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Measuring Internet Financial Reporing (IFR) Disclosure Strategy

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ABSTRACT

There is a significant development in the accounting practices and communication due to the rapid growth of internet technology. Nonetheless, until today, financial reporting through the internet still has no legally structured standard compared to the formal international financial reporting standard (IFRS) that firms need to adhere. Yet, firms must still consider stakeholders' decision making based on internet accounting disclosures. Since the 1990s studies on Internet Financial Reporting (IFR) apply various indexes to measure disclosure practices. However existing indexes mainly focus only on the level and quality of IFR disclosure. Our study develops a new checklist – IFR disclosure strategy checklist – to measure IFR disclosure strategy based on a taxonomy proposed by Williams (2008) which has not yet been empirically tested until today. However, the taxonomy only outlines the characteristics of each proposed strategy. Our study takes the challenge to interpret the taxonomy by developing a checklist for each characteristic that were describe in the taxonomy. Utilizing content analysis, detailed consideration was made about items in the checklist based on prior studies, available regulations in several countries as well as current practices by reporting entities. Results from reliability test indicate that our checklist is a valid and reliable instrument with regards to our sample of study. It is expected that our checklist will be referred to by reporting entities in order to assist stakeholders' decision making. Eventually we hope that with the knowledge about the disclosure strategy, stakeholders might reduce their time and effort in searching for the best business entities when deciding upon their investment portfolio.

Keywords: IFR disclosure strategy; internet technology; content analysis; IFR disclosure strategy checklist

INTRODUCTION

Internet technology is almost the only way of global communication nowadays. In June 2017, the Internet World Stats reported individual internet users to be at 3.88 billion worldwide (representing about 51.7% of world population) compared to 2.92 billion in year 2014 and 910 million in year 2009 (http://www.internetworldstats.com/stats.htm). In line with the evolution of internet technology, firms definitely have been following suit by continuously enhancing their corporate disclosures (Oyelere, Laswad & Fisher 2003; Mohamed Hisham & Hafiz-Majdi 2005; Chan & Wickramasinghe 2006; Momany & Al-Shorman 2006) as internet technology has the power to revolutionize external reporting (Jones & Xiao 2004). The information disclosed on the internet normally include standard annual reports together with different formats of added financial and nonfinancial information (Jones & Xiao 2004; Bonsón & Escobar 2006). These disclosures are usually referred to in prior studies as the Internet Financial Reporting (IFR) disclosure.

Realizing the significant development of IFR, regulators and standard setters worldwide have required companies to disclose corporate information on companies' websites. For example, in Malaysia, public companies are legally required to disclose online, information relevant for the benefit of shareholders and other stakeholders as stated in Chapter 9 Bursa Listing Requirements. However, firms' management are given considerable flexibility to disclose additional corporate information on their websites since the guidelines established by the regulators are not clearly structured. For example, Para 9.21 Chapter 9 Bursa Listing Requirement only requires firms to "ensure its website is current, informative and contains all information which may be relevant to the firm's shareholders". There is no specific regulation for companies in Malaysia to disclose on their websites concerning how and what information actually being required. This is due to the fact that the pronouncements issued by Bursa Malaysia only relate to the requirement of general issues regarding the information quality, reliability and availability.

As such, there is potential that firms' managers may behave opportunistically by taking advantage on the flexibility of information to report, as a prospect for them to structure IFR disclosure that can improve firms' reputation as well as to boost their personal performance (Williams 2008). At the same time, managers could also take advantage of the flexibility by highlighting their IFR disclosure as a legitimating device to avoid the authorities' compliance violations which might help companies to be seen as obedient in the eyes of the stakeholders. As a consequence, the sentiment to position IFR disclosure as well as knowing the importance of IFR being the prime source of corporate information might trigger firms the desire to have their own unique IFR disclosure strategy (Cormier, Ledoux & Magnan 2009) in order to compete fairly with other business entities online. However, to date, there is no established findings yet whether firms really strategized their IFR disclosure and how they might strategized their IFR disclosure online. Exception would be the study by Cormier, Ledoux and Magnan (2009).

Having a strategy in disclosing their IFR will help firms to differentiate themselves from other companies since IFR disclosure might itself be a signal of high quality disclosure (Craven & Marston 1999). Further, with certain IFR disclosure strategy, firm may highlight the most important information that could reflect the real economic conditions of the firms which will affect firm value (Lev 1992). Consequently, this would also help firms to reduce their cost. By using certain IFR disclosure strategy, firms provide a "focused" information on the firms' website that would assist stakeholders to be more focused in their decision making on the firm value. Thus, knowing the IFR disclosure strategies that are being utilized by firms is important to stakeholders because stakeholders would fully appreciate the intrinsic value and potential of a firm (Cormier et al. 2009; Lev 1992). Until year 2017, stock exchanges' guidelines worldwide with regards to content for internet financial reporting (IFR) per se to be prepared by listed firms still do not change much compared to the first time the guidelines were issued, including the guidelines of year 2009 in Malaysia. In this situation, it will not be easy for stakeholders to know exactly the type of strategy that firms might utilized with regards to firms' IFR disclosure. Hence this study will try to examine the existence of potential strategies that firms might utilized based on theories and concepts from prior studies. Specifically, this study will focus on the proposed measurements for IFR disclosure strategy types based on Williams (2008) taxonomy.

Williams (2008) taxonomy proposed characteristics of disclosure strategy that business entities might utilize for the purpose of several business reporting situations. The taxonomy was not actually referring to any media of communication, that is, whether the information is hardcopy based or softcopy based. However, we choose the technique in Williams (2008) taxonomy due to the more comprehensive nature of the taxonomy whereby it outlines more detail characteristics of disclosure strategy compared to suggestions from other prior studies. Furthermore, to date, we have yet to see Williams (2008) taxonomy being tested empirically, not even in terms of hardcopy based information for any general business reporting disclosure. As such, following the concepts and theoretical arguments in Williams (2008) taxonomy, we developed our own measurements for the IFR disclosure strategy characteristics that might exist within the reporting environment in Malaysia. Specifically, Bursa Malaysia, the stock exchange in Malaysia, has in place serious regulations and guidelines on items and requirements for internet reporting among firms listed on the stock exchange. Even though it has already been established through prior studies with regards to the level of firms' IFR disclosure, however, there is very little information as to the actual strategy that firms might utilize to enhance their IFR disclosure situation.

It is important to stakeholders and firms' alike to know whether other firms do have a strategy when presenting their corporate information to the world. Similar to the purpose of preparing financial statements, the purpose of preparing IFR by business entities would also be to assist users to make the best investments' decisions. Therefore, if firms prepare their IFR based on a certain format of disclosure strategy, it is expected that this knowledge will benefit stakeholders in a way that can enhance their investments' decision making. We utilized our sample based on Malaysian scenario due to the fact that Malaysia has already in place specific guidelines with regards to IFR for listed firms to follow since year 2009. These guidelines are in line with other developed countries internet reporting requirements. As such, we believe Malaysian firms' sample would be a very practical playing field to examine on the existence of IFR disclosure strategy among listed firms that are mainly multinational and global in their business quests.

