THE NATURE AND MOTIVATION OF HUMAN CAPITAL REPORTING (HCR): A PRELIMINARY STUDY

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ABSTRACT

The purpose of this paper is to explore the external disclosure of human capital (HC). This study aims to examine the nature of human capital reporting of public listed companies in Malaysia, investigate the motivational motive towards the extent of human capital reporting from preparer's point of view and identify the problems that might be faced in reporting human capital information. This study is based on a cross-sectional examination of disclosures on HCR by 20 public listed companies in Malaysia. The information about human capital presented in annual reports is grouped into five themes defined in the literature. A content analysis of these 20 annual reports is conducted to measure the nature and level of HCR. Besides the number of sentence count, narrative text unit adopted from Beattie et al. (2004) is also applied as unit of analysis. A questionnaire survey for HR managers of the Malaysian listed companies is conducted to find out the respondents' motivation to disclose information in respect of reported items of HCR. Responses are compared with the results obtained from the measured HCR through content analysis. The findings demonstrate the most reported items of human capital, a comprehensive and descriptive profile of narrative disclosures of human capital items as well as the rank of motives for disclosures. Trading and the services industry have the highest score for the number of sentence count and the narrative text unit. The most reported items by sentence and narrative text unit are the working environment and employee's involvement in the community. Most companies provide narrative descriptions with historical, non-financial and non-quantitative orientation. The nature of disclosure is explained by the possible motivation

and problems faced by companies in disclosing human capital. The data in this study are from secondary sources of disclosures which only focus on 20 listed companies due to the limited one year period of study. The small sample of survey is unable to address HCR in a comprehensive and detailed manner across the industry.

This study promotes better understanding of current HCR practices in Malaysian companies and provides better input for users to identify the importance placed on the selected human capital information in annual reports. In addition, the study might provide a framework for examining the motivation that may influence companies to improve their disclosure policy.

This paper is an empirical and exploratory study about the practices of HCR among listed companies in Malaysia. This paper contributes to the understanding of HC and its disclosure behaviour by investigating the issues of their motives of disclosure and problems that hinder voluntary disclosure of such information. Different motivations may bring different implications to the nature of reported human capital items.

Keywords: Human capital, Human capital attributes, Disclosure, Motivation

Introduction

Human capital is an important element of intellectual capital that drives value creation in the economy especially in knowledge-intensive companies. Human capital is generally embedded in an individual's mind and remains intact in the individual. According to Abeysekera (2008), human capital encompasses knowledge, skills and technical ability, personal traits such as intelligence, energy, attitude, reliability and commitment, the ability to learn which deals with aptitude, imagination and creativity, and the desire to share information, participate in a team and focus on the goals of the organisation. The recognition and utilization of human capital further help companies to be more efficient, productive and innovative (Argawala, 2003). Therefore, most organisations begin to see that human capital is an important factor in the successful achievement of organisational objectives (Guthrie and Petty, 2000) for a long-term survival and sustainability.

Despite the critical development and enhancement of human capital in improving business competitiveness, the reporting of human capital information is still an issue. In this context where the current accounting practices are unable to efficiently evaluate human capital information, most organisations deal with difficulties to quantify the expertise, knowledge and competence of their human capital. Therefore, such information is not presented in the annual reports systematically and consistently. Thus, the reported human capital information by a number of companies are insignificant (Tan, 2000), and unable to facilitate the stakeholders' investment decision-making process. A better way of human capital reporting (HCR) might allow resources to be allocated more effectively within the organisation and may further enable gaps in skills and abilities to be more easily identified (Olsson, 1999; Canibano et al., 2000; Guthrie, 2001; Abeysekera and Guthrie, 2005).

Various studies have been conducted to examine the level of emphasis placed on human capital in companies' annual reports (Mouritsen et al., 2004; Abeysekera and Guthrie, 2005; Firer and Williams, 2005). However, the documented level of disclosure in previous findings reveals that the level of HCR is still limited. While considerable research has established the framework and checklist to rationalize the selected human capital items, the organisations' motives in disclosing these items are rarely addressed. Despite the evidence on relevance of HCR in capturing the major part of intellectual capital (Hirschey and Richardson, 2002), the findings contradict with the perception that human capital is one of the most valuable assets for companies (Huang et al., 2008).

Many organisations attempt to satisfy information needs of all stakeholders by creating, measuring and reporting information other than financial data, particularly human capital information (Abeysekera and Guthrie, 2004). The reporting of these items in annual reports is considered to provide different benefits to the company and have some influence in a corporate reputation (Alvarez, 2011). Guthrie (2001) argued that user groups do not exert any pressure on firms to disclose human capital as HCR is voluntary in nature... Voluntary reporting may be considered as a response to the pressure of different social groups, which will determine the type and level of detail in the information (Branco and Rodriques, 2006). Therefore, it is important to look deeply into the level and nature of HCR to fully understand an organisation's motivation and the effectiveness of its managers to adequately reflect all resources used and developed to further the organisation's achievement (Gracia-Meca and Martinez, 2005).

