

The Level of Internet Financial Reporting of Malaysian Companies

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ABSTRACT

This research analyses the issue of the level of Internet financial reporting (IFR) by companies listed on the Main Board of Bursa Malaysia. The discussion in this paper will be based on the inconsistencies of the dimensions used in representing IFR by previous researchers who had carried out studies on IFR. The inconsistencies resulted in differences in their findings. Based on a comprehensive review, the level of IFR for this research will be divided into two main dimensions, namely, content dimension and presentation dimension. The findings showed that the level of IFR of Bursa Malaysia listed companies started from 48.27 per cent to 78.16 per cent with a min of 65.10. The findings also showed that the overall level of IFR listed companies on the Main Board of Bursa Malaysia was considered good. The implication of the research findings and future research will also be discussed.

Keywords: content; presentation; unweighted; Bursa Malaysia; Internet financial reporting (IFR)

INTRODUCTION

The increasing number of websites is an indicator of how Internet technology is being used to a greater degree. The popularity of the Internet as a channel for global communication has developed rapidly over the last two decades. More companies are using websites as an effective medium of communication based on the fact that it is cost effective, dynamic and constantly flexible in the global world. As a result, the Internet has become an influential medium being constantly utilised for presenting corporate information such as financial reports.

The rapid development of information, communication and technology (ICT) through the Internet has changed the method in which a company delivers information to their shareholders, clients, suppliers and other customers (Bonson & Escobar 2006). The Internet has emerged as the selected platform of the 1990's form of communication in disseminating information among the corporations and its use is getting broader. Now, companies' websites are an important medium for corporate reporting (Trabelsi, Labelle & Laurin 2004). Websites, for instance, have been utilized to deliver corporate information to inventors (Abdelsalam & Street 2007; Aly, Simon & Hussainey 2010), promoting the corporate identity (Poon, Li & Yu 2003; Topalian 2003), distributing information regarding an organisation and its activities (Chan & Wickramasinghe 2006; Sriram & Lakshmana 2006), and presenting financial information to shareholders, investors and other important parties (Hodge & Pronk 2006; Abdelsalam & El-Masry 2008).

Previous research has shown that many companies worldwide have published their financial information via the Internet (Lymer, Debreceeny, Gray & Rahman 1999; FASB 2000; Oyelere, Laswad & Fisher 2003; Marston & Polei 2004; Ali Khan, Bajaher & Ismail 2007). The

pronounced increase in the number of companies reporting their financial report through the Internet had a big impact on legislation, financial framework and information systems (Khan 2006). Relatively, the Internet has turned into an important medium for research, especially in the areas of financial reporting and disclosure (Khan 2006). Internet-based reporting has also been dubbed as more influential than paper-based reporting (Debreceeny, Gray & Rahman 2002) and has turned out to be more important and interesting, thus, providing a wider opportunity for deeper exploration (Jones, Xiao & Lymer 2001; Xiao, Jones & Lymer 2002).

Even though much research has been conducted in relation to Internet financial reporting (IFR), there are still enquiries that need to be addressed, especially in the context of Malaysia. Among the enquiries, is the question concerning Malaysia's current IFR status. So far, issues related to IFR have not received much attention from researchers. Therefore, this research takes the initiative to examine the level of IFR via a more comprehensive and holistic method based on two important dimensions, the content and the presentation. The importance of this research is advocated through a comprehensive review of the literature, which has proven that there is a scarcity of two-dimensional research in Malaysia. Therefore, the objective of this research is to gather empirical evidence on the level of IFR among listed companies in Bursa Malaysia.

This article is arranged as follows: the next section discusses the background of the study; followed by a comprehensive review of the literature. The section that follows discusses the research methodology and research findings. Finally, the paper ends with a concluding chapter.

BACKGROUND OF THE STUDY

Earlier studies on IFR were published in the mid-1990s. Corporate interest in Internet use started as a medium for advertisement (Allam & Lymer 2003). Organisations were also interested in using Internet technology for marketing and sales (Lymer 1997; Taylor 1998), branding (Mohamad, Saad, Ismail & Abdul Rahman 2006), financial reporting (Xiao et al. 2002), disseminating strategic information for Islamic Banking (Mokhtar & Azhari 2004), presenting corporate image (Bonson & Escobar 2006), environmental (Al Arussi, Selamat & Mohd Hanefah 2009) and investment purposes (Aly et al. 2010).

Most of the companies in a country with big market capital have their own websites and the majority of them also include a few forms of financial report in the websites. Up to a decade ago, the means of obtaining financial statement information was via printed annual reports. However, access to annual reports was limited through the libraries or analyst reports. However, the revolution of the Internet has enabled everyone to get the financial statements and the annual reports anywhere, anytime (Sortur 2006).

