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Corporate Internet Reporting in Emerging Economic Countries: The Malaysian Perspective

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ABSTRACT

The increasing use of Internet technology in corporate world is undeniable. Corporate Internet Reporting (CIR) is the communication process between the corporate sectors and stakeholders via the medium of the Internet. CIR is a significant way for the corporate sectors in presenting and disseminating business information. The study is conducted with the objective to examine the practice of CIR by the Malaysian listed corporations. Sample of the study consisted of 380 listed corporations. In measuring the level of CIR practice by companies, a CIR index was used. Data for CIR practice were collected by observing the presence of CIR attributes in the websites of companies being investigated and analysed by using descriptive statistics. The findings show that 82 percent of the companies examined have websites and are practicing CIR. On average, Malaysian listed companies practiced around 28.9% of the overall CIR attributes. The results based on industry type showed that the plantation sector had the highest mean score for overall CIR, Investor Relations category and User Support category, whereas the finance sector had the highest mean score for the categories of Accounting and Finance and Technological Advantage, and the construction sector revealed the highest mean score for forward looking data. Furthermore, a comparison between the Main Market and ACE market companies did not show any significant difference in the mean score for the overall CIR attributes and specific CIR attributes. Findings of the study might be useful to the Malaysian listed corporations in better understanding the level of CIR they practised so as to further increase the level of CIR in the near future. Finally, the study adds to the knowledge on the practice of CIR in Malaysia as one of the world's emerging economic countries.

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INTRODUCTION

Jones and Xiao (2004) define Corporate Internet Reporting (CIR) as traditional annual report together with additional financial and non-financial information in multiple formats through company websites. CIR is the new communication medium between corporate sector and stakeholders via the medium of the Internet. CIR is seen as an important way for the corporate sector in presenting and disseminating corporate information to the stakeholders. In recognising the significance of CIR in business activities, Beattie and Pratt (2003) mentioned that "Internet reporting improves users' access to information by providing information that meet their specific needs, allowing non-sequential access to information through the use of hyperlinks, interactive and research facilities, and allowing the opportunity for providing more information than available in the annual reports. This improved accessibility of information results in more equitable dissemination among stakeholders."

A substantial number of research on Internet reporting have been conducted in developed countries with advance capital markets, especially in the United States, United Kingdom and European countries (Bogdan, Pop, Popa, & Scorte, 2009). However, there are very limited studies on internet reporting in the emerging economic countries. According to Ally and Simon (2008), findings of research on internet reporting conducted in the developed countries may not be generalisable to different countries at different stages of development, or with different business environment and cultures. In Malaysia, despite the noticeable internet usage growth highlighted in the Malaysian Internet Usage and Telecommunication Reports, research in the field of internet is still lacking. Hence, this study intends to fill this gap by providing insights into the level of CIR practised by public listed corporations in Malaysia.

The paper is organised as follows. The next section provides the prior international research of CIR. Research design is elaborated in the third section, followed by findings and discussions. The paper ends with a conclusion.

LITERATURE REVIEW

In general, past research on CIR has been classified into several different groups. Basically, CIR was examined based on the perspective of nature and the extent of CIR practice by companies, determinants of CIR, comparative CIR studies among different countries, as well as attitude and preference of CIR.

A study by Petravick and Gillet (1996) was among the earliest research conducted in the field of Internet reporting in the United States. Petravick and Gillet (1996) identified 69% or 103 companies of Fortune 150 as having corporate websites. Out of this number, 83 websites were found to have financial information.

Furthermore, Petravick and Gillet (1996) categorised these 83 websites into three different groups: advertisement, limited and comprehensive. The study identified three company websites that were under the classification of advertisement due to the fact that users need to make contact through e-mail or phone calls in order to obtain information from these companies. In other words, these companies did not provide any information on their websites. The websites of thirty-four companies were classified as limited on the grounds that users could access certain items for a limited and short period, whereas forty-six companies' websites were classified as comprehensive because users could access to full annual reports, quarterly reports, current stock price, history of stock price, as well as audio and animated messages. This, according to Petravick and Gillet (1996), shows that the use of web goes beyond reporting purposes.