According to stakeholder theory, an organisation's management is expected to take on activities expected by their stakeholders as these activities contribute to the image that different stakeholders have of the company. The theory suggests that all stakeholders have the right to be provided with information about how organisational activities affect them even if they choose not to use the information and even if they cannot directly play a constructive role in the survival of the organisation (Deegan, 2000). Stakeholder theory describes organisational accountability to organisation which extends beyond their economic or financial performance. This means that the companies will elect to voluntarily disclose information that is over and above existing regulations (Olsson, 2001). In this case, HCR presents an excellent opportunity to apply stakeholder theory in the sense that stakeholders' perception can influence the disclosure policies of an organisation.

In order to understand the issue of voluntary disclosure practices which has become an important concern of policy makers as well as users, this study examines the nature of HCR particularly on analysing and evaluating narrative disclosure in annual reports. This study extends prior related study by offering an alternative approach to examine the motivation of HCR based on stakeholder theory in order to rationalize the nature of human capital reporting practices in organisations. In an attempt to better understand the nature and extent of current HCR, this study will identify some of the disclosure problems faced by companies in communicating human capital items voluntarily in their annual reports. The paper proceeds by discussing the prior literature review of HCR and motivations behind the reporting. The research methodology is then described, followed by a presentation of the findings and discussion of the limitations, implications and ideas for future research.

Prior Literature

Human Capital Reporting (HCR)

Many attempts were made to measure the value of people and to account for human capital (Abeysekera and Guthrie, 2004; Abhayawansa and Abeysekera, 2008; Ax and Marton, 2008). Evidence shows that external reporting of human capital has been on the agenda of academics and practitioners that provide evidence of the importance of human capital information in the valuation of companies, which are tailored to meet the stakeholders' need and expectations (Brennan, 2001). The research is primarily based on content analysis of the annual reports. For example, Abeysekera and Guthrie (2004) in a study of the disclosure patterns of HCR observed that in the top 30 Sri Lankan firms, the increase of HCR both by frequency and line count over the two years (1998/1999 and 1999/2000) is insignificant. It also appears that "employee features" is the most reported HC attribute found in the annual reports. Information about the "value added by employees" to the firm is the second most reported item, followed by "training programmes". The items least reported are "vocational qualifications", "equity issues" and "executive compensation plans".

A study by Ax and Marton (2008) investigates the link between external disclosure of human capital and internal human resource management (HRM) practices. Disclosure data are collected from annual reports whereas management practice data are collected by email questionnaire. In the study, the association between the disclosure in annual reports and questionnaire answers is tested. The study finds a significant association between internal management practices and companies' perceived importance of human capital disclosure. However, the actual disclosure behaviour does not seem to agree with the perceived importance for disclosure. Disclosure strategy and internal management measurement difficulties could be explained by the the lack of stronger results for the existence of a link between HCR and HRM. Prior empirical studies have widely examined HCR and its implications on firm performance. Obviously, the practice of HCR will result in greater competitiveness and performance (Wallace and Naser, 1995; Inchausti, 1997; Agarwala, 2003; Chen et al., 2005). There are contrasting findings between Firer and Williams (2003) and Chen et al. (2005) on the role of HCR. Firer and Williams do not find any association between HCR and profitability,

however, Chen et al. (2005) finds that HCR enhances the firm's value and profitability. HCR is an external disclosure initiative to communicate with stakeholders in order to justify resources and validate success (Behn, 2003). Moreover, HCR may be a way to overcome stakeholders' concern and promote stakeholders' relationship with the organisation.

The studies on HCR are largely based on human capital theory which treats employees' knowledge, capabilities and skills as an output rather than input. Human capital theory views training as an investment that should be justified according to its expected financial returns (Becker and Huselid, 1998; Huang et al., 2008; Abeysekera, 2008). However, human capital theory is inadequate in explaining how human capital contributes to the achieving of sustainability competitive advantage in firms. The human capital issue is also at the centre of the resource-based view (Abeysekera, 2008). The resource-based view stresses on the firm's capacity to create and utilize human capital resources as the most important source of a firm's sustainable competitive advantage (Wright et al., 2001; Wright et al., 2005). All these characteristics are either typically found under the definition of human capital or formed as a basis in the disclosure index used in HCR studies.

There are many issues that discourage the reporting of human capital. The lack of human capital reporting might be explained by circumstances related to HCR strategy and internal measurement difficulties. The main factor that influences HCR motivation is security. Many firms will resist the disclosure of information regarding human capital in order to protect strategic information from competitors (Marr et al., 2003). In addition, some companies may refrain from HCR because of the extra costs associated with the collection and disclosure of the human capital information (Marr et al., 2003). Furthermore, there might be a lack of knowledge about how to measure and report human capital in a systematic way because there is no common framework to follow as HCR is voluntary in nature (Roslender and Fincham, 2001).

Motivations Behind Reporting

There are several reasons which reveal the importance for companies to provide information externally, especially when it comes to intangibility. According to White et al. (2007), the information provided might lead to

potential benefits for the company's capital allocation. Healy and Palepu (2001) argue that the main motivation for companies to disclose information is to lower the company's capital cost as additional information reduces investors' uncertainty. Providing a large number of information might have positive effects on a company's credibility (Waymire and Barton, 2004). Research by Bukh et al. (2005) claim the main motivation of companies in preparing HCR is to show that their human capital is valued. As the human capital assets are strategically more important to wealth creation, significant changes in company value creation have increased the existing information asymmetrically. Thus, this situation has led to the increasing incentives by companies to voluntarily disclose information (Bontis, 2003) in order to close the information gap between informed and uninformed investors.