Despite its popularity, there are no mandatory guidelines prescribing the content and presentation of information on corporate websites in a comprehensive way (Ashbaugh, Johnstone & Warfield 1999; Bonson & Escobar 2002; Marston & Polei 2004; Hanifa & Ab. Rashid 2005; Momany & Shorman 2006; Kelton & Yang 2008; Ismail & Shoby 2009). The development of standards for IFR is still at the discussion stage (Marston & Polei 2004). In the context of Malaysia, since 3rd August 2009 Bursa Malaysia Listing Requirements require all listed companies to have websites (Bursa Malaysia, 8 May 2009). Furthermore, the Malaysian Institute of Audit Committee also suggested that there is a need for all listed corporations to have their own website to disseminate the business information to their users (The Star, 13 May 2009).

Even though much research has been carried out with regard to IFR, including those in developing countries like Malaysia, the understanding on the level of IFR and factors that influence IFR is still vague. Therefore, this research focuses on an in-depth examination of the dimensions used by researchers to determine the level of IFR. The different dimensions used by different researchers resulted in different research findings. Relatively, this has led to the inability to give a clear explanation of the phenomena. The IFR dimensional index is an important agenda that needs to be explored further to provide a meaningful and significant contribution to both academicians and industrialists. Based on an extensive review of the literature, there are inconsistencies of the dimensions used in representing IFR by previous researchers (Ali Khan & Ismail 2009, 2010a), which led to the failure of clearly explaining the phenomena and the influencing factors that determine IFR practice (Ali Khan & Ismail 2010a). The following section explains the inconsistencies of the approaches and findings of previous research, which provide the basis for the present research.

PREVIOUS STUDIES

Most previous IFR research focused on developed countries (Tan & Teo 1998; Aly et al. 2010), such as the United States (Pettravick & Gillett 1996; Ashbaugh et al. 1999; Ettredge Richardson & Scholz 2001; Kelton & Yang 2008), the United Kingdom (Lymer 1997; Marston & Leow 1998; Craven & Marston 1999; Abdelsalam, Bryant & Street 2007), Japan (Marston 2003), Australia (Lodhia, Allam & Lymer 2004; Chan & Wickramasinghe 2006), New Zealand (McDonald & Lont 2001; Oyelere et al. 2003; Fisher, Oyelere & Laswad 2004) and Ireland (Brennan & Hourigan 1998; Abdelsalam & El-Masry 2008). Limited researches were carried out in developing countries (Davey & Homkajohn 2004; Khadaroo 2005; Celik, Ecer & Karabacak 2006; Barako, Rusmin & Tower 2008; Al Arussi et al. 2009). In addition, research on the levels of IFR and the determining factors need detailed evaluation and analysis (Hanifa & Ab. Rashid 2005). This is due to the fact that there has been limited research examining the influencing factors of companies practicing IFR (Chan & Wickramasinghe 2006). According to Celik et al. (2006), research that explored the relationship between IFR and the company's specific character were very limited as compared to financial reporting using the hard copy. In the context of developing countries like Malaysia, academic research in the field of IFR is still in the elementary stage (Hassan, Jaaffar, Johl & Mat Zain 1999; Ismail & Tayib 2000; Khadaroo 2005; Al Arussi et al. 2009). Thus, it is essential to explore the practices of IFR in Malaysia.

In terms of measurement, many researchers used index disclosure as an instrument to examine the level of IFR within a specific company (Debreceeny et al. 2002; Oyelere et al. 2003; Xiao, Yang & Chow 2004; Bonson & Escobar 2006; Chan & Wickramasinghe 2006; Celik et al. 2006; Abdelsalam et al. 2007; Kelton & Yang 2008; Al Arussi et al. 2009; Ali Khan 2010; Aly et al. 2010). For the purpose of revising the disclosure index used in IFR research, research papers from various scholarly sources were scrutinised and analysed.

Table 1 shows the various dimensions that have been used in building the disclosure index in relation to IFR. Among the dimensions that were frequently used to determine the level of IFR are content and presentation; content; technology and user support; and timeliness. The content dimension was frequently used by researchers in conjunction with other dimensions like content and timeliness, content, timeliness, technology and customer support, and content and usability.

Table 2 shows a few of the latest researches related to dimensions and items that were used to measure index disclosure, especially those related to IFR. The research findings show various indices used by researchers to measure the level of IFR and the number of items varied. This was dependent on the focus and the direction of the research.