This paper proceeds with section 2 discussing literature relevant to the issue of IFR disclosure strategy. Section 3 discusses the instrument utilized in this study to measure our proposed IFR disclosure strategy. Section 4 discuss on the example of situation where we identify the type of IFR disclosure strategy made by four firms listed on Bursa Malaysia. Section 5 discuss on the tests used to check on the reliability and validity of our IFR disclosure strategy instrument where we have examined the instrument on 320 firms listed on Bursa Malaysia. Finally, section 6 concludes our paper.

LITERATURE REVIEW

IFR DISCLOSURE STRATEGY

Studies that shed some light upon the IFR disclosure strategy are limited. For example, a study by Cormier et al. (2009) provides an interesting outlook for IFR disclosure strategies using types of disclosure. Cormier et al. (2009) classified the strategies into business-related strategy, social-related strategy and financial-related strategy. Business-related strategy refers to the firms reporting about innovation development and growth which tend to report about customer. Social-related strategy is a human or intellectual capital reporting which appears to be linked to social responsibility reporting, thus responding to public and employees' influence. Finally, financial-related strategy refers to the financial performance disclosure as well as the highlight of the firm corporate governance practices. Cormier et al. (2009) found that social-related disclosure was positively associated with firm value while financial-related disclosure had a negative impact on firm value. Therefore, the authors conclude that the IFR disclosure strategies they proposed did influence firm value.

On a more comprehensive note, Williams (2008) proposes taxonomy of voluntary corporate reporting strategies that integrates the form (which refers to mandatory and voluntary information) and types of disclosure (which refers to financial, social and environmental information). The proposed set of disclosure strategies is placed on a continuum ranging from least proactive to most proactive disclosure based on the strategic response and disclosure content as shown in Figure 1. *Strategic response* refers to company's reaction to corporate disclosure either to improve company performance or in the case of negative events, to correct potential misinterpretations or to preserve firms' legitimacy. *Disclosure content* refers to companies' behavior of including contextual data or preventive data in their disclosure. The taxonomy introduces four types of proactive disclosure strategies (as illustrated in Figure 1); (1) corrective – preventive; (2) corrective – contextual; (3) additive – preventive and (4) additive – contextual.

Williams (2008) taxonomy proposes the possible IFR disclosure strategies to firms in order to be perceived legitimate by shareholders as well as to maximize firm value. Based on the characteristics of *additive strategies*, these strategies may be the better strategy for well performing firms to assist in enhancing firms' performance. On the other hand, *corrective strategies* might be the better strategy for poorly performing firms since these strategies may help firms to avoid reputation losses and to correct shareholders' misinterpretation of firms' performance.

Compared to the IFR disclosure strategy proposed by Cormier et al. (2009), Williams (2008) taxonomy is seen to be more comprehensive. Cormier et al. (2009) only focus on *disclosure content* while Williams (2008) consider *disclosure content* as well as *strategic response*. Even though Williams (2008) taxonomy is meant for traditional financial reporting, this taxonomy should also be suitable for the IFR since the information disclosed through IFR as well as disclosed through traditional financial reporting is the outcome of an internal process of managing financial disclosure (Trabelsi, Labelle & Laurin 2004). In addition, the purpose of financial reporting per se is to assist stakeholders to make better investments decisions, does not matter what media of reporting is being chosen or utilized. Since the internet is already the global way of business communication, therefore we believe the taxonomy of reporting should also include all types of reporting media and not only limited to the traditional hardcopy version of reporting. Hence the reason we decided to empirically test Williams (2008) taxonomy for our study on IFR disclosure strategy.

Furthermore, due to the very limited study investigating IFR disclosure strategies, our study will extend Cormier et al. (2009) study in a more comprehensive and quantitatively structured methodology with regards to a research on IFR disclosure strategy. Specifically, this study intends to develop a valid and reliable instrument that can quantitatively measure IFR disclosure strategy. As such, we believe this study will become the first study that proposed a quantitative measurement of IFR disclosure strategy which we based on Williams (2008) taxonomy as a tool to become the conceptual based of our IFR disclosure strategy measurement instrument.

In developing the measurement instrument, we refer to legitimacy theory to explain why and how firms' strategize their IFR disclosure. The use of legitimacy theory in this study is consistent with prior studies that use legitimacy theory to explain what, why, when and how certain items are communicated to external audiences (Magness 2006). The legitimacy theory would suggest that a company's disclosure practices, including IFR, is a tool to establish or protect the company's legitimacy in that they may affect both stakeholders' decisions and policy (Tilt & Symes 1999). Therefore, IFR activities can reflect a practice whereby it shows that the firm is conforming to public expectation, or on the other hand, the IFR information could be utilized to modify society's expectation (Deegan et al. 2002).

Hence, firms could use their IFR disclosure as a legitimating device in the process of attaining legitimacy (Rowbottom 2002). We believe that companies actually have the choice to choose various disclosure strategies in order to remain legitimate (Deegan et al. 2000) and not simply focusing on one specific strategy. As such, as Suchman (1995) insinuate, the choice of legitimating tactics and public disclosure that companies make will differ depending on whether it is trying to gain, maintain or repair legitimacy. In addition, Deegan et al. (2000) also suggest that companies can use corporate disclosures to

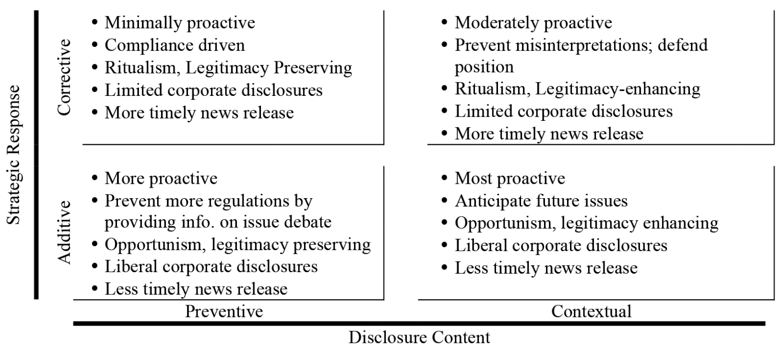

FIGURE 1. Proactive Disclosure Strategies

Source: Williams (2008 p. 251)

communicate changes in their business activities. At the same time, companies may also use corporate disclosures as an attempt to alter stakeholders' perceptions of their overall business activities (Cormier & Gordon 2001). Therefore, we believe companies actually have more than one strategy to consider when preparing their IFR disclosure and the strategy chosen will depend upon many factors that relate to the economic and social conditions faced by the companies at the time of the reporting activities.

According to Williams (2008), there are two possible legitimating tactics managers might choose before deciding upon any disclosure strategy, that is, either legitimacy preserving or legitimacy enhancing. Legitimacy preserving is when companies disclose only minimum information on their website as an attempt to avoid compliance violations of any regulations pertaining to the relevant reporting requirements. Legitimacy enhancing, on the other hand, refers to companies providing detail information on their websites as an attempt to enhance companies' legitimacy to various stakeholders. The distinctive strategies will affect the way companies disseminate online corporate information to various stakeholders differently (Patten & Crampton 2004).