Besides accounting researchers, concern over the issue of CIR has also been raised by accounting organisations. In the year 2000, the Financial Accounting Standard Board (FASB) examined the practice of Internet reporting of Fortune 100 companies. This research was done to develop a comprehensive list of website attributes, as well as to determine the popularity of the attributes, or in other words, the frequencies of the attributes disclosed on the website. Due to the rapid advancement of Internet technology, the data for this research were collected on one specific day. Of the one hundred companies examined, only one company did not have a website. Of the 99 companies with websites, 93 companies provided at least some form of investor relation or financial information on their websites. The study listed CIR attributes that were considered popular out of 325 total attributes developed by the FASB staff and academic members from prior studies. Graphics was used by all 99 companies' websites; hence, it was the most popular attribute, followed by 80% to 90% use of table of contents, links to news releases and product advertisements. Chairman's message, sales information, financial highlights and HTML format of financial information were provided by 70% to 80% of companies' websites. Other popular attributes were used by at least fifty per cent of companies' websites. The findings of this study were published for the Business Reporting Research Project's (BRRP) report entitled, "Electronic Distribution of Business Reporting Information". The study was also briefly discussed by Fitzsimons and Shoaf (2000) in their article entitled, "FASB Studies the Electronic Reporting of Business Information."

In the European countries, In Greece, a study on Internet reporting was examined by Spanos (2006) by using a sample of 141 Greek companies listed on the Athens Exchange. The extent of Internet disclosure was investigated based on the developed Internet disclosure index. The index consisted of 50 items, classified under the categories of accounting and financial, corporate governance, corporate

social responsibility and contact details to investor relations that are associated with disclosure content and categories of processable formats and technological advantages associated with presentation format. The study found that majority of the companies (121 companies) had websites. For the disclosure content, the category of financial and accounting received the highest score with press releases, current financial statements and current annual reports being the most common items to be found. This implied the awareness of Greek companies concerning the importance of timely financial information. Nevertheless, corporate social responsibility was found to receive the lowest score. However, both categories of presentation format showed a similar score. A very low score was found with regards to the use of technological features of Internet reporting such as processable format of financial data, video and audio files, mailing list and link to related parties. Therefore, Spanos (2006) concluded that the potential of the Internet was not being fully utilised by Greek companies in practising Internet reporting. This is in line with the studies by Hedlin (1999) in Sweden, Gowthorpe and Amat (1999), and Larran and Giner (2002) in Spain.

Another study was conducted by Hossain Khan, Muzaffar and Nazmul (2008) by closely examining the extent of Internet reporting by Bangladeshi companies based on the attributes of financial reporting websites, which consisted of 27 items. In addition, the evaluation of Internet reporting was also examined based on a focus group conducted with different experts and regulatory institutions. This differentiates this study from the previous one in 2006. A smaller sample of 30 companies listed on the categories of A and B of the Chittagong Stock Exchange were used. It was revealed by the study that 40% of the companies have websites with three quarters of them (9 companies, 75%) disclosing financial statements on the websites. Corporate information was the most frequently found item with all companies disclosing it, followed by vision statement (92%), chairman's message and financial highlight summary (83%). Conversely, no company was found to have environmental reporting and quarterly statements on their websites. Despite the high percentage of disclosure, Hossain Khan *et al*. (2008) observed differences between annual reports in the digital version and the paper-based version. In addition, the auditors' report and signatures in the digital annual reports were found to be copied from the printed version without the existence of the auditor's digital signature on any website, thus, contributing to the issue of information security and manipulation of online corporate information.

In India, the first research on Internet reporting was conducted by Verma (2010). By using a sample of two hundred companies of BSE-200 Index from nineteen industry sectors, Verma (2010) examined the level and extent of financial and non-financial disclosure on corporate websites based on the Internet disclosure index of

135 items. The items were grouped into one category of financial reporting index and six categories of non-financial reporting index, namely, corporate governance information, corporate social responsibility and human resource information, marketing information, investor relations communication, right to information act, and technological aspects and user support. The results of the study indicated a wide variation of web disclosure of the companies without standardisation of the content and presentation of the disclosure. In general, disclosure of the non-financial reporting index received the mean score of 46.52, which was much higher than the mean score of 14.16 for the financial reporting index. Specifically, disclosure for the category of technological aspects and user support was the highest, followed by financial reporting index, corporate governance information, investor relations' communication and corporate social responsibility and human resource information. However, the categories of marketing information and right to information act revealed the lowest score of disclosure. Looking at industry wise classification, it was found that companies in the sectors of information technology, diversified and transport service outperformed other sectors in average web disclosure. Companies in the diversified sector were the highest in the disclosure of financial reporting index, followed by the financial sector and chemical and petrochemical sector. However, the information technology sector was in the first place with regards to the web disclosure of the non-financial reporting index, followed by the diversified sector and transport services sector. Furthermore, statistical analysis of ANOVA (sig. value of 0.001) confirmed the significant impact of industry sector upon the level of web disclosure of companies, thus, proving that the reporting practices by companies were determined by the industry standard and level of competition. Thus, Verma (2010) concluded that Internet reporting was used as a tool by corporations in India for the purpose of differentiation, image management and attracting stakeholders.