TABLE 1. Dimensions of Internet Financial Reporting

No.	Dimension	Researcher (Year)
1	Content and Presentation	IASC (1999), Debreceeny et al. (2002), Marston and Polei (2004), Trabelsi et al. (2004), Xiao et al. (2004), Bonson and Escobar (2006), Spanos (2006), Kelton and Yang (2008), Ali Khan (2010), Aly et al. (2010)
2	Content, Timeliness, Technology and User Support	Pirchegger and Wagenhofer (1999), Lybaert (2002), Davey and Homkajohn (2004), Pervan (2006), Chan and Wickramasinghe (2006)
3	Timeliness	Ettredge and Gerdes (2005), Abdelsalam and Street (2007), Abdelsalam and El-Masry (2008), Ezat and El-Masry (2008)
4	General Attribute, Investor relation attribute/financial information, annual report attribute and others attribute	FASB (2000), Khadaroo (2005), Celik et al. (2006)
5	Investors relation	Deller et al. (1999), Abdul Hamid and Md Salleh (2005)
6	Reporting: Required and voluntary	Ettredge et al. (2002), Mendes-da-Silva and Christensen (2004)
7	General attribute and financial attribute	Allam and Lymer (2003), Lodhia et al. (2004)
8	Content and Usability	Abdelsalam et al. (2007)
9	Accounting and financial information	Ettredge et al. (2001)

In summary, various dimensions are used to illustrate index reporting for IFR. Table 1 shows that there are inconsistencies in the usage of dimensions among the researchers in representing the level of IFR. This leads to differences in research findings, which subsequently, lead to difficulties in making comparisons between studies. Table 1 also indicates that no particular emphasis is given to a specific IFR dimension by the researchers. Different researchers use different dimensions such as content, timeliness, technology and customer support (Pirchegger & Wagenhofer 1999; Lybaert 2002; Davey & Homkajohn 2004; Chan & Wickramasinghe 2006), content and presentation (IASC 1999; Debreceeny et al. 2002; Marston & Polei 2004; Trabelsi et al. 2004; Xiao et al. 2004; Spanos 2006; Bonson & Escobar 2006; Kelton & Yang 2008; Ali Khan 2010; Aly et al. 2010), and timeliness dimension (Ettredge & Gerdes 2005; Abdelsalam & Street 2007; Abdelsalam & El-Masry 2008; Ezat & El-Masry 2008) in ascertaining the level of IFR. This scenario probably happens because IFR is published voluntarily. However, based on a comprehensive review of the literature it can be concluded that little attention is given to the study of the integration of both main dimensions, which are, first: content and presentation, and second, content, timeliness, technology and customer support, which need to be investigated further.

METHODOLOGY

SAMPLE AND DATA

The survey population comprises all Bursa Malaysia listed companies. Companies listed under financial industry, trust and closed-end funds are not included in the survey. The financial industry (bank, insurance companies and security firm) is excluded because this industry is under

the Malaysian banking institutions and subject to several rules and regulations of the Banking Institution Act 1998 outlined by the Bank Negara Malaysia (Rahmat & Mohd Iskandar 2004; Abd Aziz, Mohd Iskandar & Mohd Saleh 2006). Compared to other sectors, financial industries, trust and closed-end funds are also subject to different rules and regulations (Ku Ismail & Chandler 2004; Mohd Isa 2006; Hashim & Mohd Saleh 2007; Bue, Hassan & Md Nor 2008). The complete list of 984 Bursa Malaysia 2007 listed companies as at 12th June 2008 (636 Main Board, 223 The Second Board and 125 MESDAQ market) was obtained from the Bursa Malaysia website.

The sampling procedure started by excluding companies from the financial, banking, insurance, trust unit, closed-end fund and security sectors (Hashim & Mohd Saleh 2007). Second, this study focuses solely on companies listed on the Main Board Bursa Malaysia based on the fact that these companies are bigger than companies on the Second Board (Hashim & Mohd Saleh, 2007). According to the information obtained from Bursa Malaysia, only one company is listed under mining, five from hotel and eight from infrastructure project sectors, and were thus excluded from the study. After the selection process, the number of companies available for the survey was 564 companies.

Of the 564, 182 companies were selected for the survey (Rosce (1975) in Sekaran 2003). The study takes a snapshot in November and December 2008 to investigate the sample companies. The websites were revisited in February 2009 as a validity check and no changes in the companies' website were found. In the case of companies whose websites were under construction, it was confirmed that they were still under construction. The IFR index was measured by using a checklist, which contains 87 items. Each company was examined and given a score 1 if IFR items were found on its website or given a score 0 if any of the IFR items was not found on its website.