By taking the argument that IFR is being used by firms as a legitimating device, this study, therefore, aims to quantify the measurement of IFR disclosure strategies conceptually proposed in Williams (2008) taxonomy. Based on legitimacy theory as our theoretical framework, we will empirically investigate the scope and patterns of IFR disclosure currently practiced by listed firms in Malaysia. Specifically we will construct our disclosure strategies using Williams (2008) taxonomy as a basis to distinguish the possibility of the existence of a selection of IFR disclosure strategies.

METHODOLOGY

RESEARCH INSTRUMENT

In order to measure the four IFR disclosure strategies proposed by Williams (2008), (1) corrective–preventive strategy; (2) corrective–contextual strategy; (3) additive–preventive strategy and (4) additive–contextual strategy, the first step undertaken is to develop a checklist. The checklist will be used to evaluate firms' disclosure content and presentation in order to identify their IFR disclosure strategies. This is consistent with Marston and Polei (2004) and Trabelsi et al. (2004) that claim in assessing IFR disclosure, it is important to evaluate content as well as presentation of the IFR disclosure.

In order to develop the checklist items, we initially refer to all requirements made by Bursa Malaysia Listing Requirement (2009) and Corporate Disclosure Guideline (2011). In addition, we also refer to the list in the study by Marston and Polei (2004) as well as the study by Pirchegger and Wagenhofer (1999) as basis for the development of the checklist as both studies propose quite a comprehensive checklist for the evaluation of corporate websites. Checklist by Marston and Polei (2004) as well as Pirchegger and Wagenhofer (1999) have been used in several other IFR studies such as Salehi, Moradi and Pour (2010) and Xiao, Yang and Chow (2004).

Following suggestions in Williams (2008) taxonomy and arguments in prior studies, we initially divide our checklist into two sections – *disclosure content* and *disclosure presentation*. Discussions on the items that fall within the *disclosure content* and the *disclosure presentation* sections are presented as follows.

DISCLOSURE CONTENT SECTION

IFR *disclosure content* refers to the information that is disseminated on the company's website. We believe that a *disclosure content* section should include at the minimum, items required by Para 9.21 Chapter 9 Bursa Malaysia Listing Requirements (2011) because these items are conceptually similar with *preventive information*. *Preventive information* is more limited in their scope but contain just enough information to allow the company to be perceived legitimate by shareholders (Woodward, Edwards & Birkin 1996). Thus, this study defines *preventive information* as mandatory information required by Para 9.21 Chapter 9 Bursa Malaysia Listing Requirements (2011).

We propose that this section should also include items recommended by Para 3.29 Corporate Disclosure Guideline (CD Guide) (2011) since items within this Para are conceptually similar to *contextual information*. *Contextual information* is generally richer in content than mandatory information required by the relevant regulation (Meek, Roberts & Gray 1995). Hence we define contextual information as information offered beyond compliance as suggested by Para 3.29 CD Guide. Furthermore, to ensure that the items in the checklist are comprehensive enough, all items that have been used in the study by Marston and Polei (2004) as well as Pirchegger and Wagenhofer (1999) are also included. It is noted that most of the items in these two studies actually overlap with the Bursa Malaysia Listing Requirements and Corporate Disclosure Guideline. Details of the overlapping items are illustrated in Table 1. After taking into consideration all relevant items, our *disclosure content* section finally has 46 items classified into two subsections, that is, *preventive disclosure* (14 items) and *contextual disclosure* (32 items) as shown in Table 1. *Preventive disclosure* subsection lists the type of published financial information required by Para 9.21 Chapter 9 Bursa Malaysia Listing Requirements (2011), including the availability of company financial statements, interim statements and prior period information. It also includes the existence of contact information such as email address, name(s) of designated person(s) and their contact numbers to enable the public to forward queries. *Contextual disclosure* subsection lists the governance information published on the firms' website which includes webcasts on meetings and briefings, notices and minutes of meeting and information about the Board of Directors memberships and senior management. Contextual disclosure subsection also includes the availability of press releases or stock price information since Malaysian public listed companies are recommended to communicate their financial information immediately to their shareholders. In addition, contextual disclosure subsection also contain items on housekeeping of IFR which includes the availability on frequency and date of updating IFR.

DISCLOSURE PRESENTATION SECTION

As highlighted above, apart from the IFR disclosure content, we also include the IFR *disclosure presentation* section in the measurement for our IFR disclosure strategy. Trabelsi et al. (2004) suggested that it is important to evaluate IFR presentation apart from the disclosure content, whereby *disclosure presentation* will include information related to the technical components of the firm's website. This suggestion is also consistent with Marston and Polei (2004) which classified IFR presentation into technological features and convenience and usability of website. Therefore we also include items for our IFR disclosure presentation section based on items in the study by Marston and Polei (2004). After including all relevant items, our final IFR *disclosure presentation* section has 26 items classified into two subsections namely *technological features* (9 items) and *convenience and usability of website* (17 items but with maximum score of 18 – where item No. 3 is actually given a score of 2) as shown in Table 1.

Technology features list of items reflect the extent to which the companies under investigation make use of some of the technology features (Pirchegger & Wagenhofer 1999). Technology features items include loading time, existence of videos, sounds, graphics, webcast, hyperlinks and search engines. *Convenience and usability of website* items measure the design and layout of the website factors, such as how easy to access information and how the website structure ease the searching of information. Items in *convenience and usability of website* subsection are also based on the study by Marston and Polei (2004). The items under *convenience and usability of website* subsection are further divided into three subsections, including *navigation support* (6 items), *contact and information supply services* (4 items) and *structure* (7 items but with total score of 8). Refer to Table 1 for all detail of items mentioned.

Navigation support items assess whether firms have a user-friendly navigation inside the Web site. This section includes existence of help site, site map, internal search engine and various types of menu. *Contact and information supply services* items evaluate the availability of contact information. This section utilizes a number of interrelating factors such as how easy it is to communicate with the company including online investor information order service, hyperlink to direct e-mail of investor relations, mailing list and email alert. *Structure* subsection measures how IFR structure eases the searching of information. This section includes the number of 'clicks' necessary to go to investor relation information and press releases or news. From the list of items in Table 1 that we have included for our final quantification (that is, all checked items), we believe that our checklist is comprehensive enough with regards to the process of measuring our proposed IFR disclosure strategy. Our method of employing all items from relevant authorities' regulation, guidelines and findings from prior studies suggests that we have taken into consideration every possible venue to ensure that our IFR disclosure strategy items would include the most comprehensive checklist available. Table 1 illustrates the comparison of the checklist items which include Bursa Malaysia Listing Requirement (2009), Corporate Disclosure Guideline (2011), relevant findings from Marston and Polei (2004) as well as Pirchegger and Wagenhofer (1999). Based on the lists within the sections, subsections and specific items available in Table 1, only then we are able to proceed with identifying the possible IFR disclosure strategy that we believe are being practiced by our sample firms.

After finalizing the process of the checklist comparison in Table 1, and coming up with the final items within the overall checklist (that is, all checked items), then only we can identify whether the companies in our sample are actually utilizing the four IFR disclosure strategies suggested in Williams (2008) taxonomy. Williams (2008) taxonomy proposed the following four IFR disclosure strategies, (1) corrective–preventive strategy; (2) corrective–contextual strategy; (3) additive–preventive strategy, and (4) additive–contextual strategy. In order to identify the specific IFR disclosure strategy practiced by each firm in our sample, we proposed a unique quatitative measurement of IFR disclosure strategy based on the characteristics outlined in Williams (2008) taxonomy. Those measurement are based on the score of the checklist items, which we will discuss in detail in the next section.