In a review of research on voluntary disclosure, a number of theories are used to explain the rationale of corporate disclosure. According to stakeholder theory, the major objective of disclosure is to attain the ability to balance the conflicting demands of various stakeholders of a company. From the perspective of legitimacy theory, it posits that organisations continually seek to appear legitimate in the eyes of society in which they operate. A company will voluntarily report on activities if the management perceives that this is what the community expects. Abeysekera (2008) demonstrates that firms have different motivations when they voluntarily disclose human capital in annual reports. This study gains insight into motivations behind human capital disclosure in annual reports from the perspective of political economy. The disclosures are intended to convince the three major constituents: economic, social and political.

Method

Two methods are employed in gathering the data for this study: content analysis of annual reports and questionnaire survey.

Content Analysis

Content analysis disclosures can be measured in a robust and objective manner (Krippendorff, 1980) and this method has been widely used in accounting and HCR studies (Guthrie and Petty, 2000; Bontis, 2003;

Bozzolan et al., 2003; Guthrie et al., 2004). The study measures the information relative to human capital included in 2009 annual reports. The year 2009 is selected as it is the most recent year for which annual reports are available at the time of the study. Previous studies in HCR have all used annual reports as their source document for analyzing the relevant information (Guthrie and Petty, 2000; Brennan, 2001; Olsson, 2001; Bozzolan et al., 2003; Abeysekera and Guthrie, 2005). Top 20 companies listed in Bursa Malaysia are selected as a sample. As HCR is voluntary in nature and unregulated by accounting standard, these top 20 companies are selected by market capitalization to minimize the differences in HCR. Previous research reveals the trends in voluntary disclosure due to variation in the size of the firm (Meek et al., 1995). They find that larger firms are more likely to disclose voluntarily as compared to small firms.

In order to derive patterns in the presentation and reporting of human capital information, a frequency coding is employed for each pre-defined human capital item in the checklist. In the selection of human capital items to be focused on, Bukh et al.'s (2005) framework is used as a starting point. Additional items of human capital are subsequently added from other human capital studies such as by Ax and Marton (2008), Abhayawansa and Abeysekera (2008) and Abeysekera and Guthrie (2005). Then, the preliminary research instrument is pilot tested on selected samples to ensure that the items that are unique or important to the Malaysian environment are added and those not relevant omitted. The framework is modified to ensure that each item is unambiguous and mutually exclusive of others. The checklists of 29 attributes that make up human capital are shown in Appendix 1. In order to maintain coding reliability, two independent researchers are involved in coding HCR based on the checklist items. Bozzolan et al. (2003) demonstrates consistent coding decisions through the use of multiple coders. Any discrepancy in the coding will be resolved and then the coding framework is updated with the agreed coding data.

This study clusteres the 29 human capital items into five themes. These human capital themes are: (1) employee's breakdown, (2) employee's health and job satisfaction, (3) education and training, (4) recruitment, career and compensation and (5) employee's relation (see Appendix 1). The themes of human capital items are adopted from Ax and Marton (2008) which consist of staff breakdown, staff health and job satisfaction, education and training,

recruitment, careers and compensation, and revenues and employees. Meanwhile, the employee's relation theme follows the disclosure theme in Abeysekera and Guthrie (2005). Human capital items are clustered based on how well they represent each human capital theme. The combined theme from the two separate studies results in a comprehensive measurement perspective of reported human capital in annual reports and thus the results have provided a complete picture of the firms' HCR practices.

The numbers of sentences containing, for example, the words "human resources", "human capital", "employees", "staff", "talent" and "people" are counted to capture the volume of HR content. The use of sentences also seems to be preferred by recent researchers (Ax and Marton, 2008; Abeysekera, 2008). In order to generate a rich descriptive profile of a company's narrative disclosure of human capital information, this study also adopts the methodology by Beattie et al. (2004) which is the procedure of content analysis that is based on the coding of three types of attributes. These three types of attributes capture the time orientation, financial/non-financial and quantitative/non-quantitative element of each text unit. A text unit is defined as a phrase containing a single piece of information (Beattie et al., 2004). This methodology is adopted as it provides a comprehensive content analysis framework related to narrative disclosures. The focus of the content analysis is only on voluntary narrative disclosures basis.

Questionnaire Survey

The data are also collected using questionnaires distributed to human resource managers who are responsible for providing HC information in annual reports. The questionnaires are divided into three sections. **SECTION I** attempts to examine items of human capital resources that are relevant or irrelevant to be disclosed. The section also covers the motivation of disclosure. **SECTION II** consists of twelve problems associated with HCR, which are identified from the previous studies. The answers range between 1- Very unlikely to 5-Vey likely. **SECTION III** covers the respondent's profile. A pilot test of the questionnaire is prepared and distributed to determine the reliability of each item in the section of instrument. The results show that the overall Cronbach's coefficient alpha is 0.88 which is statistically reliable (Nunally, 1978).