TABLE 2. Selected Current Research Related to the Dimensions and Items of Disclosure Index of Internet Financial Reporting

No.	Name of Index	Researcher (Year)	Scope	No. of Item	Dimension
1	Checklist of Internet Financial Reporting Index	Ali Khan (2010)	Malaysia	87	<ul style="list-style-type: none"> • Content • Presentation
2	Disclosure Index	Aly et al. (2010)	Egypt	90	<ul style="list-style-type: none"> • Content • Presentation
3	Internet Business Reporting Quality Index	Mohd Hanafi et al. (2009)	US, UK, Malaysia, Singapore and Thailand	205**	<ul style="list-style-type: none"> • Website design • Website content
4	Internet Financial and Environment Disclosure	Al Arussi et al. (2009)	Malaysia	60	<ul style="list-style-type: none"> • Financial • Environment
5	Disclosure Index Internet	Despina and Demitrios (2009)	Greece	55	<ul style="list-style-type: none"> • Financial • Corporate governance information • Investor relation • Corporate social responsibility • Item Presentation
6	Attribute in Website	Chatterjee and Hawkes (2009)	New Zealand and India	46	<ul style="list-style-type: none"> • Main page website • Investor information
7	Timeliness Index Corporate Internet Reporting	Abdelsalam and El-Masry (2008)	Ireland	13	<ul style="list-style-type: none"> • Timeliness
8	Measurement Scheme of Format and Content	Kelton and Yang (2008)	US	36	<ul style="list-style-type: none"> • Content • Presentation or format
9	Checklist of Timeliness Index Corporate Internet Reporting	Ezat and El-Masry (2008)	Egypt	11*	<ul style="list-style-type: none"> • Timeliness
10	Timeliness Index Corporate Internet Reporting	Abdelsalam and Street (2007)	UK	11*	<ul style="list-style-type: none"> • Timeliness
11	Comprehensive Index of Corporate Internet Reporting	Abdelsalam et al. (2007)	UK	143	<ul style="list-style-type: none"> • Content • Usability
12	Checklist – Reporting Item Online	Dutta and Bose (2007)	Bangladesh	65	<ul style="list-style-type: none"> • Financial • Corporate governance • Corporate social and environment • Investor relation • Presentation
13	Reporting Item	Celik et al. (2006)	Turkey	164	<ul style="list-style-type: none"> • General item • Investor relation item • Annual report item • Other item in financial reporting and business not in annual report

* minimum item ** maximum item

MEASURING THE LEVEL OF IFR

Previous studies classified IFR companies differently. Mohamad et al. (2003), Oyelere et al. (2003), and Momany and Al-Shorman (2006), for example, classified IFR companies as those that disclose: (1) overall financial statement including footnotes, (2) a part of financial statement and/or; (3) important financial information such as summary of financial statement through the company's website. Chan and Wickramasinghe (2006), however, classified an IFR practicing company as a company that

discloses its comprehensive financial statement (including footnotes and annual report) or links to the company annual report through the Internet. In this study, a company is classified as an IFR practicing company when it reports either financial information, half of the financial statement and/or a comprehensive annual report on the company's website.

Second, the level of IFR usage was measured using different disclosure indexes (e.g. Oyelere et al. 2003; Marston & Polei 2004; Xiao et al. 2004; Bonson & Escobar 2006; Chan & Wickramasinghe 2006; Celik et al. 2006;

Abdelsalam et al., 2007; Kelton & Yang 2008; Al Arussi et al. 2009; Ali Khan 2010; Aly et al. 2010). According to Marston and Shrivies (1991), the index could be used to evaluate the quantity of information offered by a company. The index disclosure used in this research was constructed based on a comprehensive review of the literature. The two main dimensions used are content and presentation. The content dimension measures the type of information reported through the company's website, whereas the presentation dimension measures the usage of the latest display criteria in disseminating corporate information and the company's web design.

This research used the unweighted index with the presupposition that every index category is equally important (Meek, Roberts & Gray 1995). A number of researchers have supported the usage of the unweighted index based on the assumption that each item has the same importance (Cooke 1989; Chavent, Ding, Fu, Stolowy & Wang 2006). Use of the unweighted index was considered appropriate, as this present research does not focus on the importance of a specific group of consumers (Cooke 1989; Hossain, Lin & Adams 1994; Hossain, Perera & Rahman 1995; Chau & Gray 2002). Second, Abdelsalam (1999) argued that assigning different weights for different items in the disclosure index might be misleading as the relative importance of each item varies from company to company, industry to industry and time to time.

In addition, measurement based on unweighted index could avoid the element of subjectivity, as the measurement would not be biased towards any group that accesses the accounts information (Raffournier 1995). This solidified the findings of the empirical disclosure index, which used a weighted and unweighted index and led to almost the same result (Spero 1979; Firth 1980; Robbins & Austin 1986; Chow & Woren-Boren 1987; Adhikari & Tondkar 1992; Wallace & Naser 1995; Xiao et al. 2004).