RESULTS

IDENTIFYING FIRMS' IFR DISCLOSURE STRATEGY

After the consolidation of the IFR checklist items in Table 1, we developed our own measurement of IFR disclosure strategy that we believe would determine the IFR disclosure strategy actually used by firms in practice. We believe that firms in reality might use one of the following strategies: (1) corrective–preventive strategy; (2) corrective–contextual strategy; (3) additive–preventive strategy; or (4) additive–contextual strategy. As mentioned previously, the four IFR disclosure strategies are based on the disclosure strategy taxonomy proposed by Williams (2008).

Following the arguments in Williams (2008), we believe the characteristics of each IFR disclosure strategy must be based on the four dimensions, which are (1) *strategic intent* – corrective or additive; (2) *organizational legitimacy* – legitimacy preserving or legitimacy enhancing; (3) *disclosure position* – ritualistic or opportunistic; and (4) *disclosure content* – preventive

TABLE 1. Comparison of the checklist items for IFR disclosure strategy

		P&W[1]	M&P[2]	LR[3]	CD Guide[4]
I.	DISCLOSURE CONTENT				
A.	*Preventive Disclosure*				
1.	Balance sheet	✓	✓	✓	-
2.	Profit and loss account	✓	✓	✓	-
3.	Cash flow or funds flow statement	✓	✓	✓	-
4.	Statement of changes in stockholders' equity	✓	✓	✓	-
5.	Notes to the accounts	✓	✓	✓	-
6.	Management report/analysis	✓	✓	✓	-
7.	Auditor report	✓	✓	✓	-
8.	Interim statements	✓	✓	✓	-
9.	Annual reports of former years	✓	✓	✓	-
10.	Summary of key ratios over a period of at least 5 years	✓	✓	✓	-
11.	Analysts briefings	-	-	✓	-
12.	Name of designated person	-	-	✓	-
13.	Phone number to investor relations	✓	✓	✓	-
14.	E-mail to investor relations	✓	✓	✓	-
B.	*Contextual Disclosure*				
1.	Share price history	✓	✓	-	✓
2.	Summary of financial data over a period of at least 5 years	✓	✓	-	✓
3.	Details of foreign shareholdings based on latest available information	-	-	-	✓
4.	Dividend policy	-	-	-	✓
5.	Corporate structure	-	-	-	✓
6.	Notice of meetings and agenda of annual shareholders' meeting	-	✓	-	✓
7.	Minutes of general meeting	-	-	-	✓
8.	Voting results of AGM	-	✓	-	✓
9.	Webcasts on financial performance briefings	-	-	-	✓
10.	Webcasts on External meetings	-	-	-	✓
11.	Webcasts on general meetings	-	-	-	✓
12.	CV of the members of the management or supervisory board	-	✓	-	✓
13.	Sideline activities of the members of the management board	-	✓	-	✓
14.	Documentation of press and analysts' conferences	-	✓	-	✓
15.	Terms of references of the audit committee	-	-	-	✓
16.	Terms of references of the nomination committee	-	-	-	✓
17.	Terms of references of the remuneration committee	-	-	-	✓
18.	Current press releases	✓	✓	-	✓
19.	Current share price	✓	✓	-	✓
20.	Financial calendar	✓	✓	-	✓
21.	Pages indicate the latest update	✓	✓	-	✓
22.	Date of posting information on website	-	-	-	✓
23.	Historical information archive	-	-	-	✓
24.	Share price performance in relation to stock market index	✓	✓	-	✓
25.	Shareholder structure	-	✓	-	✓
26.	Speeches of the management board during the AGM	-	✓	-	✓
27.	Analyst forecasts	-	✓	-	✓
28.	Compensation of the members of the management board	-	✓	-	✓
29.	Compensation of the members of the supervisory board	-	✓	-	✓
30.	Information about directors dealing	-	✓	-	✓
31.	Information about share option programs	-	✓	-	✓
32.	Postal address to investor relations	✓	✓	-	✓
II.	PRESENTATION				
A.	*Technological features*				
1.	Loading time of the web site <10 seconds	✓	✓	-	-
2.	Text only alternative available	✓	✓	-	-
3.	Hyperlinks inside the annual report	✓	✓	-	-
4.	Annual report in PDF-format	✓	✓	-	-
5.	Annual report in html-format	✓	✓	-	-
6.	Graphic images	✓	✓	-	-
7.	Flashes	✓	✓	-	-
8.	Sound files	✓	✓	-	-
9.	Video files	✓	✓	-	-

(continue)

Continued (TABLE 1)

B.	*Convenience and usability of website: Navigation support*				
1.	Help site	✓	✓	-	-
2.	Table of content/site map	✓	✓	-	-
3.	Pull-down menu	✓	✓	-	-
4.	Click over menu	✓	✓	-	-
5.	Internal search engine	✓	✓	-	-
6.	Next/previous buttons to navigate sequentially	✓	✓	-	-
C.	*Convenience and usability of website: Contact and information supply services*				
1.	Direct e-mail hyperlink to investor relations	✓	✓	-	-
2.	Online investor information order service	✓	✓	-	-
3.	Mailing list	✓	✓	-	-
4.	Email alert			-	-
D.	*Convenience and usability of website: Structure*				
1.	Page divided into frames	✓	✓	-	-
2.	Number of clicks to get to investor relation information	✓	✓	-	-
3.	Number of clicks to get to press releases or news (a score of 2 is given if only one click is needed to go to press release or news, and a score of	✓	✓	-	-
	1 if otherwise)	✓	✓	-	-
4.	Clear boundaries between the annual report (audited) and other information				
5.	Change to printing friendly format possible	✓	✓	-	-
6.	Function to recommend the page	✓	✓	-	-
7.	Service to change data in the Share register online	✓	✓	-	-

[1] P&W - Pirchegger and Wagenhofer (1999)
[2] M&P - Marston and Polei (2004)
[3] LR -Bursa Malaysia Listing Requirements (2009)
[4] CD Guide - Corporate Disclosure Guidelines (2011)

or contextual. Thus, in order to identify IFR disclosure strategy used by firm, using the checklist from Table 1, we propose a measurement to quantify each IFR disclosure strategy dimension except for *strategic intent dimension*. The proposed measurement for each dimension in order to identify the IFR disclosure strategy used is presented in Table 2.

