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An Empirical Investigation of Preparers' and Users' Views on Internet Financial Reporting Disclosure Items in Malaysia

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Abstract

This research paper seeks to empirically investigate perceptions of preparer and user of corporate annual report on the important items of internet financial reporting (IFR) disclosed on websites of listed companies. The study employs the survey questionnaires for gathering information from the respondents on significant items that should be listed under IFR disclosure index checklist. Based on an extensive literature review, the level of IFR in this study is divided into two, namely, content dimension and presentation dimension. The results indicate that income statement of the current year is the most important items in content dimension. In addition, annual report in PDF format is perceived to be the most important items in presentation dimension. The result empirically proves that 140 items could be used for IFR disclosure index checklist to ascertain IFR's level of disclosure. The paper can be considered as the first empirical study to examine the important items of the IFR disclosure index from both views; preparers and users in Malaysia. The purpose of this study is to help significant gaps in knowledge about the important items in IFR disclosure index. The findings are expected to have great use to the interested parties such as government, regulators, policy makers, standard setters, corporations, market participants, management and other institutions. This study is the first attempt to explore in depth preparers' and users' views on IFR disclosure items in Malaysia. The implication of the research findings and future research will also be discussed.

Keywords: Preparer; user; content; presentation; disclosure item; internet financial reporting (IFR) and Malaysia

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■1.0 INTRODUCTION

The technology of Internet tends to revolutionise and increase the number of companies disclose their financial activities by using website (Jones & Xiao, 2004) and the economy system has been digitalized (Shiri *et al.*, 2013). Paper-based annual reports are less useful now in terms of timeliness and reliability as the world is highly relying on information and communication technologies (Ettredge *et al.*, 2002). The Internet provides an efficient means for companies to improve communications with individual financial investors, increase accessibility of financial and non-financial information, decrease costs associated with distributing hardcopy information, and increase the frequency of information disclosures (Bollen *et al.*, 2008; Kelton & Pennington, 2012; Ojah & Mokoteli, 2012). Basically, company usually exposes the activity via online such as financial information, corporate govenance, corporate social responsibility (CSR), strategic information, timeliness, interactivity with user, navigability and web structure (Gallego-Alvarez *et al.*, 2011). The Internet is also a very exciting medium to look into especially with regards to presentation, dislcosure and financial reporting (Ali Khan & Ismail, 2012a). Disclosure by using content and presentation format give an impact to the investor in decision making (Kelton & Pennington, 2012).

Well establishment of Internet as a medium to sharing information as a new technology for financial reporting (Valentinetti & Rea, 2012). Internet has becoming a channel for dissemination of the corporate information in recent years (Moradi *et al.*, 2011; Andrikopoulos *et al.*, 2013). Seetharaman and Subramaniam (2006) claims that so far there are no specific guidelines and standards set with regards to information dissemination through any professional bodies or government agencies websites. This situation leads to difference in internet financial reporting (IFR)'s content and presentation dimensions. IFR acts as a medium to make cominucation in term to exchange the information about financial information at the global level (Valentinetti & Rea, 2012). IFR is crucial as a reporting medium for communicating financial and non-financial information in order to provide a confident signal to potential investors and for strengthening the capital market (Ilias *et al.*, 2014). IFR is still characterized as being voluntarily without any legislations or guideline to control and explain the comprehensive information conveyed (Ashbaugh *et al.*, 1999; Bonson & Escobar, 2002; Marston & Polei, 2004; Hanifa & Ab. Rashid, 2005; Momany & Shorman, 2006; Kelton & Yang, 2008; Ismail & Sobhy, 2009; Homayoun *et al.*, 2011; Boubaker *et al.*, 2012).

Most of the studies done on IFR in Malaysia are in descriptive form which covers issues like types on information reported (Ismail & Tayib, 2000), IFR by Malaysian banks and financial institutions (Jamaliah *et al.*, 2001), classification of web establishment on financial disclosure (Keliwon & Aziz, 2005), different IFR practices between Malaysia and Singapore (Khadaroo, 2005a), IFR practices and its effect on auditing (Khadaroo, 2005b), information on the relationship with investors (Abdul Hamid, 2005), the importance of Internet usage for Malaysia and Singapore investors (Abdul Hamid *et al.*, 2006), previous websites' content and graphic applications (Mohamad *et al.*, 2006), the level of IFR (Ali Khan & Ismail, 2011), indexes of IFR (Ali Khan & Ismail, 2012b), and the selected aspects of IFR (Ali

Khan & Ismail, 2013). A few explanatory studies also took place, for example determinant factors that influence IFR (Hassan *et al.*, 1999; Abdul Hamid & Md Salleh, 2005; Hanifa & Ab. Rashid, 2005; Ali Khan, 2010a; Ali Khan & Ismail, 2014) and determinant factors of financial and environmental disclosures through Internet for Bursa Malaysia listed companies (Al Arussi *et al.*, 2009). Therefore, the issues of disclosure financial reporting make other researchers interested to study in this field (Andrikopoulos *et al.*, 2013).

A large number of the literatures on IFR are focused on describing and exploring the determinants of IFR, then measuring it, and finally disclosing and reporting it. However, there are limited studies that have researched the issue of important items of IFR, particularly in the context of Malaysia. Therefore, there are several reasons in order to conduct this research in Malaysia. Firstly, the success of electronic government policy in Malaysia has increased the number of companies that utilize the IFR in both the public and private sectors (Abdul Aziz et al., 2011). Moreover, the growth of information technology creates revolution in obtaining information beyond the world boundaries (Shiri et al., 2013) and the dynamic nature of IFR (Uyar, 2012). As a result, it is necessary to investigate further in-depth the important items in the IFR in the context of Malaysia. Secondly, based on the research done by Ali Khan et al. (2013), the content dimension is an important factor to influence the effectiveness of IFR as the items of IFR will help to determine the importance and usefulness of IFR in Malaysia. Thirdly, according to Kiew and Salleh (2011), there are three motivations in engaging IFR in Malaysia which are the transparency of disseminating company information increases, usage of internet to promote and create a good brand name and also practise of good corporate governance. Besides, the International Accounting Standards Committee (IASC) has published paper regarding "Business Reporting on the Internet" in the year 1999 in order to standardize IFR (Lymer et al., 1999) and this followed by the similar approaches taken by Financial Accounting Standards Board (FASB) in the year 2000 (FASB, 2000). However, there is still no mandatory requirement for IFR disclosure in Malaysia (Hanifa & Ab. Rashid, 2005; Ali Khan, 2010). For that reason, the initiative of this paper is to investigate the IFR disclosure index in a more comprehensive, holistic and global way to ascertain IFR level. Thus, this study will try to fill in the loopholes existed with regard to IFR. The importance of this study is based on the fact that a wide literature reviews done by researchers have proven that not even one study had touched on the important IFR items through the view of reporting preparers and users. In addition, this study determines whether significant differences exist between the perceptions of preparers and users on the important items of IFR from different background. Furthermore, the objective of this study is to obtain empirical evidence about the extent of IFR disclosure index that can be used to describe the level of IFR among listed companies. The impact of this study will show empirical evidence that is able to contribute to the body of knowledge related to IFR research.

The reminder of the paper is arranged as follows. The second section presents a review of IFR literature. Next, the methodology used will be discussed and then followed by the findings of this study. Summary and conclusion are presented in final section.

■2.0 LITERATURE REVIEW

Since 1995, interest in the internet has grown due to the availability of the World Wide Web (WWW) (Jain & Kumar, 2013). The earlier researchers on IFR are descriptive in its characteristic (Allan & Lymer, 2003). The evolution of IFR research can be categorized into four themes; classification of IFR, descriptive studies, association studies and dimension of IFR (Ali Khan & Ismail, 2008a). The research on IFR can divided into three main categories; descriptive research by one or more countries, research by professional bodies and explanatory research (Ali Khan, 2010). The trend of IFR researches starts from descriptive research, comparative research, association research, dimension and timeliness of IFR (Ali Khan & Ismail, 2012a; Boubaker *et al.*, 2012). Ali Khan and Ismail (2012c) stated that the evolution of IFR research can be categorized into several themes: theme and definition of IFR, classification of IFR research, descriptive studies, association studies, dimension and timeliness of IFR. Ali Khan and Ismail (2013) stated that studies on the perceptions of IFR from preparers' and users' perspective are very limited compared to those of traditional reporting. Perceptions studies on the benefits, factors, advantages and disadvantages of IFR are still lacking in emerging market countries especially Asian countries (Ali Khan & Ismail, 2013).