Content Analysis Results

Descriptive Analysis

The descriptive company's profile is shown in Table 1. 45% of the companies reviewed are from the trading/services industry, 25% are from the finance industry while the remaining 30% are from the plantation industry (10%), infrastructure industry (10%) and consumer product industry (10%).

| Industry | Frequency | % |
|------------------|-----------|----|
| Trading/services | 9 | 45 |
| Finance | 5 | 25 |
| Plantation | 2 | 10 |
| Infrastructure | 2 | 10 |
| Consumer product | 2 | 10 |

Table 1: Descriptive Company's Profile

Content Analysis Measurement

A content analysis is made of each annual report in order to access the nature of voluntary HCR in annual reports. Table 2 presents the mean, standard deviation, minimum and maximum of HCR scores for the top 20 companies by using frequency: sentence and narrative text unit count. On average, these companies have used 48.40 sentences in the paragraphs and the sentences are split and coded into multiple units with 149.45 narrative text units for each sentence. The minimum human capital items recorded by using both unit analyses: sentence and narrative text unit, are 12 and 37 respectively, while the maximum human capital items recorded are 124 for sentence count and 421 for narrative text unit count.

Table 2: Descriptive Analysis for Unit Analysis

| Unit analysis | N | Mean | Standard deviation | Minimum | Maximum |
|---------------------|----|--------|--------------------|---------|---------|
| Sentence | 20 | 48.40 | 33.05 | 12 | 124 |
| Narrative text unit | 20 | 149.45 | 100.44 | 37 | 421 |

The frequency of sentence and narrative text unit recorded by each industry is presented in Table 3. The highest number of sentence count is found

in annual reports by the trading & services industry with 623 sentences, followed by the finance industry (386). For the narrative text unit, the trading and services industry also have the highest score (1963). With narrative text unit of 1421, the finance industry is the second highest. The results show that the ranking by market capitalization does not give any significant effect related to HCR. Although the top 20 companies ranked by market capitalization are relatively large in terms of size, the nature of HCR for each company does not demonstrate similar manner in the extent of disclosure.

| Industry | Sentence | Narrative Text Unit |
|--------------------|----------|------------------------|
| Finance | 386 | 1421 |
| Trading & services | 623 | 1963 |
| Plantation | 90 | 249 |
| Infrastructure | 62 | 190 |
| Consumer product | 136 | 410 |

Table 3: Descriptive Analysis for Unit Analysis - by Industry

Human Capital Items

Table 4 indicates that out of 29 human capital items identified, 25 items are disclosed by one or more companies. There are 14 human capital items that are most favourable and being fully disclosed by all companies: Number of employees (No. 1); Employees' entrepreneur spirit and teamwork (No. 5); Work environment (No. 9); Management-employees relationship (No. 11); Health and safety of employees (No. 12); Management's commitment and concern for effective human resource development (No. 14); Training, education and other efforts for human resource development (No. 16); Expenses related to employees (No. 17); Facilities /benefits provided to employees (No. 20); Remuneration system (No. 23); Awards/rewards for good performance/best practices (No. 25); Employee evaluation system (No. 27); Employees' involvement in the community (no. 28) and Appreciation towards employees' (No. 29). Out of the 29 human capital items, 4 items are not being reported by any of the top 20 companies: Number of employees in different positions (No. 2), Qualification of employees (No. 4), Rate of employee's turnover (No. 7) and Comments on changes in the number of employees (No. 8).

| No. | | | osed | Not disclosed | |
|-----|-------------------------------------------------------------------------------|----|------|------------------|-----|
| | | | % | Ν | % |
| | Theme 1: Employee's breakdown | | | | |
| 1 | Number of employees. | | 100 | - | - |
| 2 | Number of employees in different positions. | - | - | 20 | 100 |
| 3 | Equity issues: race, gender and religion. | 3 | 15 | 17 | 85 |
| 4 | Qualification of employees. | - | - | 20 | 100 |
| 5 | Employees' entrepreneur spirit and teamwork. | 20 | 100 | - | - |
| 6 | Employees' capabilities and abilities. | 18 | 90 | 2 | 10 |
| | Theme 2: Employee's health and job satisfaction | | | | |
| 7 | Rate of employee's turnover. | - | - | 20 | 100 |
| 8 | Comments on changes in the number of employees. | - | - | 20 | 100 |
| 9 | Work environment. | 20 | 100 | - | - |
| 10 | The importance of human resource to the organisation. | 13 | 65 | 7 | 35 |
| 11 | Management-employee's relationship. | 20 | 100 | - | - |
| 12 | Health and safety of employees. | 20 | 100 | - | - |
| 13 | Employees' satisfaction. | 18 | 90 | 2 | 10 |
| | Theme 3: Education, training and | | | | |
| | development | | | | |
| 14 | Management's commitment and concern for effective human resource development. | 20 | 100 | - | - |
| 15 | Statement of policy on competent training and development programs. | 18 | 90 | 2 | 10 |
| 16 | Training, education and other efforts for human resource development. | 20 | 100 | - | - |
| 17 | Expenses related to employee. | 20 | 100 | - | - |
| 18 | Expenses related to education, training and development. | 18 | 90 | 2 | 10 |
| 19 | Average hours of training and development. | | 80 | 4 | 20 |
| 20 | Facilities /benefits provided to employees or employees' welfare. | | 100 | - | - |
| | Theme 4: Recruitment, career and compensation | | | | |
| 21 | Annual recruitment. | 3 | 15 | 17 | 85 |
| 22 | Employee's incentive program. | 16 | 80 | 4 | 20 |