STRATEGIC INTENT DIMENSION

To fulfil the requirement for the strategic intent dimension, Williams (2008) suggested that top management's strategic intention actually determines the strategic response of the company, either to be additive or corrective. This study consider the position of this dimension by categorizing sample firms into poorly performing companies and

TABLE 2. Summary of the proposed measurement for IFR disclosure strategy dimensions

Dimensions	Measurement			
Strategic Intention	Presence of Negative Event *(Current Net Income<Prior Net Income)*			
	Yes	Yes	No	No
Disclosure Content	*(Preventive > Contextual AND Individual total < 50% overall)*			
	Yes *[Preventive]*	No *[Contextual]*	Yes *[Preventive]*	No *[Contextual]*
Organizational Legitimacy	Depends on *Disclosure Content* *(Preventive – Preserving; Contextual – Enhancing)*			
	Preserving	Enhancing	Preserving	Enhancing
Disclosure Position	*(Individual total Presentation < 50% overall total Presentation)*			
	Yes *[Ritualistic]*	No *[Opportunistic]*	Yes *[Ritualistic]*	No *[Opportunistic]*
IFR Disclosure Strategy	Corrective-Preventive	Corrective-Contextual	Additive-Preventive	Additive-Contextual

The measurement for each dimension will be explained thoroughly in the following sections.

well performing companies. It is expected that the position of being a poor performing firm might force firms' management to determine whether they should disclose information in an additive or corrective way. This categorization of sample firms is consistent with Williams (2008) taxonomy since the strategic plan of the company is assumed to be influenced by the presence of an event, be it negative or otherwise. This study defines poorly performing firms (firms with negative event) as firms that have negative income or decreases in income (Conrad, Cornell & Landsman 2000) or increase in loss. We categorized well performing firms in this study to be firms in the absence of a negative event.

Poorly performing firms are expected to behave in a way that they might be using corrective disclosure strategies. By undertaking corrective disclosure strategies, firms are expected to correct potential misinterpretations of their performance or the strategy could also safeguard the firm by complying minimum disclosure required within the regulation of the authority (Williams 2008). On the other hand, we expect well performing firms to practice additive disclosure strategies because it could enhance the firm performance. Undertaking additive disclosure strategies could also assist firms to differentiate themselves from other firms within the same category.

To illustrate how strategic response is measured, we provide an example of two firms, Company AA and Company BB with their hypothetical financial data assuming as follows:

Year	Net Income	
	Company AA	Company BB
2012	RM15 million	RM7 million
2011	RM21 million	RM4.3 million

FIGURE 2. Net income for Company XX and Company YY

Based on the hypothetical financial data, Company AA is considered a *poorly performing firm* because quantitatively this company has a decrease in its' net income. On the other hand, Company BB is considered a *well performing firm* because quantitatively its' net income increases over the two years period.

Subsequently, to identify the possible IFR disclosure strategy used by each company, the other three IFR disclosure strategy dimensions which are disclosure content, organizational legitimacy and disclosure position, must be assessed. The assessment of these dimensions are based on the items within the checklist in Table 1 discussed previously. The following subsections will thoroughly discuss the evaluation of each dimension. Assessment of disclosure content dimension is using the disclosure content section (section I in Table 1) of the checklist items.

DISCLOSURE CONTENT DIMENSION

We believe firms may either have a contextual or a preventive disclosure content. This study uses the disclosure content section of the checklist in Table 1 to measure disclosure content dimension. Disclosure content section has 46 items which is classified into preventive disclosure (14 items) and contextual disclosure (32 items) as shown in Table 1. As discussed earlier, this study defines *preventive information* as a concept of minimum mandatory information and therefore should include information as required by Para 9.21 Chapter 9 Bursa Malaysia Listing Requirements (2011). On the other hand, *contextual information* would be within the concept of additional voluntary information and as such include information as recommended by Para 3.29 Corporate Disclosure Guideline (CD Guide) (2011).

In this study, a firm is assumed to practice preventive IFR disclosure content if it provides more preventive information compared to its' contextual information. Quantitatively, we consider a firm to have a *preventive* IFR disclosure content if its *preventive* content score is *more* than its' *contextual* content score AND *total* content score is *lower* than *50%* of the overall total content score in the checklist. On the other hand, firms are considered to disclose *contextual* IFR disclosure content if it provide more contextual information compared to preventive information. That is, quantitatively, if its' *contextual* content score is *more* than its' *preventive* content score AND its *total* content score is *higher* than *50% overall* total content score, a firm is considered to have a contextual IFR disclosure content. We include the measurement of the *lower* and *higher* than the *50% overall total score* to ensure that the category of preventive and contextual content score is clearly distinguished among the firms. This method of measurement quantification is consistent with prior studies such as Trabelsi et al. (2004) and Percy (2000).

To illustrate quantitatively how disclosure content dimension is measured among firms, the score sheet of IFR disclosure content section of the checklist (from Table 1) for our example of firms, that is, Company AA and Company BB is presented in Table 3.

From the score sheet in Table 3, the preventive content scores for Company AA and Company BB are 13. The contextual content score is 6 for Company AA and 25 for Company BB. The 50% overall total content score for the disclosure content section is 23 (that is, 14 items plus 32 items, and multiply by 50%). The individual total content score for Company AA is 19 and for Company BB is 38. Therefore, based on the scores in Table 2, Company AA is considered to have a *preventive IFR disclosure content* because its' preventive content score (13) is more than its contextual content score (6) AND individual total content score (19) is less than 50% of the overall total content score (23). On the other hand, Company BB is considered to have a *contextual IFR disclosure content* because its' contextual score (25) is more than preventive score (13) AND individual total content score (38) is more than 50% of the overall total content score (23).

TABLE 3. Score Sheet of IFR Disclosure Content: Example of Company AA and BB

		Company AA	Company BB
I.	DISCLOSURE CONTENT	Yes (1) No (0)	Yes (1) No (0)
A.	*Preventive Disclosure*		
1.	Balance sheet	1	1
2.	Profit and loss account	1	1
3.	Cash flow or funds flow statement	1	1
4.	Statement of changes in stockholders' equity	1	1
5.	Notes to the accounts	1	0
6.	Management report/analysis	1	1
7.	Auditor report	1	1
8.	Interim statements	1	1
9.	Annual reports of former years	1	1
10.	Summary of key ratios over a period of at least 5 years	1	1
11.	Analysts briefings	0	1
12.	Name of designated person	1	1
13.	Phone number to investor relations	1	1
14.	E-mail to investor relations	1	1
	Total Score	13	13
B.	*Contextual Disclosure*		
1.	Share price history	0	1
2.	Summary of financial data over a period of at least 5 years	1	1
3.	Details of foreign shareholdings based on latest available information	0	1
4.	Dividend policy	0	1
5.	Corporate structure	1	1
6.	Notice of meetings and agenda of annual shareholders' meeting	1	1
7.	Minutes of general meeting	0	0
8.	Voting results of AGM	0	0
9.	Webcasts on financial performance briefings	0	0
10.	Webcasts on External meetings	0	0
11.	Webcasts on general meetings	0	0
12.	CV of the members of the management or supervisory board	1	1
13.	Sideline activities of the members of the management board	1	1
14.	Documentation of press and analysts' conferences	0	1
15.	Terms of references of the audit committee	0	1
16.	Terms of references of the nomination committee	0	1
17.	Terms of references of the remuneration committee	0	1
18.	Current press releases	0	1
19.	Current share price	0	1
20.	Financial calendar	0	1
21.	Pages indicate the latest update	0	1
22.	Date of posting information on website	0	0
23.	Historical information archive	0	1
24.	Share price performance in relation to stock market index	0	1
25.	Shareholder structure	0	1
26.	Speeches of the management board during the AGM	0	0
27.	Analyst forecasts	0	1
28.	Compensation of the members of the management board	0	1
29.	Compensation of the members of the supervisory board	0	1
30.	Information about directors dealing	1	1
31.	Information about share option programs	0	1
32.	Postal address to investor relations	0	1
	Total Score	6	25
	Total Content Score	19	38

After determining the strategic intent dimension, followed by the disclosure content dimension, the third step in the process to determine a firm IFR disclosure strategy is to examine the organizational legitimacy dimension of all firms under assessment. In order to assess the organizational legitimacy dimension practiced by the firms, we also utilized information in the disclosure content section of the checklist items from Table 1 as conceptually suggested by Williams (2008) taxonomy. This is discussed in the next subsection.