Ali Khan and Ismail (2014) discussed that issues related to index construction approach used to evaluate IFR standard received two different views which are (1) the weighted approach or (2) non weighted approach or no weightage. Based on the investigation of previous literatures, researcher finds that very little effort has been put among researchers in using the weighted approach to investigate IFR standard especially through the view of annual report preparer and user. Another point that should be taken into consideration is that IFR assessment items or dimensions used among researchers are inconsistent (Ali Khan & Ismail, 2009). This opens a space for debate with regard to the scales used in measuring IFR dimensions. However, Ali Khan and Ismail (2009) proposed utilizing content dimension and presentation dimension to ascertain IFR level for Bursa Malaysia listed companies. Content dimension will provide information on the types of information reported through the company's website (Ali Khan & Ismail, 2009). While, presentation dimension will provide information on latest display features in disseminating corporate information and a company's web design (Ali Khan & Ismail, 2009).

In the context of developing countries like Malaysia academic research involving IFR is still at the initial stage (Hassan *et al.*, 1999; Ismail & Tayib, 2000; Khadaroo, 2005a; Al Arussi *et al.*, 2009). Therefore, it is a necessity to carry out the study of IFR in the context of Malaysia. Ali Khan and Ismail (2012b) analysed the items which are important in IFR from the view of corporate annual report preparers. The study employs the survey questionnaires in gathering information from the respondents on significant items that should be listed under IFR checklist. Based on an extensive literature review the level of IFR in Ali Khan and Ismail (2012b) is divided into two, namely content dimension and presentation dimension. The result has shown five most important items in the current year which are: income statement of current year, balance sheet of current year, cash flow statement of current year, auditor report of current year, and annual report of current year (full text) which could illustrate the current content dimension. Presentation dimension on the other hand covers other five most important items which are the length of time taken to download the company's website, PDF annual report format, hyperlink to financial analysis, the existence of hyperlink in the annual report and link to the website. The result empirically proves that 87 items could be used for IFR disclosure checklist to ascertain IFR's level of disclosure.

The difference in dimensions used by researchers as mentioned earlier has opened a ground for investigation on the dimensions in order to create a clearer picture on the level of IFR. Even though a lot of researches have been carried out by accounts academicians, there is no unanimous agreement on dimensions that should be used to illustrate the level of IFR. The researcher revealed that very few researches could explain the phenomena from the view of preparers and users. Most of the previous studies are either descriptive or comparative and explanatory. Thus, this study will provide a very important input for IFR disclosure index checklist construction. An

effort by previous researchers in gauging preparers' and users' view on how IFR disclosure index checklist should be constructed is very limited. Previous studies show that IFR disclosure index was constructed based solely on index listed by previous researches. The uniqueness of this IFR disclosure index is that it takes into consideration inputs from preparers and users of corporate annual report. Thus, the finding is very significant as it is able to give empirical evidence for literature review related to disclosure item essential in IFR disclosure index checklist.

■3.0 RESEARCH DESIGN

Two main techniques are used to ascertain the level of IFR namely non weighted scoring system (Ashbaugh *et al.*, 1999; Bonson & Escobar, 2002; Debreceny *et al.*, 2002; Allam & Lymer, 2003; Oyelere *et al.*, 2003; Bonson & Escobar, 2006; Celik *et al.*, 2006; Chan & Wickramasinghe, 2006; Abdelsalam *et al.*, 2007; Kelton & Yang, 2008; Al Arussi *et al.*, 2009; Mohd Hanafi *et al.*, 2009; Ali Khan, 2010; Aly *et al.*, 2010; Ali Khan & Ismail, 2011; Ali Khan & Ismail, 2012b) and weighted scoring system (Davey & Homkajohn, 2004; Marston & Polei, 2004; Mohd Hanafi *et al.*, 2009). Non-weighted scoring technique is the most popular technique used to ascertain the level of IFR among companies. When the study was taking place, the researcher found that there are very limited studies done by using weighted scoring system to ascertain the level of IFR. Weighted scoring system allows each percentage of index items evaluated (Inchausti, 1997). This study uses questionnaire to survey the importance of IFR disclosure index in view of preparers and users and corporate annual report.

The target preparers of IFR are chief financial officer (CFO), finance manager (FM) and accountants. CFO, FM, auditor or accountants of the public companies listed. CFOs are chosen because they are the senior executives who are responsible for both accounting and financial operations (Jiambalvo, 2004), these individuals also have the necessary knowledge and competency regarding IFR matters (Ho & Wong, 2003; Mohd Isa, 2006), they are ultimately responsible for the preparation of the financial reports either annual and interim (Ku Ismail & Chandler, 2007) and they are knowledgeable, and skilful, and maintain high professional standards and ethical values (Gomes, 2009). Accountants' roles as gatekeepers, interpreters and beneficiaries of the accounting process they have significant influence in shaping reality (Morgan, 1988). Accountants have been instrumental in imposing an increasingly rigid and pervasive structure of regulation (Gowthorpe, 2000).

The target users of IFR are academic, student, bank officer and manager. It is important to look through the users' perspectives wanted highly detailed disclosures (Hay & Antonio, 1990). Views from corporate annual report users (share broker, remisier, business owner, graduates, academicians and other public users) are exposed to accounting information and have essential knowledge on how to use information contained in the annual report (Mohd Isa, 2006). Users of corporate annual report (accountants, executives/manager, bankers, assessors/tax officers, academics, financial analysts and investors) are chosen because they are well educated, knowledgeable in accounting, higly experienced and interested in investments in shares of companies (Zoysa & Rudkin, 2010). Academics were chosen as a proxy group for corporate annual report users in this study because they were considered to be responsible for accounting education geared towards meeting the country's need for professional accountants (Mishekary & Saudagaran, 2005). Students are believed to be corporate annual report users because of the nature of their academic specialization (Mohd Isa, 2006). Bank officer acts as a representative of a market economy (Mirshekary & Saudagaran, 2005). Managers were also chosen as a proxy group for corporate annual report users in this study because they were considered to be responsible for make daily decisions affecting business process (Barsky & Catanach, 2011; Moghadam *et al.*, 2013). Auditors were chosen to obtain their feedback on IFR regarding the increasing number of issues in the auditors' environment such as the role and responsibility of information on websites, the high potential of unaudited financial reporting, omission of audit reports, inappropriate audit issues, and also the timing and nature of the content form of audit reports on the website (Griffiths, 2012).

Financial disclosure is an abstract concept that cannot be measured directly. A suitable proxy like reporting index could be used to determine information reported by a company (Cooke & Wallace, 1989). Therefore, one of the important functions of this study involves selecting items reported in Bursa Malaysia Listed Companies to determine their level of IFR. Thus, the broad-based approach (see Haniffa, 1999) is used in selecting items for the checklist. According to Sekaran (2003), broad problem area refers to overall situation that shows a possible need for research to find solutions. Furthermore, there are three procedures for constructing disclosure index (Curuk, 2008). The procedures involve opening spreadsheet for disclosure score, calculation score, disclosure item score and disclosure index score. Based on the ground that there is no general theory that could be used in relation to the number and selections of items that need to be listed in the disclosure (Wallace, 1988; Wallace *et al.*, 1994; Haniffa, 1999), previous study related to IFR disclosure index will be taken as guidelines whereby the number of items will start at the eleventh items (Abdelsalam & Street, 2007; Ezat & El-Masry, 2008) until 205 items (Mohd Hanafi *et al.*, 2009). The step is similar as the IFR checklist items constructed by Haniffa (1999), Ali Khan (2010), Ali Khan and Ismail (2010) and Ali Khan and Ismail (2012b).

Data from questionnaires were collected through post. Every respondent received a code questionnaire together with a letter stating that the information is private and confidential. Each questionnaire was enclosed with a stamped envelope addressed to the researcher. As some of the 155 items are likely to be perceived as being more important than others, importance weighting are attach to each. The weightings were obtained by sending a list of the 155 items to respondents and asking them to grade the importance of each item on a 1 to 5 scale, where 5 meant the item was very important, 4 meant the item was important, 3 related to moderately important, 2 meant slightly important, and 1 related to unimportant. The mean score was used as the weighting for each individual item of disclosure. Each respondent received a marked questionnaire (for tracking purposes) together with a letter outlining the objective of the research, respondent confidentiality, and availability of survey result upon request, as well as a stamped addressed envelope. We sent questionnaire to solicit their opinion on important items of IFR. In order to determine the importance of item in IFR a perception survey of preparers and five user-groups in Malaysia was conducted. The responses received from the questionnaire delivered are shown in Table 1. 376 questionnaires out 940 sent were secured back with the respond rate of 40.0% percent, which is higher than the ample response rate (i.e. 15 to 20 percent) for a questionnaire survey (Standen, 1998). Frazer and Lawley (2000) claimed that the results of most studies using survey method obtained the response rate of 10% or lesser. The response rate is considered as sufficient based on the fact that the response rate for survey method through post in Malaysia is around 10 to 16 percent (PricewaterhouseCoopers, 2002). This study respond rate is quite sufficient as compare with other previous studies which were 16.8 percent and 17.2 percent (Ho & Wong, 2001a), 14 percent (Ku Ismail & Chandler,

2005), 13.29 percent (Mohd Isa, 2006), 15.10 percent (Gibbins *et al.*, 2007), 10.30 percent (Leng *et al.*, 2007), and 15.11 percent (Ali Khan, 2010). Various efforts had been taken to improve the response rate including sending first and second reminders.