Table 4: Frequency of Disclosure for Human Capital Items

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| 23 | Remuneration system. | 20 | 100 | - | - |
|----|-------------------------------------------------------|----|-----|---|----|
| 24 | Career opportunities. | 18 | 90 | 2 | 10 |
| 25 | Awards/rewards for good performance / best practices. | 20 | 100 | - | - |
| 26 | Recruitment policies. | 18 | 90 | 2 | 10 |
| 27 | Employees' evaluation system. | 20 | 100 | - | - |
| | Theme 5: Employee's relation | | | | |
| 28 | Employee's involvement in the community. | 20 | 100 | - | - |
| 29 | Appreciation towards employees' | 20 | 100 | - | - |

| ltom | Item | | ntence | Narrative text unit | |
|------|-------------------------------------------------------------------------------------|------|--------------------|---------------------|--------------------|
| no. | Disclosure | Mean | Standard deviation | Mean | Standard deviation |
| 1 | Number of employees. | 1.33 | 0.57 | 8.00 | 5.29 |
| 3 | Equity issues: race, gender and religion. | 0.33 | 0.00 | 1.33 | 2.31 |
| 5 | Employees' entrepreneur spirit and teamwork. | 3.67 | 1.15 | 18.00 | 6.93 |
| 6 | Employees' capabilities and abilities. | 1.00 | 1.00 | 5.00 | 5.57 |
| 9 | Work environment. | 6.67 | 3.78 | 33.33 | 2.05 |
| 10 | The importance of human resource to the organisation. | 1.67 | 0.57 | 9.67 | 4.72 |
| 11 | Management-employee's relationship. | 1.67 | 2.88 | 6.67 | 1.15 |
| 12 | Health and safety of employees. | 2.33 | 1.51 | 10.67 | 1.10 |
| 13 | Employees' satisfaction. | 1.67 | 2.88 | 7.67 | 1.33 |
| 14 | Management's commitment and concern for effective human resource development. | 3.67 | 0.57 | 27.33 | 1.33 |
| 15 | Statement of policy on competent training and development programs. | 1.00 | 1.73 | 4.67 | 8.08 |
| 16 | Training, education and other efforts for human resource development. | 5.67 | 5.03 | 27.00 | 2.33 |
| 17 | Expenses related to employee. | 1.67 | 2.08 | 6.67 | 8.33 |

| 18 | Expenses related to education, training and development. | 0.67 | 1.15 | 2.67 | 4.61 |
|----|-------------------------------------------------------------------------|------|------|-------|------|
| 19 | Average hours of training and development. | 0.67 | 1.15 | 2.67 | 4.62 |
| 20 | Facilities /benefits provided to employees or employees' welfare. | 3.67 | 2.51 | 18.33 | 1.56 |
| 21 | Annual recruitment. | 0.67 | 1.15 | 4.00 | 6.93 |
| 22 | Employee's incentive program. | 1.00 | 1.00 | 4.67 | 5.03 |
| 23 | Remuneration system. | 0.67 | 0.57 | 3.33 | 3.05 |
| 24 | Career opportunities. | 1.33 | 1.53 | 5.33 | 6.11 |
| 25 | Awards/rewards for good performance / best practices. | 3.00 | 3.60 | 12.00 | 1.44 |
| 26 | Recruitment policies. | 3.33 | 1.53 | 16.33 | 6.66 |
| 27 | Employees' evaluation system. | 0.67 | 0.57 | 2.67 | 2.31 |
| 28 | Employee's involvement in the community. | 6.33 | 2.52 | 28.67 | 1.00 |
| 29 | Appreciation towards employees' | 1.33 | 0.57 | 3.33 | 1.15 |

Table 5 shows the mean score and standard deviation for 25 reported human capital items. As illustrated in the table, out of 14 reported items of human capital, as been mentioned in the earlier discussion, "working environment" represents the highest mean by both sentence and narrative text count, followed by "employee's involvement in the community" item. Most companies are concerned of human capital development to improve the efficiency of utilising employees and their productivity. However, the result reveals that "training, education and other efforts for human resource development" item is found to be the third most reported item by sentence count and fourth by text unit count. It can be considered that full disclosure practices are still ambiguous, thus it is not reported systematically and consistently. The least important item of human capital reported by both sentence count and narrative text unit is "equity issues" (No. 3).

Category of Human Capital Items

The 29 items of human capital are clustered into five themes: (1) employee's breakdown; (2) employee's health and job satisfaction; (3) education,

training and development; (3) recruitment, career and compensation and (5) employee's relation (see Table 6). It can be seen that all top 20 companies have disclosed human capital information in all themes. The highest frequency of all themes is reported by the finance industry, followed by the trading and services industry which have the second most reported of theme 1 (127), theme 3 (644), theme 4 (223) and theme 5 (158).