Besides looking at the extent of internet reporting by corporations, Aly, Simon and Hussainey (2010) made an attempt to examine the potential factors affecting CIR of 62 listed companies Egyptian Stock Exchange. Factors investigated include company size, profitability, leverage, liquidity, industry sectors, foreign listing and auditor size in examining the impacts of these factors on 62 companies listed on the Egyptian Stock Exchange. In measuring Internet reporting, the study used 82 items of Internet disclosure index, whereby the index consisted of 58 items of disclosure content and 24 items of presentation format and accessibility factors. The results of the OLS regression analysis showed that profitability, foreign listing and industry sectors through the communication and financial services sectors were positively significant in affecting both the amount and presentation formats of corporate Internet reporting of the Egyptian listed companies.

A comparative CIR study was conducted by Allam and Lymer (2003) who examined CIR practice by the largest companies in five countries around the world with advanced capital markets, namely, the US, UK, Canada, Australia and Hong Kong. In addition, the study examined the effects of firm size and country of origin against the level of CIR practice. The study was conducted on 50 largest companies from each of the five countries, whereby the companies were selected according to the value of market capitalisation. Thus, a total of 250 companies were examined in the study. The study examined the presence of corporate websites as well as the existence of CIR attributes and CIR scores for each company based on 36 CIR items. The study found that with an exception of one company in Hong Kong, almost all companies (99.6%, 249 companies) were revealed to have websites. All websites were found to have a section for investor relations. Looking specifically at general attributes, the study revealed differences with regards to the presence of webcast among companies in the five countries examined, whereby companies in the US and Canada were at the top in providing this attribute (84%) as compared to the UK (68%) and Australia (62%). Conversely, very few company websites in Hong Kong (4%) provided this attribute. A similar result was found pertaining to the attributes of e-mail alert and inside annual report techniques, whereby a very small number of company websites in Hong Kong companies have these attributes (14% for e-mail alerts, 6.1% for inside annual report techniques) compared to more than half of the company websites in the other four countries. As for the presentation style and format of annual reports, the results revealed differences in the practice of companies among the five countries with regards to the pdf format, as well as a mixed format of pdf and html. The use of pdf format in presenting financial information was higher among companies in Hong Kong (80%), Australia (66%) and Canada (58%) as compared to companies in the US (30%) and the UK (34%). However, the mixed format was less frequently used by most US companies (30%), followed by Australia (18%), Canada (14%), UK (8%) and Hong Kong (4%).

Another study was conducted by Hossain Khan, Muzaffar and Mahmood (2006) to examine the use of Internet corporate reporting by Bangladeshi companies. However, the study was done based on the attitudinal survey, which was aided by questionnaires and focus group discussion conducted with stakeholders. The study found that the majority of the stakeholders examined (60%) regularly browsed company websites. When asked about their opinion regarding CIR usage, including the variables of graphics, hyperlinking, downloadable data, press releases, financial trend data, non-financial information and data updating, the respondents revealed that such variables were important. Therefore, Hossain Khan *et al*. (2006) concluded that the Internet can be considered as a flourishing means of corporate reporting by the stakeholders.

In Malaysia, the issue of Internet technology transformation into corporations in Malaysia was investigated by Adham and Ahmad (2005). The study examined the rate of corporate website adoption and e-commerce technology by the population of the main board's companies listed on the Kuala Lumpur Stock Exchange (KLSE), which consisted of thirteen activity sectors. The study was conducted based on the proposition of one hundred percent of companies having websites and most companies that serve end customers having e-commerce systems. It was found that more than half of the companies (62%, 351 companies) have operable websites. With regards to the remaining companies without functioning websites, the major concern of the study was on the deficiency in the level of information visibility of the companies in attracting investment from shareholders. Out of 351 operable websites, only 15 websites provided e-commerce transactions, with companies in the finance sector being at the top (8 companies), followed by trading and services (5 companies) and consumer products, as well as industrial products (1 company of each sector). As for corporate websites of other sectors, which include companies in the direct seller category (e.g., Cosway, Amway, Nestle), e-commerce application did not exist. A possible reason for not adopting e-commerce technology by these companies was to maintain the relationship of the companies and to avoid conflict with the stockists or intermediaries of the companies. The results indicated a slow adoption of websites and e-commerce systems among the companies being examined, which is not in agreement with the developed research proposition.