No.	User Group	Respond
1	Preparer	68 out of 450 = 15.11%
2	Academic	34 out of 50 = 68%
3	Student	74 out of 80 = 93%
4	Manager	106 out of $150 = 71%$
5	Bank officer	54 out of 110 = 49%
6	Auditor	40 out of 100 = 40%

Total

376 Malaysian respondents

Table 1 Distribution of respondents

The result will compare with overall perception included preparers and users. Therefore, the construction, structure and validation of the questionnaire for this research were based on an extensive review of the literature and previous similar questionnaire surveys which are relevant on this research. Thus, this research is based totally on the accounting standards and regulations guideline. Some items in this questionnaire were derived from discussion with the person that have knowledge and experience deal with this topic especially the person expose on accounting field. Subsequently, a pilot survey was conducted before the final questionnaires were sent to the respondent to ensure that the question were appropriate, would work as intended and were properly sequenced and worded (Ott *el al.*, 1983). Furhermore, a content validity test was conducted to ensure that the measures include sufficient coverage of the investigated questions (Cooper & Schindler, 2006). The IFR index disclosure checklist was tested during the pre and pilot study. Local and international academicians' reviews were obtained when constructing IFR disclosure item index checklist. Then, the disclosure checklist had been reviewed by accounting practitioners and found it to be understandable, appropriate in length for the purpose of the study, and the content to be clear and have sufficient coverage.

There are three sections in order to finalize the questionnaire. The first section of the questionnaire has 97 questions which finalize the perception which items are important in the content dimension. The second section of questionnaire has 58 questions which analyse which items are important in the presentation dimension. Final section of questionnaire consists of subsection questions which analyse about information on demography profile and several perceptions about IFR. Thus, each of the respondents is allowed to give any comments based on their observation and able to give suggestion according to their observation related to disclose of IFR in Malaysia. In addition, this study provides evidence that there are some differences in the perception of respondents particularly between the preparers and users towards each item presented according to their perceptions towards disclosure items through IFR.

■4.0 RESULTS AND DISCUSSION

From the data shown in Table 2, out of 376 respondents 175 were males (46.5%) and 201 were females respondents (53.5%). On the other hand, 179 of respondents in range age below than 30 years (47.6%), while 116 of respondents were 31 to 40 years (30.9%). Hence, 60 respondents in age range of 41-50 years (16.0%) and only 21 of respondents between 51-60 years (5.6%). In terms of academic qualification, 143 respondents are diploma holders (38.0%), 157 respondents are degree or professional holders (41.8%), nine respondents are PhD holders (2.4%), while 67 respondents are master holders (17.8%). Lastly, respondents' position in their organization such 36 as chief finance officer (9.6%), 21 respondents as finance manager (5.6%), 11 respondents as accountants (2.9%). 34 respondents from academic member (9.0%), 74 respondents from university students (19.7%). While, 106 respondents works as executive officer (28.2%), 54 respondents as bank officer (14.4%) and 40 respondents as auditor (10.6%).

		Prepare	ers	User		
Demographic	Item	Frequency	%	Frequency	%	Total
Gender	Male	46	12.2	129	34.3	175 (46.5%)
	Female	22	5.9	179	47.6	201 (53.5%)
Age	< 30 years	6	1.6	173	46.0	179 (47.6%)
	31 - 40 years	27	7.2	89	23.7	116 (30.9%)
	41- 50 years	26	6.9	34	9.0	60 (16.0%)
	51 - 60 years	9	2.4	12	3.2	21 (5.6%)
Academic qualification	Diploma	3	.8	140	37.2	143 (38.0%)
•	Degree	49	13.0	108	28.7	157 (41.8%)
	Master	16	4.3	51	13.6	67 (17.8%)
	PhD	-	-	9	2.4	9 (2.4%)
Position in Organization	Chief Finance Officer	36	9.6	-	-	36 (9.6%)
_	Finance Manager	21	5.6	-	-	21 (5.6%)
	Accountant	11	2.9	-	-	11 (2.9%)
	Academician	-	-	34	9.0	34 (9.0%)
	University Student	-	-	74	19.7	74 (19.7%)
	Executive Officer	-	-	106	28.2	106 (28.2%)
	Bank Officer	-	-	54	14.4	54 (14.4%)
	Auditor	-	-	40	10.6	40 (10.6%)

Table 2 Profile of respondents

4.1 Content Dimension

Table 3 presents the result of preparers' and users' perception on the importance of items of disclosure for content dimension. In order to measure the beneficial disclose financial report through Internet, it is crucial to measure what is the most important item needed by both respondents to review in content dimension. Hence, the information needed by both respondents can be disclosed in the financial report and fulfill their expectation. Both preparers and users are asked to rate the perceived importance of 97 items included in content dimension.

As a result, this indicates that preparers rank the content dimension in income statement of current year (mean = 4.60) as the most important item, balance sheet of current year (mean = 4.57) as a second important medium, and cash flow statement of current year (mean = 4.57) as the third important item. However, users take a slightly different view. The users also considered income statement of current year (mean = 4.42) as the most important source of information. However, the second important item that needed by them is cash flow statement of current year (mean = 4.39). Lastly, the third important information needed by users is balance sheet of current year (mean = 4.37). Both respondents give the positive feedback related to each item presented in the content dimension. Meaning that all the items are relevant which the mean exceed (mean = 3.00). Thus, both respondents believe that the most effective financial report is the financial report provided with all the criteria needed by the respondents and always be updated based on the current year.

In addition, there are also significant differences between the preparers and users over the criteria on half year report of current year. The mean score given by preparers is 4.10 (ranked no. 24). However, for the users, they do not consider half year report of current year as the most important item in the content dimension (mean = 3.87) rank number 42. Normally, preparers need it in order to analyse the potential of the company for the whole year rather than the users need it mostly for the current year only. Lastly, text of speeches and presentations (preparers mean = 3.07, users mean = 3.32) are considered to be slightly important to both preparers and users groups. This item is ranked almost the last yet it is still relevant to the preparers and users. This is not surprising because those particular items are not necessary for both groups because not much information needed by them in that area.

A Mann-Whitney tests on the 97 disclosure items for content dimension included in the questionnaire was carried out to give interested decision making parties (such as regulator, professional bodies and standard setting boards) a better insight into desirability and level of agreement which may exist among preparers and users about IFR disclosure items. The results indicate that there is a significant difference at the level of 5% for 21 items and is a significant difference at the level of 1% for 24 items. The results provide an indication of the items which are interested by preparer versus user in the content dimension that should be disclosed in corporate website.

Table 3 Perceptions on the importance items of disclosure for content dimension

		Preparers	3		Users		Overall			M-W test
Disclosure Item	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank	Sig.
Great importance										_
Income statement of current year	4.60	.672	1	4.42	.687	1	4.45	.687	1	$.018^{*}$
Cash flow statement of current year	4.57	.676	3	4.39	.698	2	4.43	.696	2	$.024^{*}$
Balance sheet of current year	4.57	.654	2	4.37	.739	3	4.40	.728	3	.023*
Annual report of current year (full text)	4.46	.700	5	4.34	.731	4	4.37	.725	4	.241
Auditor report of current year	4.51	.635	4	4.32	.747	5	4.36	.731	5	.063
Notes to financial statements of current year	4.46	.742	6	4.29	.692	7	4.32	.703	6	$.027^{*}$
Income statement of past years	4.37	.710	9	4.29	.724	6	4.30	.721	7	.374
Cash flow statement of past year	4.31	.758	13	4.25	.702	8	4.26	.712	8	.387
Balance sheet of past years	4.32	.722	12	4.22	.752	9	4.24	.747	9	.320
Annual report of past years (full text)	4.29	.734	14	4.21	.759	10	4.23	.754	10	.416
Statement of changes in shareholders' equity	4.37	.790	8	4.17	.764	13	4.20	.772	11	$.029^{*}$
Auditor report of past years	4.29	.774	16	4.17	.799	12	4.19	.795	12	.257
English version of financial	4.38	.847	7	4.12	.796	15	4.17	.811	13	.004**
Accounting policy	4.34	.725	11	4.13	.811	14	4.16	.800	14	.050*
Auditor signature of current year	4.04	1.165	26	4.17	.822	11	4.15	.893	15	.893
Financial Reporting Standards (FRS) basis in the current year	4.29	.774	15	4.10	.763	18	4.14	.767	16	.039*
Dividend information	4.18	.772	18	4.11	.720	17	4.12	.736	17	.388
Notes to financial statements of past years	4.13	.839	17	4.08	.786	20	4.11	.796	18	.208
Web page in English	4.35	.728	10	4.05	.835	23	4.11	.825	19	.006**
Management report/analysis in current year	4.07	.834	25	4.11	.804	16	4.10	.808	20	.737
Analyses of main business risks	4.07	.896	20	4.09	.788	19	4.10	.808	21	.387
Supplement or amendment to current year annual	4.13	.820	23	4.09	.751	21	4.10	.763	22	.470
report Changes in stockholders' equity in the current										
year	4.03	.914	27	4.06	.706	22	4.05	.746	23	.845
Users quickly find the financial information	3.91	.748	37	4.03	.756	25	4.01	.755	24	.214
Auditor signature in past years report	3.88	1.191	40	4.03	.861	24	4.00	.930	25	.813
Moderate importance										
Summary of financial data over a period of at least five years	3.96	.836	30	3.97	.817	26	3.97	.819	26	.936
Summary of annual report of current year	3.96	.905	31	3.95	.764	31	3.95	.790	27	.727
Current year information can be distinguished from last years information	3.81	.966	47	3.97	.811	27	3.94	.842	28	.316
Segmental reporting by line of business in current year	4.12	.764	21	3.91	.775	35	3.94	.776	29	.034*