The plantation industry is the second most reported of theme 2 (305). The less frequency disclosure of all themes is reported by the infrastructure industry.

| Theme | Trading & Services | Finance | Plantation | Infrastructure | Consumer Products |
|-----------------------------------------------------|-----------------------|---------|------------|----------------|----------------------|
| Theme 1 -Employee's breakdown | 127 | 140 | 60 | 24 | 50 |
| Theme 2 -Employee's health and job satisfaction | 231 | 615 | 305 | 189 | 258 |
| Theme 3 -Education, training and development | 644 | 1234 | 456 | 188 | 478 |
| Theme 4 -Recruitment, career and compensation | 223 | 424 | 134 | 49 | 90 |
| Theme 5 -Employee's relation | 158 | 190 | 36 | 25 | 112 |

Table 6: Descriptive Statistics of HCR Themes by Industry

Comprehensive Narrative Text Unit Reporting

The reporting of human capital items is further analysed according to three dimensional frameworks: Time orientation, Financial/Non-financial and Quantitative/Non-quantitative. Table 7 shows the reported narrative text unit across dimension. From the result, it shows that the top 20 companies provide more reported items of human capital on historical (mean: 46.60) with minimum and maximum reported items of 12 and 122 respectively, followed by non financial (mean: 39.15). Meanwhile, 21.33% is forward looking, 9.25% is financial, 43.20% is non-quantitative where 27.05% is the fact and the rest is judgement, and 8.10% is quantitative whereas 5.75% is measurement and 2.35% is change. The least reported dimension is quantitative–change with the lowest maximum reported item of 12. It shows that most companies provide narrative descriptions of their human capital rather than presenting the information in specific quantitative measures.

| Dimensions | Mean | Standard deviation | Minimum | Maximum |
|------------------------------|-------|--------------------|---------|---------|
| Historical | 46.6 | 32.84 | 12 | 122 |
| Forward looking | 21.33 | 13.17 | 15 | 33 |
| Financial | 9.25 | 6.05 | 0 | 22 |
| Non-financial | 39.15 | 30.98 | 7 | 109 |
| Quantitative – measurement | 5.75 | 5.69 | 0 | 21 |
| Quantitative – change | 2.35 | 2.92 | 0 | 12 |
| Non-quantitative – fact | 27.05 | 20.66 | 3 | 94 |
| Non-quantitative - judgement | 16.15 | 23.23 | 0 | 89 |

Table 7: The Reported Narrative Text Unit Across Dimension

Questionnaire Survey Results

Out of the 60 questionnaires that have been distributed, only 24, representing 40% are collected and analysed. Majority of the respondents are in the trading & services industry (41.7%). 58.3% of the respondents are from Non-GLC companies and the remaining from GLC companies. Out of the 24 respondents, 62.5% are female and 37.5% are male. 50% of the respondents are aged 40 and above. About 37.5% of the respondents have served the companies for more than 20 years (see Table 8).

| Variable | Frequency | % |
|---------------------|-----------|------|
| Industry: | | |
| Finance | 5 | 20.8 |
| Trading & services | 10 | 41.7 |
| Plantation | 2 | 8.3 |
| Consumer products | 4 | 16.7 |
| Industrial products | 1 | 4.2 |
| Construction | 1 | 4.2 |
| Infrastructure | 1 | 4.2 |
| | | |

Table 8: Demographic Profile of Sample

| Type of company: GLC Non-GLC | 10 14 | 41.7 58.3 |
|---------------------------------------------------------------------------------------------------|------------------|------------------------------|
| Gender: Male Female | 9 15 | 37.5 62.5 |
| Working experience: Less than 5 years 5 to 10 years 10 to 20 years More than 20 years | 2 5 8 9 | 8.3 20.8 33.3 37.5 |
| Age: 20 – 29 30 – 39 40 – 49 50 and above | 3 9 7 5 | 12.5 37.5 29.2 20.8 |

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As shown in Table 9, the top 2 items that are perceived as the most relevant items to be disclosed are *health and safety of employees* (91.7%) and *employee's involvement in the community* (91.7%). Meanwhile, information on *employees' evaluation system* (58.3%) and equity *issues* (54.2%) and *comments on changes in the number of employees* (54.2%) are irrelevant.

Table 9: Descriptive Statistics for Human Capital Items

| No | Items | Relevant to be Disclosed | | Not relevant to be disclosed | |
|----|----------------------------------------------|-----------------------------|------|------------------------------|------|
| | | Frequency | % | Frequency | % |
| 1 | Number of employees. | 20 | 83.3 | 4 | 16.7 |
| 2 | Number of employees in different positions. | 12 | 50.0 | 12 | 50.0 |
| 3 | Equity issues: race, gender and religion. | 11 | 45.8 | 13 | 54.2 |
| 4 | Qualification of employees. | 12 | 50.0 | 12 | 50.0 |
| 5 | Employees' entrepreneur spirit and teamwork. | 18 | 75.0 | 6 | 25.0 |
| 6 | Employees' capabilities and abilities. | 12 | 50.0 | 12 | 50.0 |
| 7 | Rate of employee's turnover. | 13 | 54.2 | 11 | 45.8 |