The utilisation of Internet technology in disclosing corporate information by the Malaysian companies was also examined by Abdul Hamid (2005). However, the focus of his study was on investor relations information, whereby the research examined the presence of investor relations information on corporate websites and the content of the investor relations information. A study was conducted on one hundred Malaysian index-linked counters listed on the KLSE. It was found that nearly three quarters of the companies (74%, 74 companies) have websites. The majority of the websites (95%, 70 websites) contained investor related materials. For the purpose of examining the content of investor relations information of the 70 websites, six categories of checklist instruments for investor relations were used, namely, background of companies and financial data, share price and shareholder data, ratio analysis, press release and presentations, frequently asked questions and contact details, and online investor service. Based on the checklist, the investor relations disclosure level was examined by using a dichotomous score of 1 for the existence of items in the checklist and 0 for the non-existence of items. Based on the content analysis conducted, the study indicated that company's background (93%), historical press releases (45%), current annual reports (47%), current press release (45%)

and earnings per share (31%) were the top five investor relations items disclosed by the companies through their websites. In contrast, information pertaining to frequently asked questions, names and addresses for investor enquiries and ratio of price earning, gearing, return on shareholder funds and both ROA and ROE was the least investor relations information disclosed, whereby this information was found on less than 10% of the websites examined. Based on the results, Abdul Hamid (2005) concluded that the full potential of the Internet was not fully utilised by the Malaysian corporations for investor relations purposes, especially in reaching foreign and public investors.

Furthermore, the findings on the variation in the use of the Internet for corporate reporting by the Malaysian corporations in terms of the type and extent of information disclosed motivated Hanifa and Abdul Rashid (2006) to investigate firm specific characteristics that influenced the practices of IFR by the Malaysian companies. The sample used in their study consisted of the 50 top and 50 bottom companies based on market capitalisation. The specific firm's characteristics examined were size, leverage, performance, shareholders concentration, growth prospects, foreign ownership and industry type. The practice of IFR was measured through dummy variables of 1 for firms that have websites with latest annual reports and 0 for companies without websites or without the latest annual reports on the websites. Based on the binomial logistic regression conducted, the study found that with the exception of profitability and industry type, the practice of IFR by Malaysian companies was positively and significantly influenced by all firms' specific characteristics being examined.

RESEARCH DESIGN

The study examined 380 Malaysian listed companies which consist of eleven different sectors. Out of which, 332 companies are from the Main market and the remaining is listed under the ACE market. The companies were chosen based on the technique of systematic random sampling. Data for the study were collected from the companies' websites from December 2008 to February 2009.

In searching for the website address of companies, multiple sources were used. First, for companies directly linked to Bursa Malaysia's website, the companies' homepage addresses were identified through the website of Bursa Malaysia. Second, identification of the homepage addresses for companies not directly linked to Bursa Malaysia's website was done by using several meta search tools, which include AltaVista, Yahoo! and Google. Meanwhile, Internet Explorer was used in searching for the respective companies' web addresses. Third, for the remaining website addresses that still could not be identified through the previously mentioned techniques, the companies were contacted directly through phone calls to confirm the existence of their website and the company web address.

In measuring the level of CIR practice by the companies, the study developed 41

attributes of CIR index. The development of CIR index is based on a review of the Web based business reporting framework by FASB (2000), as well as internet reporting index developed in the studies of Pirchegger and Wagenhofer (1999), Deller, Stubenrath and Weber (1999) and Marston and Polei (2004), but with some modification to provide better reflection of the web features available on the websites of Malaysian listed companies. The attributes were categorised into five groups, namely accounting and financial information, information of investor relations, forward looking data, technological advantage and user support.

Data for CIR practice were collected by observing the presence of each of the CIR attributes in the websites of companies being investigated. Specifically, the level of CIR practice by the company was measured by using the formulae of each company's CIR score over total CIR score. Data were analysed based on both individual companies and sectors by using descriptive statistics technique.