		Preparers			Users			Overall		M-W test
Disclosure Item	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank	Sig.
Financial ratios	3.94	.790	33	3.93	.806	32	3.93	.802	30	.078
CEO signature in the report	3.74	1.115	51	3.95	.971	29	3.91	1.000	31	.155
Summary of key ratios over a period of at least	3.93	.834	35	3.91	.820	33	3.91	.822	32	.913
five years										
Half-year report of current year	4.10	.849	24	3.87	.786	42	3.91	.802	33	.013*
Sales of key products Historical share prices	3.71 3.53	.793 .906	52 65	3.95 3.97	.805 .784	30 28	3.90 3.89	.808 .824	34 35	.017* .000**
Company address	3.81	.885	45	3.91	.800	28 37	3.89	.815	36	.383
Corporate information	4.12	.783	22	3.83	.797	45	3.88	.801	37	.008**
Directors shareholding information	3.79	.764	48	3.87	.827	41	3.86	.816	38	.358
Top 10 stockholders in current year	3.96	.888	29	3.82	.856	46	3.85	.863	39	.228
Annual report of current year (excerpt)	3.78	1.005	49	3.84	.858	44	3.83	.885	40	.799
Link to Bursa Malaysia websites	3.60	.979	59	3.88	.796	39	3.83	.838	41	$.026^{*}$
Quarterly report of current year	4.15	.919	19	3.74	.886	63	3.82	.904	42	.000**
Indicator for finding current information directly	3.57	.798	60	3.88	.781	40	3.82	.792	43	.009**
Information on the date of latest websites update	3.88	.856	39	3.79	.950	49	3.81	.934	44	.591
Recent monthly financial data	3.38	1.037	74	3.91	.818	34	3.81	.884	45	.000**
Members of the Board of Directors	3.96	.921	32	3.78	.832	54	3.81	.850	46	.124
Information regarding a dividend reinvestment	3.60	.933	56	3.85	.793	43	3.81	.824	47	.048*
plan Information on corporate strategy	3.81	.918	46	3.79	.792	52	3.80	.815	48	.709
Chairman's report	3.99	.906	28	3.75	.885	60	3.79	.892	49	.034*
Annual general meetings information	3.69	.851	53	3.81	.872	48	3.79	.869	50	.199
Charters for the audit committee	3.82	.791	41	3.79	.823	51	3.79	.816	51	.769
Segmental reporting by line of business in past	2.02		2.4							
years	3.93	.779	34	3.75	.811	62	3.78	.807	52	.085
Shareholder information	3.82	.897	44	3.75	.872	61	3.77	.875	53	.631
Number of share traded	3.24	.994	86	3.89	.800	38	3.77	.874	54	.000**
Segmental reporting by region in current year	3.69	.981	54	3.78	.840	53	3.77	.866	55	.595
Share price performance in relation to stock	3.13	1.064	90	3.91	.740	36	3.77	.860	56	.000**
market index										
Company's charter in the current year	3.82 3.54	.809 1.112	43	3.74 3.76	.848 .893	64 57	3.76	.841 .938	57 58	.608
Current year resolutions of shareholders' meeting Annual report of past years (excerpt)	3.65	.943	64 55	3.73	.893 .867	65	3.72 3.72	.938	59	.074 .538
Half-year report of past years	3.93	.869	36	3.68	.849	73	3.72	.857	60	.030*
Disclaimer	3.75	.952	50	3.72	.775	69	3.72	.809	61	.793
Share price graphs	3.35	1.048	77	3.79	.837	50	3.71	.894	62	.001**
Specific update time for the stock/share price										
data	3.46	.953	70	3.77	.844	56	3.71	.872	63	.004**
Corporate social responsibility report	3.82	.732	42	3.68	.814	75	3.70	.800	64	.230
Share quote	3.10	.979	94	3.82	.790	47	3.69	.871	65	$.000^{**}$
Projected information	3.57	.886	61	3.72	.859	68	3.69	.864	66	.183
Frequently Asked Question (FAQ)	3.40	.933	73	3.76	.788	58	3.69	.827	67	.002**
Other than English web page (such as Malay)	3.34	1.002	79	3.75	.903	59	3.67	.933	68	.002**
Segmental reporting by region in past years	3.60	.949	57	3.69	.847	71	3.67	.866	69	.579
Current year resolutions of the Board of Directors	3.35	1.207	78	3.73	.807	67	3.66	.903	70	$.016^{*}$
Classes of shares	3.12	1.030	92	3.78	.788	55	3.66	.873	71	.000**
Indication of audited and unaudited information										
(half yearly and quarterly)	3.49	1.015	68	3.69	.810	72	3.66	.853	72	.111
Information on intellectual capital	3.54	.937	63	3.68	.829	74	3.66	.850	73	.296
Quarterly report of past years	3.91	.958	38	3.57	.905	89	3.64	.922	74	.005**
Calendar of future financial activities	3.40	.883	72	3.69	.851	70	3.64	.863	75	.010**
Code of conduct and ethics for directors, officers	3.60	.949	58	3.63	.916	82	3.63	.921	76	.780
and employee	3.00	.949	36	3.03	.910	62	3.03	.921	70	.760
Information about managers, at least the identity	3.57	.919	62	3467	.908	79	3.63	.909	77	.692
and curriculum vitae of executives										
Postal address to investor relations	3.47	.872	69	3.66	.894	76	3.62	.892	78	.087
Monthly share prices	3.10	.917	93	3.73	.823	65	3.62	.874	79	.000**
Current year resolutions of the Supervisory	3.51	.855	66	3.64	.818	81	3.61	.825	80	.276
Current year resolutions of the Supervisory Board	3.29	1.173	81	3.66	.833	77	3.59	.913	81	.016*
Phone number to investor relations	3.41	.966	71	3.63	.891	83	3.59	.908	82	.086
Current share prices	3.41	.912	82	3.65	.818	78	3.59	.847	83	.001**
Employee shareholding information	3.31	.935	80	3.64	.890	80	3.58	.906	84	.005**
Corporate governance principles/guidelines	3.51	.985	67	3.59	.851	87	3.58	.876	85	.610
Information of third party opinion about										
company	3.28	1.077	83	3.63	.880	84	3.57	.927	86	.012*
Calendar of events of interests to investors	3.37	.945	75	3.61	.860	85	3.57	.880	87	.038*
E-mail to investor relations	3.37	.945	76	3.57	.872	90	3.53	.888	88	.088

		Preparers			Users			Overall		M-W test
Disclosure Item	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank	Sig.
Option provided to register for future email alerts (press releases, newsletters, etc.)	3.09	.707	95	3.61	.793	86	3.52	.803	89	.000**
Listing of analysts following the firm	3.16	.908	87	3.58	.801	88	3.51	.836	90	.000**
Monthly or weekly sale or operating data	3.04	.984	97	3.56	.877	91	3.47	.917	91	.000**
Past year resolutions of the Board of Directors	3.16	1.114	89	3.53	.840	92	3.46	.905	92	.012*
Past year resolutions of shareholders' meeting	3.26	1.060	84	3.49	.817	94	3.45	.869	93	.169
Past year resolutions of the Supervisory Board	3.16	1.087	88	3.49	.860	93	3.43	.912	94	$.032^{*}$
Glossaries	3.12	.970	91	3.47	.817	95	3.41	.856	95	.002**
Charters of others committees	3.25	.817	85	3.41	.874	96	3.38	.865	96	.168
Text of speeches and presentations	3.07	.816	96	3.32	.905	97	3.28	.894	97	.036*

4.2 Presentation Dimension

Results of preparers and users are according to their perceptions on the importance of items of disclosure for presentation dimension in Table 4. Thus, both groups were asked to answer around 58 questions regarding which criteria are the most important for them in presentation dimension shown. In order to understand what are the criteria preparers needed during accessing the annual report through Internet, users were also asked to indicate their wants during analysing annual report through Internet. Table 4 indicates that preparers are most interested of four items such as in loading time of the website below 10 seconds (mean = 4.34), annual report in PDF format (mean = 4.26), hyperlinks inside the annual report (mean = 4.09) and hyperlink to financial analysts (mean = 4.09) as the most important item which exceed (mean = 4.00). Besides, the rest item categorize as moderate important such as link to homepage (mean = 3.93), link to top homepage (mean = 3.87) and ability to download reports (mean = 3.85). Lastly, there are five items not relevant because the mean lowest than (mean = 2.00) which the ranking from 54 to 58.