There have been various approaches in constructing the scoring scheme to determine the standard index (Curuk 2008). Items in the checklist will be measured by using dichotomous answers (yes/no) where a score of 0 is given for no index and a score of 1 is given if there is an index. A checklist was used to identify the score amount by evaluating the content and presentation of the company's website.

Researchers have presupposed that investors were interested in knowing both how financial information and accounts were prepared (content variable) and in gathering the information as fast as possible, which is supported by surfing a company's user-friendly website (presentation variable). The content dimension's items present the information reported through the company's website, whereas the presentation dimension presents how the information is displayed (e.g. whether information is in the procession format) and how it facilitates use (e.g. the existence of surfing engine). For each company, the level of IFR is measured through the total score, which is counted as the total percentage of the ratio for the real score compared to the maximum score.

The independent variable is constructed from the items in the disclosure index. The main measurement is the total score. This measurement is consistent with previous studies, such as Debreceeny et al. (2002), Marston and Polei (2004), Xiao et al. (2004), Bonson and Escobar (2006), Abdelsalam et al. (2007), Kelton and Yang (2008) and Aly et al. (2010). We sought expert opinions from the preparers (chief financial controller, finance manager and accountant) from Bursa Malaysia to refine the list of items so that it would reflect IFR items that were considered important for disclosure in the company website. We also obtained academicians' opinion to finalize our checklist to measure the IFR disclosure index. The detailed procedures and steps (including the issue of validity and reliability of the index) to develop the disclosure items have been discussed by Ali Khan and Ismail (2010b), and Ali Khan and Ismail (forthcoming).

The maximum score that could be obtained by each company is 87 points (the disclosure checklist is provided in Appendix 1). The score for the disclosure index was counted based on the exact total of the items reported compared to the total of maximum index items (Hossain et al. 1994; Naser, 1998; Camfferman & Cooke 2002; Haniffa & Cooke 2002; Naser, Al-Khatib & Karbhari, 2002; Abd. Ghaffar, Ibrahim & Mohd Zain 2004; Bonson & Escobar 2006; Hashim & Jaffar 2006; Mohd Ghazali & Weetman 2006; Abdelsalam et al. 2007; Jaffar, Jamaludin & Rahman 2007; Lopes & Rodrigues 2007; Curuk 2008; Kelton & Yang 2008; Al Arussi et al. 2009; Ali Khan 2010; Aly et al. 2010). Therefore, each IFR item reported in a company's website was evaluated based on dichotomy, which was a score of 1 for a reported item and a 0 score for an unreported item. Below is the formula used in counting the IFR index.

$$\text{IFR index} = \frac{\Sigma \text{ real score obtained by the company}}{\Sigma \text{ maximum score}}$$

FINDINGS AND DISCUSSION

DESCRIPTIVE STATISTICS

Table 3 shows the profile of sample companies; 31.3 per cent of the companies were from the construction and property sector, 27.5 per cent from the trade and services sector, 23.1 per cent from the industrial goods sector, 11.0 from the consumer goods sector and 7.1 per cent from the agricultural sector.

Table 4 shows the reporting strategies used by sample companies. In the context of information dissemination, *ritualism* refers to static information, whereas *opportunism* refers to dynamic information (Trabelsi et al. 2004). Only one company practices an *opportunism* strategy and the remaining 181 companies (99.5%) practiced a *ritualism* strategy. In the context of making use of the Internet in disseminating information to potential users, Trabelsi et al. (2004) explained *ritualism* as the easy replication of a

TABLE 3. Profile of Companies

Industry	Number of Firms	Percentage (%)
Consumer Product	20	11.0
Industrial Products	42	23.1
Trade & Services	50	27.5
Construction and Property	57	31.3
Plantation	13	7.1
Total	182	100

TABLE 4. Reporting Strategy

Strategy	Number of Firms	Percentage (%)
Ritualism	181	99.5
Opportunism	1	0.5
Total	182	100

company's website for its financial information presented in a traditional medium, which explains the findings of this study.

Reproduction is a systematic process that does not visualize much active participation on the management's side. Trabelsi et al. (2004) added the information on the possibility of disseminating extra information faster to the investors and the shareholders by improving the organizational aspect and presenting the company's website by utilizing various technologies like video besides being user-friendly. By stressing replication, the Internet will influence more active participation from the managers in the process of managing information, which signifies the character of *opportunism* (Trabelsi et al. 2004).