FINDINGS AND DISCUSSION

Out of 380 companies being examined, over three quarters were found to have websites and are practising CIR. With only 20 percent of the companies from the Main Market (do not have websites), the majority of companies with websites are from the Main Market. For the ACE Market, almost all companies were found to have corporate websites. With the high existence of corporate websites in both the Main market and the ACE market, it shows that the basic mechanism for corporate reporting over the Internet is in place. It also shows that CIR has been widely accepted and used by a significant number of listed companies in Malaysia as a means of communication to their stakeholders. The finding is depicted in Table 1.

TABLE 1
The Existence of CIR in the Malaysian Market

Listing	Practising CIR		Non-practising CIR		Total	%
	No. of companies	%	No. of companies	%		
Main Board	266	80	66	20	332	100
ACE Market	44	92	4	8.33	48	100
Total	**310**	**82**	**70**	**18**	**380**	**100**

Regarding the existence of CIR based on the Malaysian business sector, the findings revealed that companies in Malaysia vary in their frequency of having websites and practising CIR. Specifically, the hotel and infrastructure sectors revealed the highest percentage with all the sample companies in both sectors having corporate websites and practising CIR. Furthermore, the technology, trading and services, properties, industrial product and finance sectors were found to have a high number of companies having websites and practicing CIR (93% for technology, 84% for trading and services, 83% for properties and 80% for both industrial product and finance). However, one company in the mining sector did not have a website. The result is depicted in Table 2.

TABLE 2
CIR Existence by the Malaysian Business Sectors

Industry Type	No. of companies having website / practicing CIR	Total no. of companies in the sector	% of industry
Consumer Products	40	52	77%
Industrial Products	86	108	80%
Construction	15	19	79%
Trading and Services	61	73	84%
Finance	12	15	80%
Properties	30	36	83%
Plantation	10	16	63%
Technology	52	56	93%
Infrastructure	2	2	100%
Mining	0	1	0%
Hotel	2	2	100%
Total	**310**	**380**	

As for the overall practice of CIR in Malaysia, findings are discussed based on the extent of overall CIR practice, as well as the extent of accounting and financial data disclosure, investor relation disclosure, forward looking data disclosure and practice of technological advantage and user support attributes. It is revealed that the overall mean of the extent of CIR is 0.289, with a standard deviation of 0.134. The overall practice ranges from 0.05 (minimum limit) to 0.63 (maximum limit), showing a large variation in the practice of CIR by companies. The mean score shows that Malaysian public listed companies practiced, on average, 29% or 12 attributes of the total 41 attributes of CIR index. Furthermore, the results on the Accounting and Financial data disclosure constitute the highest mean score of 0.49. This indicates that nearly half of the companies in the sample disclosed Accounting and Financial data in their corporate website. This is done by either providing a link to their complete financial statements or a comprehensive set of financial statements in their corporate website. This is followed by the User Support attributes, Investor Relation disclosure and Technological Advantage attributes with the mean scores of 0.45, 0.33 and 0.20, respectively. These also indicate that, on average, the companies disclosed 45% or 2 attributes out of 5 attributes of the User Support's category, 33% or 7 attributes out of 20 attributes of Investor Relation's category and 20% or 2 attributes out of 11 attributes of the Technological Advantage's category. In contrast to the category of Accounting and Finance, the category of Forward Looking is the lowest disclosure with a mean score of 0.04, revealing that, on average, companies only disclosed 4 percent or 0.16 attributes out of 4 attributes of the Forward Looking data category. The overall CIR practice is summarised in Table 3.

TABLE 3
Descriptive Statistics of the Extent of CIR

	Mean	*Rank*	Min	Max	Std. Dev	Skewness	Kurtosis
CIR (overall practice)	0.289	-	0.05	0.63	0.134	0.340	-0.904
Accounting and Financial data disclosure	0.490	*1*	0.00	1.00	0.501	0.039	-2.012
Investor Relation disclosure	0.334	*3*	0.05	0.65	0.128	0.463	-0.302
Forward Looking data disclosure	0.044	*5*	0.00	0.50	0.107	2.443	5.475
Technological Advantage	0.202	*4*	0.00	0.64	0.177	0.435	-0.963
User Support	0.453	*2*	0.00	1.00	0.221	0.183	-0.724

Looking at the practice of CIR by specific economic sectors in Malaysia, the results show that companies in the plantation sector held the top position with regards to the score of Investor Relations category (i.e.,0.415) and User Support category (i.e.,0.580). Companies in the plantation sector also scored the highest in the overall CIR score (0.371). Companies in the Finance sector scored the highest in the Accounting and Finance category (mean of 0.833) and technological advantage category (0.288), while the highest score for forward looking data (0.117) was in construction companies. Industrial products companies were the lowest in the overall CIR score (0.253), as well as Investor Relations category (0.298) and technological advantage category (0.162). The sector of 'others', which constitutes hotel and infrastructure companies held the lowest position with regards to the score of forward looking category (0) and user support category (0.3). In addition, the lowest score for the category of accounting and finance was in consumer product companies (0.375). These findings are depicted in Table 4.