In contrast, a majority of users prefer to choose seven items as the most important such as annual report in PDF format (mean = 4.20), loading time of the website below 10 seconds (mean = 4.13), link to homepage (mean = 4.08) and hyperlink inside the annual report (mean = 4.07). While, the balance of the items being considered as moderate important such as link to top homepage (mean = 3.99), financial data in processable format (such as Excel) (mean = 3.99), direct e-mail contacts (feedback) available (mean = 3.98), use of multimedia technology (in general) (mean = 3.94).

From the observation towards both groups mostly agree that items in presentation dimension are the most important criteria in order to analyse financial report by using Internet. Hence, it will actually influence their mood or affect their emotion if the service given is in worst condition because it will waste their time during analysing financial report. A Mann-Whitney tests on the 58 disclosure items for presentation dimension included in the questionnaire was carried out to give interested decision making parties (such as regulator, professional bodies and standard setting boards) a better insight into desirability and level of agreement which may exist among preparers and users about IFR disclosure items. The results indicate that there is a significant difference at the level of 5% for two items and a significant difference at the level of 1% for 43 items. The results provide an indication of the items which are interested by preparer versus user in the presentation dimension that should be disclosed in corporate website.

Table 4 Perceptions on the importance items of disclosure for presentation dimension

M_W tost

	Preparers				Users			M-W test		
Disclosure Item	Mean	SD	Rank	Mean	SD	Rank	Mean	SD	Rank	Sig.
Great importance										
Annual report in PDF format	4.26	.704	2	4.20	.751	1	4.21	.742	1	.579
Loading time of the website below 10 seconds	4.34	.784	1	4.13	.830	2	4.17	.825	2	.054*
Hyperlinks inside the annual report	4.09	.876	3	4.07	.820	4	4.07	.829	3	.790
Hyperlinks to financial analysts	4.09	.893	4	4.05	.783	5	4.06	.803	4	.552
Link to homepage	3.93	.852	5	4.08	.733	3	4.05	.757	5	.185
Link to table of contents	3.85	.815	8	4.05	.751	6	4.01	.766	6	.060
Ability to download reports	3.85	.778	7	4.04	.820	7	4.00	.815	7	.080
Moderate importance										
Link to top homepage	3.87	.845	6	3.99	.742	8	3.97	.762	8	.252
Financial data in processable format (Excel)	3.72	1.063	10	3.99	.846	9	3.94	.894	9	.077
Direct e-mail contacts (feedback) available	3.72	.750	9	3.98	.805	10	3.94	.801	10	.007**
Use of multimedia technology (in general)	3.68	.762	11	3.94	.823	11	3.89	.817	11	.009**
Format of reports suitable for calculations	3.56	.920	17	3.89	.829	16	3.83	.854	12	.003**
Change to printing friendly format possible	3.57	.816	14	3.89	.797	15	3.83	.808	13	.003**
Internal search engine	3.56	.835	16	3.86	.819	17	3.82	.823	14	.004**
Clear boundaries for annual reports	3.54	.818	18	3.89	.772	14	3.82	.791	15	.000**
Users can download the full annual reports in sections	3.38	.978	30	3.91	.857	13	3.81	.902	16	.000**
Next/previous bottoms to navigate sequentially	3.44	.741	23	3.87	.757	17	3.80	.772	17	.000**
Annual report in HTML format	3.54	.937	19	3.84	.819	20	3.78	.848	18	$.014^{*}$
Financial information can be viewed in more than one currency (UK£ & US\$)	3.03	1.036	53	3.91	.883	12	3.75	.972	19	.000**
User can subscribe to public announcement via e-mail	3.09	.893	50	3.63	.897	41	3.75	.855	20	.000**

	P	Preparers Users			M-W test					
Disclosure Item	Mean	SD	SD Rank		SD	Rank	Mean	SD	Rank	Sig.
Direct e-mail hyperlinks to investor relations	3.38	.792	27	3.83	.797	21	3.75	.814	21	.000**
Users can download the financial information in	3.24	.964	39	3.86	.819	19	3.74	.879	22	.000**
more than one type of format	3.24	.904	39	3.60	.019	19	3.74	.019	22	.000
Hyperlinks texts	3.62	.864	13	3.76	.856	30	3.73	.858	23	.186
Users can compare and analyses comparative stock	3.21	.986	40	3.83	.841	22	3.72	.901	24	.000**
or other performance on the same screen	3.21	.900	40	3.63	.041	22	3.12	.901	24	.000
Hyperlinks to data on a third-party's website	3.57	.967	15	3.75	.880	35	3.72	.898	25	.178
Help information/site	3.43	1.041	24	3.78	.833	27	3.72	.883	26	.007**
Annual meeting	3.49	.782	21	3.77	.841	29	3.72	.837	27	.004**
E-mail alerts	3.44	.741	22	3.77	.858	28	3.71	.847	28	.001**
One click to get to investors relations information	3.37	.845	31	3.79	.826	25	3.71	.844	29	$.000^{**}$
Online feedback	3.34	.803	34	3.79	.814	26	3.71	.829	30	$.000^{**}$
Annual report in multiple file format	3.32	.953	35	3.79	.890	24	3.70	.918	31	$.000^{**}$
There are investment calculators available (e.g.	2.15	006	12	2.01	057	22	2.60	010	22	.000**
investment return or dividend calculator)	3.15	.996	42	3.81	.857	23	3.69	.919	32	.000
Content can be viewed in different browsers	2.41	015	25	275	055	22	2.60	056	22	.002**
(Internet Explorer and Netscape)	3.41	.815	25	3.75	.855	33	3.69	.856	33	.002
Use of presentation slides	3.37	.896	32	3.75	.855	32	3.68	.873	34	.001**
Online investor information order service	3.28	.895	36	3.76	.815	31	3.68	.849	35	.000**
Table of content/sitemap	3.63	.896	12	3.69	.802	46	3.68	.819	36	.570
One click to get to press releases or news	3.38	.811	28	3.75	.782	36	3.68	.799	37	.001**
Menu pull-down	3.50	.985	20	3.69	.841	45	3.66	.871	38	.094
Menu click over	3.35	.910	33	3.73	.832	38	3.66	.858	39	.001**
External links to related content	3.38	.829	29	3.72	.804	41	3.66	.818	40	.001**
Online shareholder services available (change										
address, dividend paid directly into account)	3.12	.907	47	3.74	.927	37	3.63	.952	41	.000**
Download plug-in on spot	3.18	.828	41	3.73	.821	39	3.63	.848	42	.000**
There is information concerning technical devices										000**
(formats, size of downloads)	3.24	.775	38	3.71	.849	42	3.62	.855	43	.000**
Service to change data in the Share register online	3.15	.868	44	3.71	.815	43	3.61	.851	44	.000**
Technical hints for the user (browsers, screen										
resolution)	3.12	.838	46	3.69	.854	44	3.59	.878	45	.000**
Users have a choice of download (black and white										**
or full color)	2.91	.926	55	3.72	.958	40	3.57	1.001	46	.000**
Function to recommend the page	3.12	.838	45	3.67	.888	47	3.57	.904	47	.000**
Mail listings	3.25	.887	37	3.64	.871	48	3.57	.886	48	.001**
Graphic images	3.41	1.054	26	3.57	.916	50	3.54	.943	49	.296
Contact to the webmaster	3.10	.813	49	3.59	.878	49	3.50	.885	50	.000**
Conferences	3.06	.667	51	3.55	.851	51	3.46	.841	51	.000**
Use of frames	3.15	.738	43	3.51	.813	53	3.45	.811	52	.000**
Moving picture such as JAVA applications	3.12	1.030	48	3.52	.977	52	3.44	.997	53	.002**
Notice book	3.03	.791	52	3.44	.795	54	3.37	.809	54	.002
Flashes	2.99	1.044	54	3.40	.944	55	3.32	.974	55	.003**
Video files	2.65	.974	56	3.38	.962	56	3.24	1.003	56	.000**
Chat room	2.37	.845	58	3.33	.955	57	3.15	1.005	57	.000**
Sound files	2.53	.922	57	3.26	.991	58	3.13	1.003	58	.000

^{*}significant at 5% level (2) **significant at 1% level (43) (1 = not important at all; 5 = very importance)

As a conclusion, based on preparers' and users' views and feedbacks, overall result shows that, a number or 90 out of 97 items were identified as the basis for IFR index measurement for content dimension. On the other hand, 50 out of 58 items were identified as the basis for IFR index measurement for presentation dimension. On the whole a total of 140 items out of 155 items were identified as the basic measurement to evaluate the level of IFR for Bursa Malaysia listed companies. The study used the importance score minimum of 3.50 (similar to Ho & Wong, 2001b; Ali Khan & Ismail, 2008b; Ali Khan, 2010; Ali Khan & Ismail, 2010; Ali Khan & Ismail, 2012b) using the cut-off point to measure IFR index.