ORGANIZATIONAL LEGITIMACY DIMENSION

We believe that companies might use disclosure as a legitimating device in the process to attain legitimacy from their stakeholders (Rowbottom 2002). To remain legitimate, companies may choose various disclosure strategies (Deegan, Rankin & Voght 2000). Williams (2008) defines organizational legitimacy as a legitimating strategy used by managers to communicate firms' activities and performance. Prior studies theoretically suggest that there are two types of organizational legitimacy - *legitimacy preserving* and *legitimacy enhancing*.

Williams's taxonomy proposes that when companies use legitimacy preserving tactic, companies would disclose only minimum information to preserve a company's legitimacy. As such, we believe companies that use legitimacy preserving tactic is expected to disclose more preventive information compared to contextual information. On the other hand, when using legitimacy enhancing tactic, companies would disclose detailed information on their website as an attempt to enhance companies' legitimacy. Therefore, companies that use legitimacy enhancing tactic is expected to disclose more contextual information compared to preventive information.

Based on the above discussion, our study suggests that IFR disclosure content should be able to determine whether a company uses legitimacy-preserving or legitimacy-enhancing tactic. Thus, we define a company to be using the legitimacy preserving tactic if at least the company has more preventive disclosure content compared to contextual disclosure content. On the other hand, a company is assumed to be using a legitimacy enhancing tactic if the company is at least has more contextual disclosure content compared to preventive disclosure content.

To illustrate how organizational legitimacy dimension is measured quantitatively, the score sheet of IFR disclosure content section of the checklist items for the example of our two firms, Company AA and Company BB in Table 2 is being referred. From Table 2, the preventive content scores for Company AA and Company BB are 13. The contextual content score is 6 for Company AA and 25 for Company BB. The 50% overall total content score is 23 and individual total content score is 19 for Company AA and 38 for Company BB.

Company AA is considered to have preventive IFR disclosure content because its' preventive content score (13) is more than contextual content score (6) AND individual total content score (19) is less than 50% overall total content score (23). Therefore, Company AA is considered to be using the *legitimacy preserving* tactic. On the other hand, Company BB is considered to have a contextual IFR disclosure content because its' contextual score (25) is more than its preventive score (13) AND individual total content score (38) is more than 50% overall total content score (23). Hence, Company BB is considered to be using a *legitimacy enhancing* tactic because it is quantitatively having a high contextual disclosure content.

The fourth step in the process of identifying firms' IFR disclosure strategy used is by assessing the disclosure position dimension. Evaluation of the disclosure position dimension is based on the presentation section of the checklist items in Table 1 as conceptually proposed in Williams (2008) taxonomy. This is discussed in the next subsection.

DISCLOSURE POSITION DIMENSION

Disclosure position is how managers manage IFR disclosure in order to position the company in the eyes of their stakeholders (Trabelsi et al. 2004). In managing IFR disclosure, managers may use ritualistic or opportunistic behavior. Our study uses presentation section checklists to measure quantitatively the disclosure position dimension. This methodology is consistent with prior studies such as Trabelsi et al. (2004) and Percy (2000), whereby they also use items related to presentation of IFR in order to measure a firm disclosure position.

The presentation section checklist in Table 1 has 27 items classified into two criteria namely technological features (9 items) and convenience and usability of website (17 items but with total score of 18). In this study, a firm is assumed to be more ritualistic in their disclosure position if its IFR disclosure is a simple replication of traditional financial report. As such, if a firm's individual total presentation score is less than 50% overall total presentation score, a firm is considered to display an IFR ritualistic position. In contrast, a firm with an opportunistic disclosure position is expected to go beyond mere replication of traditional financial reports. That is, if a firm's individual total presentation score is more than 50% overall total presentation score, the firm is considered to deploy an opportunistic IFR disclosure position.

To illustrate how disclosure position dimension is measured quantitatively, the score sheet of presentation section of the checklist items for the example of our two companies, Company AA and Company BB is presented in Table 4.

From the score sheet in Table 4, Company AA gets the score of 9 and Company BB gets the score of 21 for individual total presentation score. The 50% score for overall total presentation is 13.5 (that is, 9 plus 6 plus 4 plus 8, which total up to 27, and then multiply by 50%). Thus, Company AA is considered to display an IFR *ritualistic* position because its' individual total presentation score

TABLE 4. Score sheet of presentation: Company AA and BB

		Company AA	Company BB
I.	PRESENTATION	Yes (1) No (0)	Yes (1) No (0)
A.	*Technological features*		
1.	Loading time of the web site <10 seconds	1	1
2.	Text only alternative available	1	1
3.	Hyperlinks inside the annual report	0	1
4.	Annual report in PDF-format	1	1
5.	Annual report in html-format	0	1
6.	Graphic images	0	1
7.	Flashes	0	1
8.	Sound files	0	0
9.	Video files	0	0
B.	*Convenience and usability of website: Navigation support*		
1.	Help site	0	0
2.	Table of content/site map	1	1
3.	Pull-down menu	0	1
4.	Click over menu	1	1
5.	Internal search engine	0	1
6.	Next/previous buttons to navigate sequentially	0	1
C.	*Convenience and usability of website: Contact and information supply services*		
1.	Direct e-mail hyperlink to investor relations	1	1
2.	Online investor information order service	0	1
3.	Mailing list	0	1
4.	Email alert	0	1
D.	*Convenience and usability of website: Structure*		
1.	Page divided into frames	1	1
2.	Number of clicks to get to investor relation information	1	1
3.	Number of clicks to get to press releases or news*	1	1
4.	Clear boundaries between the annual report (audited) and other information	0	0
5.	Change to printing friendly format possible	0	1
6.	Function to recommend the page	0	1
7.	Service to change data in the Share register online	0	0
Total Presentation Score		9	21

*a score of 2 is given if only one click is needed and a score of 1 if otherwise.

(9) is less than 50% overall total presentation score (13.5). On the other hand, Company BB is considered to display an IFR *opportunistic* position because its' individual total presentation score (21) is more than 50% overall total presentation score (13.5).

SUMMARY OF THE MEASUREMENT QUANTIFICATION PROCESS

In conclusion, we believe that we must go through the whole four steps of the process (that is, quantifying the four dimensions – (1) *strategic intent*, (2) *disclosure content*, (3) *organizational legitimacy*, and (4) *disclosure position*) on our measurement quantification before we can determine the IFR disclosure strategy that we assumed being utilized by Company AA and Company BB. In order to finally determine which four of the IFR disclosure strategy (that is, (1) *corrective-preventive*, (2) *corrective-contextual*, (3) *additive-preventive*, or (4) *additive-contextual)* is actually being practiced by our two companies, company AA and company BB, we present the summary of our measurement quantification process findings in Table 5. The findings suggested that one of the company is using IFR Corrective-Preventive strategy, while the other company is using IFR Additive-Contextual strategy.