TABLE 4
Means of the Extent of CIR based on Business Sectors in Malaysia

Mean/industry	Overall Score	Accounting & Finance	Investor Relation	Forward Looking	Tech. Adv	User Support
Industrial (n= 86)	***0.253***	0.384	***0.298***	0.020	***0.162***	0.412
Consumer (n= 40)	0.274	***0.375***	0.328	0.056	0.177	0.430
Trading & Services (n= 61)	0.308	0.557	0.357	0.025	0.225	0.472
Properties (n= 30)	0.334	0.633	0.368	0.083	0.273	0.473
Plantation (n= 10)	**0.371**	0.800	**0.415**	0.050	0.273	**0.580**
Technology (n= 52)	0.278	0.442	0.322	0.058	0.184	0.450
Finance (n= 12)	0.337	**0.833**	0.350	0.021	**0.288**	0.550
Construction (n= 15)	0.314	0.533	0.353	**0.117**	0.200	0.520
Others (n= 4)	0.299	0.500	0.375	***0***	0.250	***0.300***

Note:
The value in bold font is the highest disclosure mean.
The value in italic bold font is the lowest disclosure mean.
Others refer to hotel and infrastructure companies.

From the results, it can be concluded that the highest and the lowest scores of the overall CIR and specific categories of CIR were dominated by certain industries. There are several possible reasons to explain the findings. Malaysian listed companies under the plantation sector are mostly involved in exporting products (Basiron, 2009). Considering this, the future direction of those companies is very much dependent on the trade relation shared by those companies with buyers around the world (Basiron, 2009). In addition, due to the growing population, the plantation sector around the world is facing a shortage of plantation raw materials (Basiron, 2009). This reflects the need for market expansion by the plantation companies (Basiron, 2009). CIR is the modern tool for corporate reporting with the advantages of attracting a broader range of customers and an interactive two-way communication channel between corporations and investors. Therefore, relative to other sectors, there is a high possibility that CIR is greatly used by the Malaysian plantation sector to expand their market to buyers around the world, thus, reflecting the highest mean score for overall CIR score, as well as investor relation and user support categories.

For the financial sector, the government introduced the Financial Sector Master Plan in 2001 in order to build financial institutions that are resilient, efficient, competitive and responsive to the changes in economic requirements (Zamani, 2006). Accordingly, various initiatives were taken by the financial companies to increase their capability to meet the growing demand of the economy. Among the initiatives taken were establishing an information website for the financial companies to provide useful information and facilitate customers in conducting transactions, as well as migrating users from a paper-based to an electronic payment system (Zamani, 2006). In undertaking these initiatives, there are needs for financial companies to not only have corporate websites, but also utilise elements of technological advantages in their websites. This could possibly be the reason behind the highest mean score of accounting and finance and technological advantage categories by the financial companies.

The industrial sector contributed the largest proportion of foreign direct investment in Malaysia (Masud, Mohd Yusoff, Abd Hamid, & Yahaya, 2008). Under the foreign direct investment, the non-resident direct investors of the home countries, which are mostly from Singapore, US and Japan, hold at least 10 percent of the total equity in a resident company in Malaysia (Masud *et al*., 2008). Companies in Malaysia function as production base and are controlled by companies in the home countries. Therefore, there is a possibility that CIR may be more actively practiced by companies in the home countries compared to companies in Malaysia, thus, contributing to the lowest CIR practice by the companies of the industrial sector in Malaysia compared to other sectors.