In respect of reporting strategy, a company in the consumer product sector obtained a score of 17 out of 20 for presentation dimension. The researcher felt that this company was practicing the *opportunism* strategy of reporting by preparing unique criteria in its website in accordance with the reporting strategy classified by Trabelsi et al. (2004). The company has unique criteria in its website, which, among others, include a hyperlink to a third party website, enabling downloading of financial data via the Excel format and having the internal website's *e-analyze tool*. The *e-analyze tool* facility in a website is an added criterion in a company's website that was discovered by the researcher. The use of the Excel format in downloading annual reports will facilitate users who are interested in making financial analysis of a company. This discovery was in accordance with the findings of Keliwon and Azizi (2005) who found that there were only two companies (0.7%) in Malaysia that used the Excel format in presenting their annual reports. This finding was also supported by Pervan (2005) through his research, which showed that only two companies in Croatia (5.2%) used the Excel format to present their annual reports in their companies' websites.

The findings indicate that other companies are still not on par with the information technology development in reporting information regarding their companies via the companies' websites. This shows that many companies in Malaysia are still adhering to the approach of presenting their financial information solely through their annual report. Nevertheless, it is undeniable that there are companies that are taking the initiative to achieve parity with the information technology development in presenting their companies' information to the public. The findings suggest that Malaysian companies are still lagging behind those in developed countries like the U.S. in preparing complete information, similar to the research reported by Ashbaugh et al. (1999). Thus, Bursa Malaysia's effort to ensure that all its listed companies have their own company's website is a good move to ensure that all parties will benefit from the advantage of networking.

Table 5 shows the type of information, the number of years and the format of IFR practices that are listed on the Main Board of Bursa Malaysia. The research findings indicate that all sample companies reported their comprehensive financial reports in the company's website. A total of 112 companies reported their comprehensive financial reports for five years or more. There are two types of format in financial reporting – *Hypertext Markup Language* (HTML) and the *Portable Document File* (PDF). In total, 167 companies prepared their financial information as a comprehensive financial statement using the PDF format while 15 companies used both the PDF and HTML format.

The findings are in accordance with the research conducted by Mohamed, Oyelere and Al-Busaidi (2009), who found that the majority of the companies listed in the Muscat Securities Market, Oman, used the PDF format for their financial reports – 101 companies (55.5%) reported important statements through their companies' websites; 94 companies reported important statements, including the financial statement summaries, for five years or more; 74 companies prepared their financial information and important statements by using the HTML format; 25 companies used the HTML format and two other companies used both the PDF and the HTML formats.

LEVEL OF IFR

Table 6 shows the frequency of IFR reporting level of the sample companies. The findings showed that the real level of IFR ranged from 48.28 per cent (42 items) to 78.16 per cent (68 items). Two companies (1.1% of the sample companies) obtained the highest IFR at 78.16 per cent. However, one company in the property sector obtained the lowest IFR score at 48.28 per cent. The overall reporting level score was 65.10 with 62.07 (54 items) as the highest frequency. The findings suggest that, on average, the level of IFR of the sample companies is satisfactory. The classification done was based on Wallace (1988) who claimed that each company that attained an index

TABLE 5. Internet Financial Reporting Practices

Type of Information	Total		No. of years					Format		
	No.	%	1	2	3	4	> 5	pdf	html	pdf & html
Comprehensive statement	182	100	16	7	22	16	121	167		15
Important statement	101	55.5	4	2	1	0	94	74	25	2

TABLE 6. Frequency of Level of Internet Financial Reporting

Disclosure Index	No. of Item	Frequency	Percentage (%)
48.28	42	1	0.5
50.57	44	1	0.5
55.17	48	1	0.5
56.32	49	2	1.1
57.47	50	4	2.2
58.62	51	11	6
59.77	52	9	4.9
60.92	53	10	5.5
62.07	54	23	12.6
63.22	55	13	7.1
64.37	56	16	8.8
65.51	57	19	10.4
66.66	58	18	8.2
67.81	59	8	4.4
68.96	60	9	4.9
70.11	61	16	8.8
71.26	62	9	4.9
72.41	63	5	2.7
73.56	64	7	3.8
75.86	66	1	0.5
78.16	68	2	1.1
Total		182	100.0

disclosure of over 50 per cent was considered as having a good index disclosure.

Table 7 reports the level of IFR of content dimension index. The findings show that the level of IFR of content dimension ranges from 37.93 per cent (33 items) to 60.92 per cent (53 items). One company (0.5% of the sample companies) obtained the highest IFR content dimension, which was 60.92 per cent. Two companies (1.1% of the sample companies) obtained the lowest IFR content dimension score at 37.93 per cent. The findings also show that the highest frequency for index disclosure is 46 items (52.87 per cent).

