBRL reporting.

 H_{2b} : System quality of free XBRL tool template has given a significant influence to the financial reporting preparers satisfaction to use XBRL reporting.

 H_{2c} : Service quality of free XBRL tool template has given a significant influence to the financial reporting preparers satisfaction to use XBRL reporting.

In information system studies, empirical research also proved that compatibility is one of the factors that could influence the intention to adopt certain technology (Abu-assi et al., 2014; Rawashdeh & Selamat, 2013; Rogers, 1995; Wang et al., 2010). DIT also suggest that compatibility is the factor that could influence the innovation of adoption. If the innovation appears incompatible, then that innovation will not be adopted. Compatibility also suggested by Cohen et al. (2018), as one of non-performance measure of a good system which could influence user satisfaction. Therefore, this element will be integrated as a successor to both preparer satisfaction and the intention to switch into XBRL reporting. Thus, the following hypothesis has been proposed:

H₃: Perceived compatibility has given a significant influence on the intention of the financial reporting preparers to switch into XBRL reporting.

H₄: Perceived compatibility has given a significant influence to the financial reporting preparers satisfaction to use XBRL reporting.

Many information system researchers agree that TAM was dominant theory in technological acceptance, particularly from the perspective of users (individuals) (Yoon, 2016; Khoi et al., 2018; Sarika et al., 2015). In addition, TAM is widely utilized in a wide range of disciplines, including psychology, sociology, and management, and it successfully predicts users' intentions to implement technologies (Agrebi & Jallais, 2015; Gangwar et al., 2015). Since this study focused on user (individuals) viewpoints, the TAM main construct should not be overlooked. Furthermore, earlier XBRL researchers have used the TAM construct to better analyse XBRL adoptions. According to TAM, perceived usefulness, and perceived ease of use were the most important predictors of user intention to use a certain technology. Isaac et al. (2018) and Islam et al. (2015) also approved that factors suggested by TAM (perceived ease of use and perceived usefulness) were a dominant factor that had a significant influence on user satisfaction. Thus, the following hypothesis was proposed:

H₅: Perceived usefulness has given a significant influence on the intention of the financial reporting preparers to switch into XBRL reporting.

H₆: Perceived usefulness has given a significant influence to the to the financial reporting preparers satisfaction to use XBRL reporting.

H₇: Perceived ease of use has given a significant influence on the intention of the financial reporting preparers to switch into XBRL reporting.

H₈: Perceived ease of use has given a significant influence to the financial reporting preparers satisfaction to use XBRL reporting.

H₉: Perceived ease of use has given a significant influence on the perceived usefulness of XBRL reporting.

Figure I below show the proposed conceptual framework.

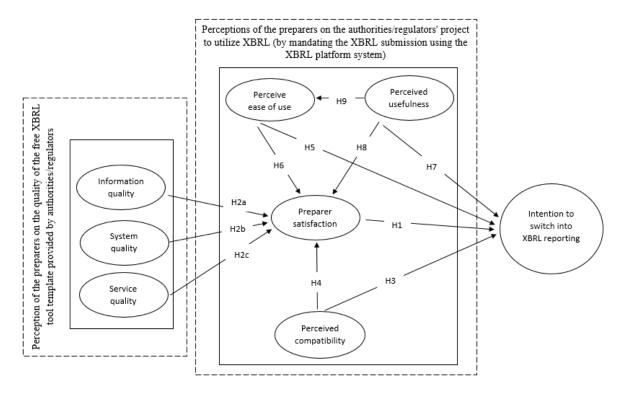


Figure I: Proposed conceptual framework

6.0 Suggested methodology for further research

To generalised this proposed conceptual framework, it should be empirically validated. This study suggests a research methodology that would allow the suggested conceptual framework to be tested and validated. A quantitative research (positivist deductive approach) is judged appropriate for evaluating a framework based on well-defined constructs in earlier publications.

According to Kerlinger (1973), survey method is the best strategy for obtaining information about personal, social, beliefs, and attitudes. Besides, surveys are the best way to measure societal views or perceptions, as surveys gather responses, thoughts, and feelings directly from a sample of the population being studied (Ferreira, 2017). Lowry et al. (2016) also reported that the survey method has been used by many researchers for decades and has proven to be one of the best methodology practices. Thus, survey method proposed to be used, and the survey questionnaire should be developed to reflect each of propose constructs. The process of development of propose item questionnaire was adapted from previous research. This survey questionnaire then should be distributed to collect the data from real financial reporting preparers who really involve with all filings reporting activities. However, since the satisfaction elements need to be validated by the preparer who already engaged with the system. This study proposes to take only financial reporting preparers who already have experience with the XBRL submission system and free XBRL

tool template whether they are using it in real reporting situations or during any training sessions.

To analyse the data, examining the data reliability and validity should be conduct first. After that, factor analysis techniques should be employed to validate all construct and model fit. Finally, to test the relationship and prepositions, structural equation modelling (SEM) technique might be used. Table III below show the description for each proposed construct and the item questionnaire source of adapted.

Table III: Description proposed construct and the item questionnaire source of adapted.

Construct	Description	Adapted from
Intention to switch into XBRL reporting	*	-
Preparer satisfaction	A preparer's impression of the gap between previous expectations and perceived XBRL achievement.	Rawashdeh & Rawadesh (2021)
Information quality	The quality of the output information delivered by the free XBRL tool template, such as its accuracy, process speed, and reliability.	Delone & Mclean (2016)
System quality	The quality that reflects on desire features of the free XBRL tool template are performing, including usability, ease of use, and flexibility.	Delone & Mclean (2016)
Service quality	The quality of support provided by regulators to the user of the free XBRL tool template such as help support and guidance.	Delone & Mclean (2016)
Perceived compatibility	A degree to which preparers feel that innovation of the XBRL submission system is consistent with previous existing business processes, practices, and value systems.	
Perceived usefulness	Perception of preparers who believed that using the XBRL submission system will improve their job performance.	(2015).
Perceived ease of use	A degree to which preparers feel free from engaging in mental and physical efforts to use the XBRL submission system.	Muñoz-Leiva et al. (2017) Nagy (2018).

7.0 Conclusions

This paper designed to develop a framework that helps academicians, businesses and regulators in understanding preparer's satisfaction and their behavioural intention to switch from conventional to XBRL reporting. Businesses and regulators can use this framework to conduct future research and help them to make proper plans to change business reporting by exploiting the XBRL benefits. For academicians, this study is expected to assist researchers to broaden their knowledge and identifying future research directions in XBRL studies.

To develop this proposed conceptual framework, literature from previous XBRL adoptions studies, technology usage behaviour, and user satisfaction element in information system studies have been reviewed. After that, relevant construct such as preparer's satisfaction, information quality, system quality, service quality, perceived compatibility, perceived usefulness, and perceived ease of use has been proposed to understand the behaviour intention of financial reporting preparers to use XBRL reporting. The description of these proposed constructs was adapted from previous literature to form a specific variable for this context of the study. As a conceptual paper, for future study, this study suggests that this proposed model be empirically validated.

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