In addition, the industrial product sector is claimed to be the fastest growing sector with a continuous positive growth that is attributed to the growth of the export-oriented industries and robust performance of resource-based industries (Danavaindran, 2005). The government through the implementation of the Industrial MasterPlan (IMP) has provided a framework to establish a strong foundation for the sustained growth of this sector, as well as to ensure that this sector is more diversified and integrated. In addition, with the establishment of the ASEAN Free Trade Area (AFTA), the industrial sector's companies are benefited by a tariff reduction, elimination of import duties, as well as quantitative restriction and removal of non-trade barriers (Danavaindran, 2005). As a result, industrial product companies are reported to have a wider market with an increase in the import and export activities (Danavaindran, 2005). As for the Malaysian consumer sector, it is well known to be a buoyant sector with relatively strong sales and earnings despite the high inflation and other changes in economic situations (Raj, 2008). In addition, the strong branding and good market positioning practiced by companies in this sector reflect the customers' loyalty in their products (Raj, 2008). Furthermore, due to the attractive dividend offered by companies in the consumer sector to investors, shareholders' investments in the companies are protected and secured (Raj, 2008). With these strong advantages of the industrial and consumer sectors relative to other sectors, companies in both sectors may consider that efforts to expand the market and attract more customers and investors through CIR practice as not crucial. This possibly contributes to the results of the lowest mean score for overall CIR, investor relation category and technological advantage category by the industrial sector and the lowest mean score for accounting and finance category for the consumer product sector.

In addition, the result of the highest mean score of forward looking data category, which is revealed by the construction sector, is possibly due to the desire of the construction companies in promoting their future projects to potential buyers. Whereas a very small number of companies under the sector of 'others' possibly contribute to the result of the lowest mean score of the categories of forward looking data, technological advantage and user support.

PRACTICE OF CIR BY THE MALAYSIAN MARKET

Discussion follows with the findings of the extent of CIR practice by the Malaysian major market. As ACE Market comprises companies based on technology business activities and high growth, it is expected that those companies will practice CIR more than companies from the Main Market. However, a comparison of the mean scores for the overall CIR practice and specific CIR categories between the companies in the Main Market and the ACE Market did not reveal any significant

difference. This shows that companies in both markets have the same concentration in practising CIR in terms of overall CIR attributes and specific CIR attributes. Thus, it could be said that such a practice has not been dominated by any one of them. In fact, the result suggests that companies in both markets have accepted CIR as a tool for corporate reporting but with a low level of CIR disclosure and practice for specific CIR categories. The result is depicted in Table 5.

TABLE 5
Means of the extent of CIR based on listing status

CIR CATEGORY	MAIN MARKET	ACE MARKET
Overall	0.291	0.278
Accounting and finance	0.5	0.432
Investor relation	0.335	0.326
Forward looking	0.040	0.063
Technological advantage	0.205	0.182
User support	0.456	0.436

CONCLUSION

The widespread and increasing use of Internet technology, specifically CIR in the corporate world nowadays, is inevitable and undeniable. As one of the top ten Asian countries for Internet use, Malaysia is not lagging behind the significant influence of Internet technology in business activities. CIR is believed to provide a way for Malaysian companies to disseminate online corporate information in order to attract a wider range of national and international investors. The study provides insights into the practice of CIR in emerging economic countries by focusing on Malaysia. Discussions are based on the existence of CIR in the Malaysian market and economic sectors, overall CIR practice and specific CIR practice by Malaysian economic sectors and market.

Overall, the findings of this study revealed that 82 percent of the total companies examined have websites and are practicing CIR. In summary, the results of the analysis of the extent of CIR revealed that Malaysian listed companies practiced, on average, 28.9% of the overall CIR attributes in the period of two months between December 2008 and February 2009. The results based on industry type show that the plantation sector had the highest mean score for overall CIR, Investor Relations category and User Support category, while the finance sector had the highest mean score for the categories of Accounting and Finance and Technological Advantage. In addition, the construction sector revealed the highest mean score for forward looking data category, while the hotel and infrastructure, which constitute the sector of 'others' revealed the lowest

mean scores for the categories of forward looking data and user support. Furthermore, a comparison between the Main Market and ACE market companies did not show any significant difference in the mean score for the overall CIR attributes and specific CIR attributes.

This study contributes towards the perspective of knowledge and practise. With regards to the contribution towards knowledge, despite many studies on CIR at the international level, most of the studies have focused on the developed western countries. Indeed, research that examines issues of CIR practice in the emerging economic countries, particularly in Malaysia, is still very limited in number. Therefore, this study adds to the CIR literature by providing a comprehensive view of the CIR practice in Malaysia as an emerging economic country. As for the contribution towards practise, findings of this study are beneficial to the Malaysian listed corporations, both individuals and by sectors, to better understand their level of CIR practice to further improve and increase the practise in the near future.