| 8 | Comments on changes in the number of employees. | 11 | 45.8 | 13 | 54.2 |
|----|-------------------------------------------------------------------------------|----|------|----|------|
| 9 | Work environment. | 15 | 62.5 | 9 | 37.5 |
| 10 | The importance of human resource to the organisation. | 18 | 75.0 | 6 | 25.0 |
| 11 | Management-employee's relationship. | 16 | 66.7 | 8 | 33.3 |
| 12 | Health and safety of employees. | 22 | 91.7 | 2 | 8.3 |
| 13 | Employees' satisfaction. | 16 | 66.7 | 8 | 33.3 |
| 14 | Management's commitment and concern for effective human resource development. | 19 | 79.2 | 5 | 20.8 |
| 15 | Statement of policy on competent training and development programs. | 17 | 70.8 | 7 | 29.2 |
| 16 | Training, education and other efforts for human resource development. | 19 | 79.2 | 5 | 20.8 |
| 17 | Expenses related to employee. | 19 | 79.2 | 5 | 20.8 |
| 18 | Expenses related to education, training and development. | 21 | 87.5 | 3 | 12.5 |
| 19 | Average hours of training and development. | 12 | 50.0 | 12 | 50.0 |
| 20 | Facilities /benefits provided to employees or employees' welfare. | 20 | 83.3 | 4 | 16.7 |
| 21 | Annual recruitment. | 12 | 50.0 | 12 | 50.0 |
| 22 | Employee's incentive program. | 13 | 54.2 | 11 | 45.8 |
| 23 | Remuneration system. | 13 | 54.2 | 11 | 45.8 |
| 24 | Career opportunities. | 18 | 75.0 | 6 | 25.0 |
| 25 | Awards/rewards for good performance / best practices. | 19 | 79.2 | 5 | 20.8 |
| 26 | Recruitment policies. | 12 | 50.0 | 12 | 50.0 |
| 27 | Employees' evaluation system. | 10 | 41.7 | 14 | 58.3 |
| 28 | Employee's involvement in the community. | 22 | 91.7 | 2 | 8.3 |
| 29 | Appreciation towards employees' | 18 | 75.0 | 6 | 25.0 |

The respondents are also asked the motives of disclosure of the information which are perceived as relevant to be disclosed. Table 10 presents the results of the items that are most relevant to be disclosed: "health and safety of employees" and "employee's involvement in the community". The *reputation and image* motive is the factor that inspires companies to provide information on "health and safety of employees" (70.8%) and "employee's involvement in the community" (66.7%). 48.5% of the respondents are inspired to be transparent in their reporting on "health and safety of employees". Meanwhile, only 16.7% of the respondents reported *appear legitimate* as their motives for disclosure related to "health and safety of employees" and "employee's involvement in the community" number of employees" are relevant. It seems that *performance indicator* is irrelevant as a motive for the disclosure on "employee's involvement in the community".

| Motives | Health and safety of employees | | Employee's involvement in the community | |
|---------------------------------------------|--------------------------------|------|-----------------------------------------------|------|
| | Frequency | % | Frequency | % |
| Increase predictability of future prospects | 7 | 29.2 | 4 | 16.7 |
| Transparent disclosures | 11 | 45.8 | 5 | 20.8 |
| Performance indicators | 6 | 25.0 | 3 | 12.5 |
| Appear legitimate | 4 | 16.7 | 4 | 16.7 |
| Reputation and image | 17 | 70.8 | 16 | 66.7 |

Table 10: Motives of Disclosure – The Most Relevant Information to be Disclosed

Table 11 presents the perception of GLC companies and Non-GLC companies on problems that might be faced in disclosing human resources information. The outputs are ranked according to their average score in order to determine the most likely problem that might be faced by companies in disclosing information in the annual reports. The results reveal that 3 factors that are most likely to be faced by GLC companies are "conflict with confidentiality" (mean = 3.90), "protection of strategic information from competitors" (mean = 3.40) and "lack of understanding of the information needed and expectations of capital markets" (mean = 3.20). Meanwhile, "lack of understanding of the information needed and the expectation of capital markets" (mean = 3.71) and "to protect strategic information from competitor" (mean = 3.36) are amongst the problems that are likely to hinder Non-GLC companies to present human capital information in annual reports. The result also shows

that "failure to identify the critical human capital resource" is not quite likely to hinder companies to present that information in annual reports as perceived by both groups of companies.

| No. | Problems | Mean | | | | |
|-----|---------------------------------------------------------------------------------------------------------------------|------|------|---------|------|--|
| NO. | Toblems | | Rank | Non-GLC | Rank | |
| 1 | Conflicts with confidentiality | 3.90 | 1 | 3.71 | 2 | |
| 2 | Lack of understanding of the information needed and expectations of capital market | 3.20 | 3 | 3.79 | 1 | |
| 3 | To protect strategic information from competitors | 3.40 | 2 | 3.36 | 3 | |
| 4 | Lack of guidance on content and process to select the human resources information that should be disclosed | 3.00 | 6 | 3.21 | 4 | |
| 5 | Lack of guidance for mandatory disclosures | 2.80 | 9 | 3.07 | 5 | |
| 6 | Costs of producing information | 3.20 | 4 | 2.64 | 8 | |
| 7 | Lack of understanding of how human resource contributes to the corporate value creation process | 2.60 | 10 | 3.07 | 6 | |
| 8 | Lack of knowledge to measure and report human resources in an appropriate manner | 3.00 | 7 | 2.71 | 7 | |
| 9 | Fail to identify the critical human resources | 3.20 | 5 | 2.50 | 10 | |
| 10 | Difficult to assign benefits to the human capital concerned | 2.90 | 8 | 2.64 | 9 | |
| 11 | Difficult to categorize the items of human resource | 2.60 | 11 | 2.50 | 11 | |
| 12 | Difficult to define a human resource | 2.40 | 12 | 2.50 | 12 | |