■5.0 CONCLUSION AND SUGGESTIONS

This papers aims to investigate the importance of IFR disclosure index by adapting the views of Malaysian preparers and users of corporate annual report. The objective of this study is to get respondents' perception regarding item used in each dimension and to know the level of IFR. Thus, in content dimension, it refers to what are the information distribute through website of the company. Meanwhile, for presentation dimension it means how the information presented and the facilities of using it. In addition, the selections of items disclosure are seen as a potential yardstick in measuring the disclosure level of a company that practise IFR.

The result of this study provides valuable input in developing the IFR disclosure index checklist. The study also developes an instrument to measure IFR content dimension and presentation dimension. The research instrument was developed by taking into account all relevant items in the content dimension, timeliness, technology and user support constructed by previous researchers. Disclosure index constructed through this instrument is expected to be a more inclusive and integrated measurement tool. Based on the literature review, there are very limited efforts done by previous researchers to obtain the views of annual report preparers and users in constructing IFR

disclosure index checklist. The formation of IFR disclosure index based on preparers and users of corporate annual report is conducted to measure listed companies IFR disclosure index. The IFR disclosure index checklist was tested during the pre and pilot study. Local and international academicians' reviews were obtained when constructing IFR disclosure index checklist. Then, the checklist had been reviewed by accounting practitioners. Thus, the results of this study are important because it seeks to contribute empirical evidence in the literature of IFR disclosure index checklist.

The current paper can be considered as one of the initial research papers in the area of important items of IFR indexes in Malaysia, and thus it provides some contributions. Nevertheless, the results of this study should be considered seriously as there are some limitations. The first limitation of this paper is the use of weighted scoring system to determine IFR item content for both content and presentation in IFR practice. Future study can be carried out by combining the two techniques (weighted and unweighted) in the development of IFR disclosure index checklist. Secondly, the scores given by each of the respondents and statistical test is conducted to compare the views of both groups and in detail of the group. Such study is expected to provide a significant contribution to a company's management about the importance of IFR items disclosure in the company's website for those interested in investing in Bursa Malaysia to make a more comprehensive decision-making. Thirdly, the paper is focused on the views of only five user group to perceived importances of IFR indexes. Moreover, this study has only relies on a single research method (i.e. questionnaires). Although this approach suffices to meet the objectives of this study, employing various methods would enrich the findings and alleviate the possibilities of bias. As the growth in the Internet continues, the author expect more companies will be creating websites within next few years. Therefore, it would be fascinating to update this study to see if an increase in the use of the Internet has occurred not only in developed countries but also in emerging markets like Malaysia.

To the best of our knowledge, this is among the earliest research paper using corporate annual report preparers' and users' view on the importance of IFR disclosure items. While, there are less efforts taken by researcher in order to find the solution regarding data manipulation that was occured in IFR and also no altenatives from previous study regarding the solution to improve the standards of IFR by providing the exact laws from professional bodies especially in Malaysia content. The findings are expected to lead to another further IFR related research not only in Malaysia but also in other countries, particularly in terms of empirical evidence. The researcher also expects the impact of this study to raise public awareness of knowledge community (such as providers, consumers, practitioners, industry, policy makers, accounting standards developers, regulatory autorities, researchers, professional bodies, shareholders, management, governmental agencies, corporation, market participants, interested parties and other institutions) to IFR practice. Even though the level of disclosure is measured by the number of IFR disclosure index, these indicators should also be qualitative in order to be informative. However, our findings would be more robust if a more in-depth study of qualitative features was undertaken.

Overall, the results show that 140 out of 155 items identified could be used to determine the level of IFR among Bursa Malaysia listed companies. There is a possibility for comparative study on the level of IFR between two or more countries in future. The result is expected to provide a useful input in constructing IFR disclosure index checklist. Such studies are expected to contribute to various parties and give added value to those interested in investment to obtain fast and accurate information relating to listed companies by referring to the company's websites, doing so will assist them in making rational and more meaningful investment decisions. In sum, this paper posits a novel research question and present empirical evidence from a dynamic emerging market. Future research using alternative methodologies and perspectives will help improve our understanding of the issues involved.

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References

- Abdelsalam, O.H., Bryant, S. M. and Street, D. L. (2007). An Examination of Comprehensiveness of Corporate Internet Reporting Provided by London-Listed Companies. *Journal of International Accounting Research*, 6(2), 1–33.
- Abdelsalam, O. H. and El-Masry, A. (2008). The Impact of Board Independence and Ownership Structure on the Timeliness of Corporate Internet Reporting of Irish-Listed Companies. *Managerial Finance*, 34(12), 907–918.
- Abdelsalam, O. H. and Street, D. L. (2007). Corporate Governance and the Timeliness of Corporate Internet Reporting by U.K. Listed Companies. *Journal of International Accounting, Auditing and Taxation*, 16, 111–130.
- Abdul Aziz, A., Mohd Arrifin, N. N. and Mohamed, I. S. (2011). Internet Financial Reporting in Malaysia. *International Proceedings of Computer Science and Information Technology*, 3, 302–306.
- Abdul Hamid, F. Z. (2005). Malaysian Companies' Use of the Internet for Investor Relations. Corporate Governance: The International Journal of Business in Society, 5(1), 5–14.
- Abdul Hamid, F. Z. and Md Salleh, M. S. (2005). The Determinants of the Investor Relations Information in the Malaysian Companies' Website. *Corporate Ownership & Control*, 3(1), 173–185.
- Abdul Hamid, F. Z., Md Salleh, M. S. and Mohamad, R. (2006). A Survey of the Use of Internet for the Investor Relations by the Malaysian and Singapore Firms. Unpublished Research Report. Sintok, Malaysia: Universiti Utara Malaysia, School of Accounting.
- Al-Htaybat, K., Alberti-Alhtaybat, L. V. and Hutaibat, K. A. (2011). Users' Perceptions on Internet Financial Reporting Practices in Emerging Markets: Evidence from Jordan. *International Journal of Business and Management*, 9, 170–182.
- Al Arussi, A. S., Selamat, M. H. and Mohd Hanefah, M. (2009). Determinants of Financial and Environmental Disclosures Through the Internet by Malaysian Companies. *Asian Review of Accounting*, 17(1), 59–76.

Ali Khan, M. N. A. (2010). Pelaporan Kewangan Menerusi Internet: Indeks, Tahap Pelaporan dan Faktor Penentunya. Unpublished PhD Dissertation: Universiti Utara Malaysia, Sintok, Kedah.

Ali Khan, M. N. A. and Ismail, N. A. (2008a). An Evolution of Internet Financial Reporting Research. Paper presented at *International Accounting and Business Conference* (IABC) 2008, Puteri Pan Pacific, Johor Bahru, Johor, August 18–19.

Ali Khan, M. N. A. and Ismail, N. A. (2008b). Kepentingan Item Pelaporan Kewangan Menerusi Internet: Satu Kajian Awal. Paper Presented at *International Accounting and Business National Management Conference* (NAMAC) 2008, Terengganu, December 13–14, 2008.

Ali Khan, M. N. A. and Ismail, N. A. (2009). Dimensi Pelaporan Kewangan Menerusi Internet. International Journal of Management Studies, 16(1), 75-69.

Ali Khan, M. N. A. and Ismail, N. A. (2010). Kajian Awal Terhadap Kepentingan Item Pelaporan Kewangan Menerusi Internet. *International Journal of Management Studies*, 17(2), 205–230.

Ali Khan, M. N. A. and Ismail, N. A. (2011). The Level of Internet Financial Reporting of Malaysian Companies. *Asian Journal of Accounting and Governance*, 2, 27–39.

Ali Khan, M. N. A. and Ismail, N. A. (2012a). A Review of E-Financial Reporting Research, Journal of Internet and e-Business Studies, 16.

Ali Khan, M. N. A. and Ismail, N. A. (2012b). An Empirical Study on the Indexes of Internet Financial Reporting: The Case of Malaysia. *African Journal of Business Management*, 6(95), 2086–2100.