REFERENCES

Adham, K. A., & Ahmad, M. (2005). Adoption of web site and e-commerce technology among Malaysian public companies. *Industrial Management & Data Systems, 105*(9), 1172-1187.

Allam, A., & Lymer, A. (2003). Developments in Internet Financial Reporting: Review and Analysis across Five Developed Countries. *International Journal of Digital Accounting Research, 3*(6), 165-199.

Aly, D., & Simon, J. (2008, April). *Assessing the Development of Voluntary Internet Financial Reporting and Disclosure in Egypt*. Paper presented at the British Accounting Association Annual Conference, Blackpool, UK.

Aly, D., Simon, J., & Hussainey, K. (2010). Determinants of corporate internet reporting: evidence from Egypt. *Managerial Auditing Journal, 25*(2), 182-202.

Basiron, Y. (2009). Trends and Potentials of Malaysia's Plantation Sector. In *A Presentation by Tan Sri Datuk Dr Yusof Basiron at the Perdana Leadership Foundation Seminar 2009* at Sime Darby Convention Centre, August 20.

Beattie, V., & Pratt, K. (2003). Issues concerning web-based business reporting: an analysis of the views of interested parties. *The British Accounting Review, 35*(2)*,* 155-187.

Bogdan, V., Pop, C. S., Popa, D. N., & Scorte, C. (2009). Voluntary Internet Financial Reporting and Disclosure. A New Challenge for Romanian Companies. *Annals of the University of Oradea: Economic Science, 3*(1), 770-778.

Danavaindran, D. (2005). *Manufacturing Sector in the Malaysian Economy – AFTA and its Implications on Employment*. Paper presented at the National Statistics Conference.

Deller, D., Stubenrath, M., & Weber, C. (1999). A survey on the use of the Internet for investor relations in the USA, the UK and Germany. *The European Accounting Review, 8*(2), 351-364.

Financial Accounting Standard Board (FASB). (2000). *Business Reporting Research Project*. Electronic Distribution of Business Reporting Information.

Hanifa, M. H., & Abdul Rashid, H. M. (2006). The Determinants of Voluntary Disclosures in Malaysia: The Case of Internet Financial Reporting. *Unitar E-Journal*, *2*(1), 22-42.

Jones, M. J., & Xiao, J. Z. (2004). Financial reporting on the Internet by 2010: a consensus view. *Accounting Forum, 28*(3), 237-263.

Khan, M. A. H., Muzaffar, A. T., & Mahmood, A. S. (2006). *The Use of Internet for Corporate Reporting: A Discussion of the Issues and Surveys of Current Usage in Bangladesh* (pp. 8-11). Working paper.

Khan, M.A. H, Muzaffar, A. T., & Nazmul, A. K. (2008). Corporate Financial Reporting on Internet: Global Developments and an Appraisal of Practices in Bangladesh. *Office of Research and Publication, Working Paper No. AIUB-BUS-ECON-2008-25*.

Marston, C., & Polei, A. (2004). Corporate reporting on the Internet by German companies. *International Journal of Accounting Information Systems, 5*(3), 285-311.

Masud, M. D., Yusoff, Z. M., Hamid, H. A., & Yahaya, N. (2008). Foreign Direct Investment in Malaysia - Findings of the Quarterly Survey of International Investment and Services. *Journal of the Department of Statistics, Malaysia, 1*, 1-9.

Petravick, S., & Gillet, J. (1996). Financial Reporting on the World Wide Web. *Strategic Finance, 78(1)*, 26.

Pirchegger, B., & Wagenhofer, A. (1999). Financial information on the Internet: a survey of the homepages of Austrian companies. *The European Accounting Review, 8*(2), 383-395.

Raj, S. (2008, January 28). Consumer sector resilient. *The Star*. Retrieved January 15, 2011 from http://www.thestar.com.my/Story/?file=/2008/1/28/business/20081599&sec=business.

Spanos, L. (2006). *Corporate reporting on the internet in a European emerging capital market: the Greek case*. European Journal of Economics, Finance and Administrative Sciences, (7).

Verma, D. (2010). Web-based Business Reporting in Indian Corporate Sector. *Journal of Knowledge Management Practice, 11*(1).

Zakimi Abdul Hamid, F. (2005). Malaysian companies' use of the internet for investor relations. *Corporate Governance: The international journal of business in society, 5*(1), 5-14.

Zamani, A. G. (2006). Re-engineering the Malaysian financial system to promote sustainable growth. *Bank for International Settlements, 28*, 269-275.