IFR CORRECTIVE-PREVENTIVE STRATEGY VERSUS IFR ADDITIVE-CONTEXTUAL STRATEGY

Table 5 presents the analysis of all four dimensions of IFR disclosure strategy for Company AA and Company BB. For company AA, the findings shows that with regards to the four dimensions – (1) *strategic intent* – it has a negative event, hence is considered a poor performing firm, (2) *disclosure content* – it fulfil the preventive category, (3) *organizational legitimacy* –it fulfil the preserving category, and (4) *disclosure position* – it fulfil the ritualistic tactic category). Hence, it is concluded that Company AA utilizes the *IFR Corrective-Preventive strategy.*

For company BB, the findings shows that with regards to the four dimensions – (1) *strategic intent* – it does not have a negative event, hence is considered a well performing firm, (2) *disclosure content* – it fulfil the contextual category, (3) *organizational legitimacy* –it fulfil the enhancing category, and (4) *disclosure position* – it fulfil the opportunistic tactic category). Hence, it is concluded that Company BB uses *IFR Additive-Contextual strategy* as summarized in Table 5.

IFR CORRECTIVE-CONTEXTUAL STRATEGY VERSUS IFR ADDITIVE-PREVENTIVE STRATEGY

As highlighted earlier, Williams (2008) taxonomy proposed four types of IFR disclosure strategies. However, Williams (2008) do not provide any empirical evidence in terms of the measurements of her taxonomy. We take the challenge to quantify Williams (2008) taxonomy by suggesting the quantification to measure each strategy. We have provided examples that come up with two of the strategies, that is, corrective-preventive strategy and additive-contextual strategy as shown in Table 5. In addition, we provide below a discussion of another two companies which represent the other two disclosure strategies as proposed in Williams (2008) taxonomy, namely the corrective-contextual strategy and the additive-preventive strategy.

To illustrate the identification for IFR Corrective-Contextual strategy and IFR Additive-Preventive strategy, we present an example of another two firms, Company XX and Company YY. The hypothetical financial data for these companies are as follow:

Year	Net Income	
	Company XX	Company YY
2012	RM3.9billion	RM7 million
2011	RM1.5billion	RM4.3 million

FIGURE 3. Net income for Company AA and Company BB

The score sheet of the checklist items for Company XX and Company YY is presented in Table 6. From the score sheet in Table 6, the preventive content scores for Company XX is 13 and Company YY is 11. The contextual content score is 20 for Company XX and 4 for Company YY. The 50% overall total content score is 23 and individual total content score is 15 for Company XX and 38 for Company YY. Therefore, by referring to the summary in Table 7 as well, Company XX is considered to have a *contextual IFR disclosure content* because its' preventive content score (13) is less than contextual content score (20) AND individual total content score (15) is less than 50% overall total content score (23). On the other hand, Company YY is considered to have a *preventive IFR disclosure content* because its' contextual score (4) is less than preventive score (11) AND individual total content score (15) is less than 50% overall total content score (23).

For individual total presentation score, Company XX gets the score of 11 and Company YY gets the score of 19. The 50% overall total presentation score is 13.5. As such, Company XX is considered to display an IFR *ritualistic* position because its' individual total presentation score (11) is less than 50% overall total presentation score (13.5). On the other hand, Company YY is considered to display an IFR *opportunistic* position because its' individual total

TABLE 5. Identification of IFR disclosure strategy

Dimension		Company AA		Company BB	
(1) Strategic Intention Presence of Negative Event *(Current Net Income<Prior Net Income)*	Net Income for 2012	RM15mil	Yes	RM7 mil	No
	Net Income for 2011	RM21mil		RM4.3mil	
(2) Disclosure Content	Preventive	13	Contextual *(Contextual > Preventive AND Individual total > 50% overall total)*	13	Preventive *(Preventive > Contextual AND Individual total < 50% overall total)*
	Contextual	6		25	
	Individual total	19		38	
	50% overall total	23		23	
(3) Organizational Legitimacy	Depends on Disclosure Content	Preserving		Enhancing	
(4) Disclosure Position	Presentation Score		Ritualistic *(Individual total Presentation < 50% overall total*		Opportunistic *(Individual total Presentation > 50% overall total)*
	Individual total	9		21	
	50% overall total	13.5		13.5	
IFR Disclosure Strategy		Corrective-Preventive		Additive-Contextual	

TABLE 6. Score sheet of the checklist: Company XX and Company YY

		Company XX	Company YY
I.	DISCLOSURE CONTENT	Yes (1) No (0)	Yes (1) No (0)
A.	*Preventive Disclosure*		
1.	Balance sheet	1	1
2.	Profit and loss account	1	1
3.	Cash flow or funds flow statement	1	1
4.	Statement of changes in stockholders' equity	1	1
5.	Notes to the accounts	0	1
6.	Management report/analysis	1	0
7.	Auditor report	1	1
8.	Interim statements	1	0
9.	Annual reports of former years	1	1
10.	Summary of key ratios over a period of at least 5 years	1	1
11.	Analysts briefings	1	0
12.	Name of designated person	1	1
13.	Phone number to investor relations	1	1
14.	E-mail to investor relations	1	1
	Total Score	13	11
B.	*Contextual Disclosure*		
1.	Share price history	1	0
2.	Summary of financial data over a period of at least 5 years	1	1
3.	Details of foreign shareholdings based on latest available information	1	0
4.	Dividend policy	1	0
5.	Corporate structure	1	1
6.	Notice of meetings and agenda of annual shareholders' meeting	1	0
7.	Minutes of general meeting	0	0
8.	Voting results of AGM	0	0
9.	Webcasts on financial performance briefings	0	0
10.	Webcasts on External meetings	0	0
11.	Webcasts on general meetings	0	0
12.	CV of the members of the management or supervisory board	1	1
13.	Sideline activities of the members of the management board	1	0
14.	Documentation of press and analysts' conferences	1	0
15.	Terms of references of the audit committee	1	0
16.	Terms of references of the nomination committee	1	0
17.	Terms of references of the remuneration committee	1	0
18.	Current press releases	1	0
19.	Current share price	1	0
20.	Financial calendar	1	0
21.	Pages indicate the latest update	0	0
22.	Date of posting information on website	0	0
23.	Historical information archive	1	0
24.	Share price performance in relation to stock market index	1	0
25.	Shareholder structure	1	0
26.	Speeches of the management board during the AGM	0	0
27.	Analyst forecasts	0	0
28.	Compensation of the members of the management board	0	0
29.	Compensation of the members of the supervisory board	0	0
30.	Information about directors dealing	1	1
31.	Information about share option programs	0	0
32.	Postal address to investor relations	1	0
	Total Score	20	4
	Total Content Score	38	15

(continue)

Continued (TABLE 6)