Ali Khan, M. N. A. and Ismail, N. A. (2012c). Users' Perceptions of Various Aspects of Malaysian Internet Financial Reporting. *Journal of Organizational Management Studies*, 14.

Ali Khan, M. N. A. and Ismail, N. A. (2013). An Empirical Investigation of Selected Aspects on Internet Financial Reporting in Malaysia. *Jurnal Teknologi*, 64(3), 39–47.

Ali Khan, M.N.A., Ismail, N.A. and Zakuan N. (2013). Benefits of Internet Financial Reporting in a Developing Countries: Evidence from Malaysia. *African Journal of Business Management*, 7(9), 719–726.

Ali Khan, M. N. A. and Ismail, N. A. (2014). Determinants of Web Based Financial Reporting in Malaysia. GIABR Journal of Business, 1(1), 28-56.

Allam, A. and Lymer, A. (2003). Development in Internet Financial Reporting: Review and Analysis Across Five Developed Countries. The International Journal of Digital Accounting Research, 3(6), 165–199.

Aly, D., Simon, J. and Hussainey, K. (2010). Determinants of Corporate Internet Reporting: Evidence from Egypt. Managerial Auditing Journal, 25(2), 182–202.

Andrikopoulos, A., Merika, A. A., Triantafyllou, A. and Merikas, A. G. (2013). Internet Disclosure and Corporate Performance: A Case Study of the International Shipping Industry. *Transportation Research Part*, 47, 141–152.

Armitage, S. and Marston, C. (2008). Corporate Disclosure, Cost of Capital and Reputation: Evidence from Finance Directors. *The British Accounting Review*, 40, 314–336.

Ashbaugh, H., Johnstone, K. M. and Warfield, T. D. (1999). Corporate Reporting on the Internet. Accounting Horizons, 13(3), 241-257.

Barako, D. G., Rusmin, R. and Tower, G. (2008). Web Communication: An Indonesian Perspective. African Journal of Business Management, 2(3), 53-58.

Barsky, N. P. and Catanach, A. H. (2011). Every Manager Can be an Innovator. Strategic Finance, 93(2), 22–29.

Bollen, L. H., Hassink H. F, Lange, R. K. D. and Buijl, S. D. (2008). Best Practices in Managing Investor Relations Websites: Directions for Future Research. *Journal of Information System*, 22(2), 171–194.

Bonson, E. and Escobar, T. (2002). A Survey on Voluntary Disclosure on the Internet: Empirical Evidence from 300 European Union Companies. *The International Journal of Digital Accounting Research*, 2(1), 27–51.

Bonson, E. and Escobar, T. (2006). Digital Reporting in Eastern European: An Empirical Study. *International Journal of Accounting Information System*, 7, 299–318.

Boubaker, S., Lakhal, F. and Nekhili, M. (2012). The Determinants of Web-based Corporate Reporting in France. Managerial Auditing Journal, 27(2), 126–155.

Brennan, N. and Hourigan, D. (1998). Corporate Reporting on the Internet by Irish Companies. Accountancy Ireland, 30(6), 18-21.

Celik, O., Ecer, A. and Karabacak, H. (2006). Impact of Firm Specific Characteristics on the Web Based Business Reporting: Evidence from the Companies Listed in Turkey. *Problems and Perspectives in Management*, 4(3), 100–133.

Chan, W.K. and Wickramasinghe, N. (2006). Using the Internet for Financial Disclosure: The Australian Experience. *International Journal Electronic Finance*, 2(1), 118–150.

Cooke, T. E. and Wallace, R. S. O. (1989). Global Surveys of Corporate Disclosure Practices and Audit Firms: A Review Essay. *Accounting and Business Research*, 20(77), 47–57.

Cooper, D. R. and Schindler, P. S. (2006). Business Research Method. 9th ed. New York: McGraw-Hill/Irwin.

Craven, B. M. and Marston, C. L. (1999). Financial Reporting on the Internet by Leading UK Companies. *The European Accounting Review*, 8(2), 321–333.

Curuk, T. (2008). An analysis of The Companies' Compliance with the EU Disclosure Requirements and Corporate Characteristics Influencing It: A Case of Turkey. Critical Perspectives on Accounting. Available at: doi:10.1016/j.cpa.2007.05.003 (assessed 6 August 2008).

Davey, H. and Homkajohn, K. (2004). Corporate Internet Reporting: An Asian Example. Problems and Perspectives in Management, 2, 211–227.

Debreceny, R., Gray, G. L. and Rahman, A. (2002). The Determinants of Internet Financial Reporting. Journal of Accounting and Public Policy, 21(4-5), 371-394.

Ettredge, M., Richardson, V. J. and Scholz, S. (2001). The Presentation of Financial Information at Corporate Web Sites. *International Journal of Accounting Information Systems*, 2, 149–168.

Ettredge, M., Richardson, V. J. and Scholz, S. (2002). Dissemination of Information for Investors at Corporate Web Sites. *Journal of Accounting and Public Policy*, 21, 357–369.

Ezat, A. and El-Masry, A. (2008). The Impact of Corporate Governance on the Timeliness of Corporate Internet Reporting by Egyptian Listed Companies. *Managerial Finance*, 34(12), 848–867.

FASB. (2000). Business Reporting Research Project: Electronic Distribution of Business Reporting Information. Steering Committee Report Series. Financial Accounting Standards Board.

Frazer, L. and Lawley, M. (2000). Questionnaire Design & Administration. Australia: John Wiley & Sons.

Gallego-Alvarez, Isabel., Rodriguez, L. and Garcia-Sanchez, I. M. (2011). Information Disclosed Online by Spanish Universities: Content and Explanatory Factors. Online Information Review, 35(3), 360–385.

Gibbins, M., McCracken, S. A. and Salterio, S. E. (2007). The Chief Financial Officer's Perspective on Auditor-Client Negotiations. *Contemporary Accounting Research*, 24(2), 387–422.

Gomes, M. (2009, March). Financial Reporting During Turbulent Times. *Accountants Today*, 22(3), 8–12.

Gowthorpe, C. (2000). Corporate Reporting on the Internet: Developing Opportunities for Research. Journal of Applied Accounting Research, 5(3), 3-29.

Griffiths, P. (2012). Information Audit: Towards Common Standards and Methodology. Business Information Review, 29(1), 39-51.

Haniffa, R. M. (1999). Culture, Corporate Governance and Disclosure in Malaysian Corporation. Unpublished PhD Thesis, University of Exeter, United Kingdom.

Hanifa, M. H. and Ab. Rashid, H. (2005). The Determinants of Voluntary Disclosures in Malaysia: The Case of Internet Financial Reporting. *UNITAR E-Journal*, 2(1), 22–42.

Hassan, S, Jaaffar, N., Johl, S.K. and Mat Zain, M./N. (1999). Financial Reporting on the Internet by Malaysian Companies: Perceptions and Practices. *Asia-Pacific Journal of Accounting*, 6(2), 299–319.

Hay, L. E. and Antonio, J. F. (1990). What Users Want in Government Financial Reports. Journal of Accountancy, August, 91–98.

Ho, S. S. M. and Wong, K. S. (2001a). A study of Corporate Disclosure Practice and Effectivensss In Hong Kong. Journal of International Financial Management and Accounting, 12(1), 75–102.

Ho, S. S. M. and Wong, K. S. (2001b). A Study of the Relationship Between Corporate Governance Structures and the Extent of Voluntary Disclosure. Journal of International Accounting, Auditing & Taxation, 10, 139–156.

Ho, S. S. M. and Wong, K. S. (2003). Preparers' Perceptions of Corporate Reporting and Disclosure. International Journal of Disclosure and Governance, 1(1), 71–81.

Homayoun, S., Abdul Rahman, R. and Bashiri, N. (2011). Internet Corporate Reporting Among Public Listed Companies in Malaysia: An Exploratory Study. *African Journal of Business Management*, 5(30), 11863–11873.

Ilias, A., Abd Razak, M. Z. and Abd Razak, S. F. F. (2014). The Intention to Re-use the Internet Financial Reporting (IFR) in Malaysia. *Review of Integrative Business & Economics Research*, 3(1), 337–370.

Inchausti, B.G. (1997). The Influence of Company Characteristics and Accounting Regulation on Information Disclosed by Spanish Firms. *The European Accounting Review*, 6(1), 45–68.

Ismail, N. A. and Tayib, M. (2000). Financial Reporting Disclosure on the Internet by Malaysian Public Listed Companies. Akauntan Nasional, 13(10), 28-33.

Ismail, T. H. and Sobhy, N. M. (2009). Determinants of Auditors' Perceptions of the Work Needed in the Audit of Internet-based Financial Reports in Egypt. *Journal of Applied Accounting Research*, 10(2), 132–150.

Jain, S. K. and Kumar, P. (2013). Corporate Financial Reporting on Internet-A Study of Users Perception. Pacific Business Review International, 5(12), 45-55.