Table 8 shows the IFR index disclosure of presentation dimension. The findings show that the IFR presentation dimension ranges from 10.34 per cent (9 items) to 19.55 per cent (17 items). One company (0.5% of the sample companies) obtained the highest score at 19.55 per cent. In contrast, three companies (1.6% of the sample companies) obtained the lowest score at 10.34 per cent. The highest frequency is 12.64 per cent or 11 items.

Table 9 reports the results for the IFR disclosure index. The findings show that 40 companies (21.98%) had an IFR

TABLE 7. Frequency of Level of Internet Financial Reporting (Dimension of Content)

Disclosure Index	No. of Item	Frequency	Percentage (%)
37.93	33	5	1.1
43.68	38	4	2.2
44.83	39	4	2.2
45.98	40	13	7.1
47.13	41	6	3.3
48.28	42	14	7.7
49.43	43	19	10.5
50.57	44	21	11.5
51.72	45	16	8.8
52.87	46	22	12.1
54.02	47	15	8.3
55.17	48	14	7.7
56.32	49	13	7.1
57.47	50	8	4.4
58.62	51	7	3.9
59.77	52	3	1.6
60.92	53	1	0.5
Total		182	100.0

TABLE 8. Frequency of Level of Internet Financial Reporting (Dimension of Presentation)

Disclosure Index	No. of Item	Frequency	Percentage (%)
10.34	9	3	1.6
11.49	10	27	14.8
12.64	11	61	33.5
13.79	12	58	31.9
14.94	13	19	10.5
16.09	14	7	3.9
17.24	15	6	3.3
19.55	17	1	0.5
Total		182	100.0

TABLE 9. Level of Disclosure of Internet Financial Reporting Index

IFR Index	Number of Firms	Percentage (%)
70 – 79.9	40	21.98
60 – 69.9	113	62.09
50 – 50.9	28	15.38
40 – 49.9	1	5.5
Total	182	100.0

index from 70 to 79.9 while the majority of companies (113 companies: 62.09%) had an IFR index from 60 to 69.9; 28 companies (15.37%) obtained an IFR index from 50 to 50.9. Only one company (5.5%) obtained an IFR index of below 50. Overall, 153 (84.07%) of the sample companies obtained an IFR index level of over 60.

On average, the research samples reported their financial declaration through the Internet at a level of 65.10. The results of this research were similar to the findings of previous studies by researchers like Abdelsalam et al. (2007) and Marston and Polei (2004). The findings of Abdelsalam et al. (2007) showed that the average level of IFR of companies listed on the London Stock Exchange (LSE) as 66 per cent with the minimum and maximum values of 44 per cent and 86 per cent, respectively. Furthermore, the research findings of Marston dan Polei (2004) showed the average level of IFR for the companies listed on the Frankfurt Stock Exchange (FSE) for the year 2000 as 54.91 per cent with the minimum and maximum values of 28.36 per cent and 76.29 per cent, respectively; the 2003 average level of IFR was 67.55 per cent with minimum and maximum values of 27.79 per cent and 85.86 per cent, respectively.

The research findings showed that on the whole, the level of IFR among the listed companies on Bursa Malaysia's standard was good. This research's finding is very significant as it contributes to the empirical evidence and literature projection in respect of the level of IFR. The research findings could be utilised to improve the quality of reporting, especially in connection with the IFR practice by listed companies on Bursa Malaysia.

CONCLUSION AND RESEARCH IMPLICATION

The purpose of this research was to study the level of IFR in Malaysia. In addition, the use of the content dimension and presentation dimension demonstrated a more comprehensive and holistic measurement of index disclosure by a respective company that practices IFR. The research findings disclosed that the level of IFR started from 48.27 to 78.16 per cent with the min value of 65.10. Research findings also showed that, on average, the level of IFR among the listed companies on the Main Board of Bursa Malaysia could be said to be 'good disclosers' with regard to the Wallace (1988) index disclosure classification. Therefore, the results of this study are important because it seeks to contribute empirical evidence to the literature concerning the level of IFR in developing countries, in general, and, especially, in Malaysia. Our paper is important as it helps in informing the regulators and the industry about the level of IFR that satisfies national and international investor's and interested parties' demands for online information.

Thus, it is suggested that the liable parties, such as the Securities Commission (SC), Malaysian Institute of Accountants (MIA) and Malaysian Accounting Standards Board (MASB) will establish a general guideline in which all the companies listed on Bursa Malaysia will be able

to draw upon when disseminating their financial report or other related information regarding their companies through their companies' websites. It is for the purpose of constructing uniformity in reporting any related information in the company's website that could be used by the listed companies on Bursa Malaysia.