II.	PRESENTATION		
A.	*Technological features*	1	1
1.	Loading time of the web site <10 seconds	1	1
2.	Text only alternative available	0	1
3.	Hyperlinks inside the annual report	1	1
4.	Annual report in PDF-format	0	1
5.	Annual report in html-format	1	1
6.	Graphic images	1	1
7.	Flashes	0	1
8.	Sound files	0	1
9.	Video files		
B.	*Convenience and usability of website: Navigation support*	0	0
1.	Help site	1	1
2.	Table of content/site map	0	1
3.	Pull-down menu	1	1
4.	Click over menu	0	1
5.	Internal search engine	0	0
6.	Next/previous buttons to navigate sequentially		
C.	*Convenience and usability of website: Contact and information supply services*		
1.	Direct e-mail hyperlink to investor relations	1	1
2.	Online investor information order service	0	1
3.	Mailing list	0	0
4.	Email alert	0	0
D.	*Convenience and usability of website: Structure*		
1.	Page divided into frames	1	1
2.	Number of clicks to get to investor relation information	1	1
3.	Number of clicks to get to press releases or news*	1	1
4.	Clear boundaries between the annual report (audited) and other information	0	0
5.	Change to printing friendly format possible	0	1
6.	Function to recommend the page	0	0
7.	Service to change data in the Share register online	0	0
	Total Presentation Score	11	19

*a score of 2 is given if only one click is needed and a score of 1 if otherwise.

presentation score (19) is more than 50% overall total presentation score (13.5).

Table 7 presented the summary analysis of all dimensions of IFR disclosure strategy for Company XX and Company YY. Based on Table 7 summary, it is concluded that Company XX utilizes the IFR Corrective-Preventive strategy while Company YY uses the Corrective-Contextual strategy.

OVERALL SUMMARY OF THE FOUR IFR DISCLOSURE STRATEGIES

Based on the quantification analyses in Table 5 and Table 7, we believe that poor performing companies where in our case, the example of companies AA and XX, tend to choose the corrective strategies, that is, corrective-preventive and corrective-contextual respectively. On the other hand, well performing firms where in our case, the example of companies BB and YY, tend to choose the additive strategies, that is, additive-contextual and additive-preventive respectively.

Notwithstanding our example of hypothetical companies, eventually when we test our proposed quantification measurement of the four IFR disclosure strategies on real sample of firms, that is, firms listed on Bursa Malaysia, we do find very interesting results with regards to the IFR disclosure strategy practiced by the firms as discussed in the next section of our paper.

RELIABILITY AND VALIDITY OF OUR IFR DISCLOSURE STRATEGY CHECKLIST

This section discussed on the tests of the internal consistency for each of the components of IFR disclosure strategy (refer to Table 1) by analyzing the Cronbach's alpha for each component based on 320 firms listed on Bursa Malaysia in year 2012. Table 1 list down three main components for our checklist to quantify our proposed measurements for the four IFR disclosure strategies. The three main components include the Preventive Disclosure Content having 14 items, the Contextual Disclosure Content having 32 items, and the Presentation component

TABLE 7. Identification of IFR Disclosure Strategy – Company XX and Company YY

Dimension		Company XX		Company YY	
(1) Strategic Intention Presence of Negative Event *(Current Net Income<Prior Net Income)*	Net Income for 2012	1	Yes	RM4.3mil	No
	Net Income for 2011	0		RM7mil	
(2) Disclosure Content	Preventive	0	Contextual *(Contextual > Preventive AND Individual total > 50% overall total)*	11	Preventive *(Preventive > Contextual AND Individual total < 50% overall total)*
	Contextual	20		4	
	Individual total	33		15	
	50% overall total	23		23	
(3) Organizational Legitimacy	Depends on Disclosure Content		Enhancing		Preventive
(4) Disclosure Position	Presentation Score		Ritualistic *(Individual total Presentation < 50% overall total*		Opportunistic *(Individual total Presentation > 50% overall total)*
	Individual total	11		19	
	50% overall total	13.5		13.5	
IFR Disclosure Strategy			Corrective-Contextual		Additive-Preventive

having 26 items (but with total score of 27). This test is performed to ensure that the checklist can really represent the same concept or idea, which in our study we focused on the components of the IFR disclosure strategy. Table 8 summarizes the results of these tests.

As indicated from Table 8, all the IFR disclosure strategy components that we have proposed have an acceptable Cronbach's alpha of above 0.6 (Sekaran 2003). We believe that the higher the Cronbach's alpha for each component, the better should be the reliability of the checklist in measuring the IFR disclosure strategy (Sekaran 2003). Hence we can conclude that the checklist used in our study should be reliable enough to measure the proposed IFR disclosure strategy. In this study, we focus on the content validity issue of our data to ensure that the checklist includes an adequate and representative set of items that tap the IFR disclosure strategy. In order to achieve the content validity, as highlighted earlier, we referred to the checklist items found in prior studies such as Marston and Polei (2004) as well as Pirchegger and Wagenhofer (1999). The checklists of these two studies have been used in several IFR studies including Salehi et al. (2010) and Xiao et al. (2004).

Apart from items found in prior studies, we extend our checklist by incorporating all requirements made by Bursa Malaysia Listing Requirement (2009) and Corporate Disclosure Guideline (2011) as well as Investor Relations Best Practices and Website Guidelines (Updated March 2011) to ensure the comprehensiveness of our checklist. Eventually to confirm that our checklist items are representative of the current practice on IFR disclosure strategy, 320 websites of Malaysian listed companies were visited and assessed to check the applicability of the items in determining the IFR disclosure strategy used. The finding shows that the checklist is applicable and adequately measures the IFR disclosure strategy proposed. Thus, it is concluded that the checklist is comprehensive enough to measure the IFR disclosure strategy that has been proposed in Williams (2008) taxonomy.

CONCLUSION

The aim of this paper is to describe the development for the measurement of our IFR disclosure strategy checklist which we believe can be used to measure firms' IFR disclosure strategy. The development of IFR disclosure

TABLE 8. Cronbach's alpha for IFR Disclosure Strategy Components

IFR Disclosure Strategy Components	No. of items	Cronbach's alpha
Disclosure content		
Preventive Disclosure Content	14	0.843
Contextual Disclosure Content	32	0.860
Presentation	26	0.616
Total	72	0.899

strategy checklist items is based on Bursa Malaysia Listing Requirement (2009) and Corporate Disclosure Guideline (2011). This study also refers to the list in the study by Marston and Polei (2004) as well as the study by Pirchegger and Wagenhofer (1999). The types of IFR disclosure strategies proposed is based on Williams (2008) taxonomy which have not yet been empirically tested. This study takes the challenge to interpret the taxonomy by developing a checklist for each characteristic described in the taxonomy. From the reliability test, which was based on Cronbach's Alpha value of each components in the IFR disclosure strategy checklist, we found that the checklist is acceptable empirically and hence we believe that it should be a reliable and quantifiable instrument.

However, we acknowledge the fact that our analysis might be limited to our sample of study and hence could not be easily generalizable to other samples. Nevertheless, with the acceptable level of reliability towards our checklist instrument, we believe our future study would be to incorporate the IFR disclosure strategy checklists items towards our sample companies to identify the common IFR disclosure strategy actually practiced by those companies. With regards to our current study, we believe that we have contribute in two aspects. First, our finding would benefit companies especially those that wish to compete strategically with other companies in terms of attracting stakeholders' online by making sure they have disclose all relevant information strategically for the benefit of their stakeholders. Second, our checklist instrument should benefit other researchers to employ for the purpose of their own research on IFR disclosure strategy.

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