Jamaliah, T., Radiah, O. and Noraini, M. N. (2001). Internet Finiancial Reporting by Malaysian Banks And Financial Institutions. Paper presented at AAAA Conference, Penang.

Jiambalvo, J. (2004). Managerial Accounting. 2nd ed. USA: John Wiley & Sons, Inc.

Jones, M. J. and Xiao, J. Z. (2004). Financial Reporting on the Internet by 2010: A Consensus View. Accounting Forum, 28(3), 237-263.

Keliwon, K. and Aziz, K. A. (2005). Web Financial Reporting in Malaysia. The Current Stage. *Proceedings of International Conference on E-Commerce* 2005, Kuala Lumpur, 59–65.

Kelton, A. S. and Yang, Y. (2008). The Impact of Corporate Governance on Internet Financial Reporting. Journal of Accounting and Public Policy, 27(1), 62-87.

Kelton, A. S. and Pennington, R. R. (2012). Internet Financial Reporting: The Effects of Information Presentation Format and Content Differences on Investor Decision Making. *Computer in Human Behavior*, 28, 1178–1185.

Khadaroo, M. I. (2005a). Business Reporting on the Internet in Malaysia and Singapore: A Comparative Study. *Corporate Communications: An International Journal*, 10(1), 58–68.

Khadaroo, M. I. (2005b). Corporate Reporting on the Internet: Some Implication for the Auditing Profession. Managerial Auditing Journal, 20(6), 578-591.

Khan, T. (2006). Financial Reporting Disclosure on the Internet: An International Perspective. Unpublished doctoral dissertation, Victoria University, Footscray Park, Victoria, Australia.

Kiew, H. Y. and Salleh, Z. (2011). Internet Financial Reporting in Malaysia: The Preparers' View. Asian Journal of Finance and Accounting, 3(1), 138-161.

Ku Ismail, K. N. I. and Chandler, R. (2005). Perceptions of Professional Investors in Malaysia on the Usefulness of Quarterly Financial Reports. *Jurnal Pengurusan*, 24, 105–124.

Ku Ismail, K. N. I. and Chandler, R. (2007). Quarterly Financial Reporting: A Survey of Malaysian Users and Preparers. Accounting, Banking and Corporate Financial Management in Emerging Economies, 7, 53–67.

Leng, T. L., Lazar, J. and Othman, R. (2007). Adoption of Financial Reporting Standards (FRSs): Impact on Malaysian Companies. Unpublished research report. Malaysian Accountancy Research and Education Foundation.

Lymer, A. (1997). The Use of the Internet in Company Reporting: A Survey and Commentary on the Use Www in Corporate Reporting in UK. Paper presented at the British Accounting Association Annual Conference, Birmingham.

Lymer, A. and Tallberg, A. (1997). Corporate Reporting and the Internet-A Survey and Commentary on the Use of the Www in Corporate Reporting in the UK and Finland. Paper presented at the Annual Congress of the European Accounting Congress, Graz, Austria.

Lymer, A., Debreceny, R., Gray G. L., and Rahman A. (1999). Business Reporting on the Internet. The International Accountings Standards Committee (IASC).

Marston, C. (2003). Financial Reporting on the Internet by Leading Japanese Companies. Corporate Communication: An International Journal, 8(1), 23-34.

Marston, C. and Leow, C. Y. (1998). Financial Reporting on the Internet by Leading UK Companies. Paper presented at the 21st Annual Congress of the European Accounting Association, Antwerp, Belgium.

Marston, C. and Polei, A. (2002). Corporate Reporting on the Internet by German Companies. Paper presented at Sixth Annual Conference on Financial Reporting and Business Communication, Cardiff University, Cardiff, 4–5 July.

Marston, C. and Polei, A. (2004). Corporate Reporting on the Internet by German Companies. International Journal of Accounting Information System, 5, 285-311.

McDonald, R. and Lont, D. (2001), September. Financial Reporting on the Web-A 2001 Review. Chartered Accountants Journal, 64-68.

Mirshekary, S. and Saudagaran, S. M. (2005). Perceptions and Characteristics of Financial Statements Users in Developing Countries: Evidence from Iran. *Journal of International Accounting Auditing & Taxation*, 14, 33–54.

Mohamad, R., Saad, S., Ismail, S. A. and Abdul Rahman, A. (2006). Malaysian corporate website: a survey of web characteristics. Paper presented at *International Conference on ICT for the Muslim World (ICT4M) 2006*, Kuala Lumpur, November 21–23, 2006.

Mohd Hanafi, S. R., Kasim, M. A., Ibrahim, M. K. and Hancock, D. R. (2009). Business Reporting on the Internet: Development of a Disclosure Quality Index. International Journal of Business and Economics, 8(1), 55–79.

Mohd Hanafi, S. R., Kasim, M. A., Ibrahim, M. K. and Othman, R. (2008). Internet Business Reporting: Development of a Disclosure Quality Index (IBRQ). Paper presented at *International Accounting and Business Conference* (IABC) 2008, The Puteri Pan, Johor Bahru, Johor, August 18–19, 2008.

Mohd Isa, R. (2006). Graphical Information in Corporate Annual Report: A Survey of Users and Preparers Perception. *Journal of Financial Reporting & Accounting*, 4(1), 39–60.

Moghadam, H. M., Akhavansaffar, M., Bakhshaei, Z. and MirHosseini, S. Y. (2013). Effect of Investment in Information Technology System on Providing Desired Services of Accounting Information System. *Elixir International Journal*, 55A, 13268–13273.

Momany, M. T. and Shorman, S. A. (2006). Web-based Voluntary Financial Reporting of Jordanian Companies. *International Review of Business Research Papers*, 2(2), 127–139.

Moradi, M., Salehi, M. and Arianpoor, A. (2011). A Study of the Reasons for Shortcomings in Establishment of Internet Financial Reporting in Iran. *African Journal of Business Management*, 5(8), 3312–3321.

Morgan, G (1988). Accounting as A Reality Construction: Towards a New Epistemology for Accounting Practice. Accounting, Organizations and Society, 13(5), 477–485.

Ojah, K. and Mokoaleli-Mokoteli, T. (2012). Internet Financing Reporting, Infrastructures and Corporate Governance: An International Analysis. *Development Finance*, 2, 69–83.

Ott, L., Larson, R. F. and Mendenhall, W. (1983). Statistics: A Tool for Social Science. Boston: Duxbury Press.

Oyelere, P., Laswad, F. and Fisher, R. (2003). Determinants of Internet Financial Reporting by New Zealand Companies. *Journal of International Financial Management and Accounting*, 14(1), 26–61.

Petravick, S. and Gillett, J. (1996, July). Financial Reporting on the World Wide Web. Management Accounting, 26-29.

PricewaterhouseCoopers. (2002). Market Readiness for Disclosure-based Regulation, Highlights from Survey on the Readiness for the Malaysian Market Capital Participants for DBR. Kuala Lumpur: Securities Commission.

 $See tharaman, A. and Subramaniam, R. (2005/2006). \ Navigating the Web of Financial Reporting. \textit{European Business Forum Winter}, 23, 51–54.$

Sekaran, U. (2003). Research methods for business a skill building approach. 4th ed. USA: John Wiley & Sons, Inc.

Shiri, M., Salehi, M. and Bigmoradi, N. (2013). Internet Financial Reporting: Case of Iran. Journal of Distribution Science, 11(3), 49-62.

Standen, C. J. V. (1998). The Usefulness of the Value Added Statement in South Africa. *Managerial Finance*, 24(11), 44–59.

Tan, M. and Teo, T. S. H. (1998). Factor Influencing the Adoption of the Internet. International Journal of Electronic Commerce, 2(3), 5-18.

Uyar, A. (2012). Determinants of Corporate Reporting on the Internet an Analysis of Companies Listed on The Istanbul Stock Exchange (ISE). Managerial Auditing Journal, 27(1), 87–104.

Valentinetti, D. and Rea, M. A. (2012). IFRS Taxonomy and Financial Reporting Practices: The Case of Italian Listed Companies. International Journal of Accounting Information System, 13, 163–180.

Wallace, R. S. O. (1988). Corporate Financial Reporting in Nigeria. Accounting and Business Research, 18(72), 352-362.

- Wallace, R. S., Kamal, N. and Mora, A. (1994). The Relationship Between the Comprehensiveness of Corporate Annual Reports and Firms Characteristics in Spain. Accounting and Business Research, 25(97), 41–53.

 Xiao, J. Z., Yang, H. and Chow, C. W. (2004). The Determinants and Characteristics of Voluntary Internet-based Disclosures by Listed Chinese Companies. *Journal*
- of Accounting and Public Policy, 23, 191–225.

 Zoysa, A. D. and Rudkin, K. (2010). An Investigation of Perceptions of Company Annual Report Users in Sri Lanka. *International Journal of Emerging Market*, 5(2),