Although the research findings should be given serious consideration, there are a few limitations. First, this research was carried out in the environment of financial reporting based on Malaysia's websites. A similar research will result in a comparative research if conducted in other countries around the world that have a different social background, religion, organisational change, demographic characteristics, financial reporting system, legislative system, cultural factors or management background. This research is expected to provide an important contribution to a company's management so that the management will recognise the importance of financial reporting, rather than presenting the company's annual report via the Internet. It will help the parties that are benefitting from the report and the accounts information users to make more meaningful decisions. Second, this is a cross sectional research. Therefore, it was unable to evaluate the effect with regards to time changes that could only be done through longitudinal research. The use of quantitative and qualitative techniques in cross-sectional research will aid in understanding specific company characters that are developed from time to time and could detect the direction of IFR practice for companies listed on Bursa Malaysia. A longitudinal process is expected to discover other variables that explain IFR that were not considered in this research. The effects of the economic crisis that occurred in 2008 and 2009 provided a good foundation for knowing the standard of reporting before and after the crisis.

Within the limited knowledge of the researcher, this research is an early study upon the level of IFR based on content and presentation dimensions. It is hoped that the research findings will spark further studies related to IFR, not only in Malaysia, but also in other countries, especially in finding empirical evidence. The researcher also hopes that the impact of this research will increase the knowledge of the community (e.g. those who prepare financial reports, the consumers, the proprietors, the industry experts, the legislators, the accounts legislators, the researchers and many other professional bodies) on the IFR practice.

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APPENDIX 1
List of Items Appearing in the IFR Index

Content	
1	Income statement of current year
2	Balance sheet of current year
3	Cash flow statement of current year
4	Auditor report of current year
5	Annual report of current year (full text)
6	Notes to financial statements of current year
7	English version of financial statements
8	Statement of changes in shareholders' equity
9	Income statement of past years
10	Web page in English
11	Accounting policy
12	Balance sheet of past years
13	Cash flow statement of current year
14	Annual report of past years (full text)
15	Financial Reporting Standard (FRS) basis in the current year
16	Auditor report of past years
17	Notes to financial statements of past years
18	Dividend information
19	Quarterly report of current year
20	Analyses of main business risks
21	Segmental reporting by line of business in current year
22	Supplement or amendment to current year annual report
23	Corporate information
24	Half-year report of current year
25	Management report/analysis in current year
26	Auditor report of current year
27	Changes in stockholders' equity in the current year
28	Chairman's report
29	Summary of annual report of current year
30	Members of the Board of Directors
31	Summary of financial data over a period of at least five years
32	Top 10 stockholders in current year
33	Financial ratios
34	Half-year report of past years
35	Summary of key ratios over a period of at least five years
36	Segmental reporting by line of business in past years
37	Users quickly find the financial information
38	Quarterly report of past years
39	Auditor signature in past years report
40	Information on the date of latest websites update
41	Charters for the audit committee
42	Company's charter in the current year
43	Shareholder information
44	Corporate social responsibility report
45	Company address
46	Information on corporate strategy
47	Current year information can be distinguished from last years information
48	Directors shareholding information
49	Annual report of current year (excerpt)
50	Disclaimer
51	CEO signature in the report
52	Sales of key products
53	Annual general meetings information
54	Segmental reporting by region in current year
55	Annual report of past years (excerpt)

56	Segmental reporting by region in past years
57	Information regarding a dividend reinvestment plan
58	Code of conduct and ethics for directors, officers and employee
59	Link to Bursa Malaysia websites
60	Indicator for finding current information directly
61	Information about managers, at least the identity and curriculum vitae of executives
62	Projected information
63	Information on intellectual capital
64	Current year resolutions of shareholders' meeting
65	Historical share prices
66	Current press releases or news
67	Corporate governance principles/guidelines

Presentation

1	Loading time of the website below 10 seconds
2	Annual report in PDF format
3	Hyperlinks to financial analysts
4	Hyperlinks inside the annual report
5	Link to homepage
6	Link to top homepage
7	Ability to download reports
8	Link to table of contents
9	Direct e-mail contacts (feedback) available
10	Financial data in processable format (such as Excel)
11	Use of multimedia technology (in general)
12	Table of content/sitemap
13	Hyperlinks texts
14	Hyperlinks to data on a third-party's website
15	Change to printing friendly format possible
16	Format of reports suitable for calculations
17	Internal search engine
18	Clear boundaries for annual reports
19	Annual report in HTML format
20	Menu pull-down

Score 1 (disclosure) and 0 (no disclosure) is given for each item of reporting.