Table 11: Problems Likely Faced by Companies in Disclosing Human Capital Items

Analysis

To determine whether there is any significant difference between GLC companies and Non-GLC companies and the problems faced by companies

in disclosing human capital information, t-test is performed in this study. The result is shown in Table 12. The result indicates that there is no significant difference between GLC companies and Non-GLC companies' perception on problems faced in disclosing human capital information (p = 0.067).

| | Mean | value | t-test | | |
|----------------------------|------------------|----------------------|--------|----------------|--|
| Variable | GLC companies | Non-GLC companies | т | Sig (2-tailed) | |
| Problem faced by companies | 3.0167 | 2.9762 | 0.141 | 0.067 | |

Table 12: t - Test for Problems Likely Faced by Companies

Summary and Discussions

The purpose of the present study is to examine the motivation and nature of voluntary HCR and to identify the problems associated with disclosure level faced by public listed companies in Malaysia. The importance of disclosure on human capital items seems to be captured and portrayed accordingly in the annual reports by all companies. The findings show that out of the 29 items of human capital identified, 14 items are being reported by all companies, and only 4 items are not captured by any of the top 20 listed companies. Information on "working environment" represents the most reported item by both sentence and narrative text count, followed by "employee's involvement in the community" as a second highest reported item.

As far as the industry is concerned, the trading and services companies appear to record the highest number of sentence count and narrative text unit compared to companies in other industries. The result also reveals that the highest frequency of all themes is reported by the finance industry. The finding shows that most companies provide their human capital reporting in historical dimension, non-quantitative of narrative description with non-financial orientation. Although all the top 20 listed companies report their human capital items in annual reports in all five themes, the finding suggests that each company does not demonstrate in the similar manner the extent of HCR.

From the survey, the most reported items of human capital are "health and safety of employees" and "employee's involvement in the community". The results are inconsistent with the outcome of the content analysis. The results also show that reputation and image are the main factors that motivate companies to provide information related to "health and safety of employees" and "employee's involvement in the community". The problems of disclosure are ranked according to their average score whereby the most likely problem faced by GLC companies is conflict with confidentiality, whereas lack of understanding of the information needed and expectation of capital market is a likely problem faced by Non-GLC companies in order to select the human capital resources that should be disclosed.

The findings of the present study are subject to some limitations that provide initiatives for future research. The present study, for example, focuses only on the top 20 public listed companies and is limited to one year period of study. Despite its limitations, the present study makes several contributions. The findings of the study identify preparer's motivation, promote better understanding of current HCR practices by Malaysian companies and provide better input for users to identify the importance placed on the selected human capital information in annual reports. In addition, the study provides a framework for examining the motivation that may influence human capital reporting, which would promote companies to report on their human capital resources to shareholders and stakeholders. This will result in better investment and strategic decisions. Future research could use in-depth case study to comprehensively investigate the differences in the nature and level of HCR. With the significance of new economy, it is important to establish an understanding of the development of human capital reporting practices in Malaysia, particularly when considering that disclosure on human capital would reflect the capacity and competitiveness of a company which would lead to an increase in the value of the company.

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Appendix 1

| No. | Disclosure items | | |
|-----|-------------------------------------------------|--|--|
| | Theme 1: Employee's breakdown | | |
| 1 | Number of employees. | | |
| 2 | Number of employees in different positions. | | |
| 3 | Equity issues: race, gender and religion. | | |
| 4 | Qualification of employees. | | |
| 5 | Employees' entrepreneur spirit and teamwork | | |
| 6 | Employees' capabilities and abilities. | | |
| | Theme 2: Employee's health and job satisfaction | | |

| | · |
|----|-------------------------------------------------------------------------------|
| 7 | Rate of employee's turnover. |
| 8 | Comments on changes in the number of employees. |
| 9 | Work environment. |
| 10 | The importance of human resource to the organisation. |
| 11 | Management-employee's relationship. |
| 12 | Health and safety of employees. |
| 13 | Employees' satisfaction. |
| | Theme 3: Education, training and development |
| 14 | Management's commitment and concern for effective human resource development. |
| 15 | Statement of policy on competent training and development programs. |
| 16 | Training, education and other efforts for human resource development. |
| 17 | Expenses related to employee. |
| 18 | Expenses related to education, training and development. |
| 19 | Average hours of training and development. |
| 20 | Facilities /benefits provided to employees or employees' welfare. |
| 21 | Annual recruitment. |
| 22 | Employee's incentive program. |
| 23 | Remuneration system. |
| 24 | Career opportunities. |
| 25 | Awards/rewards for good performance / best practices. |
| 26 | Recruitment policies. |
| 27 | Employees' evaluation system. |
| | Theme 5: Employee's relation |
| 28 | Employee's involvement in the community. |
| 29 | Appreciation towards employees' |
| | |