

INTELLECTUAL CAPITAL DISCLOSURE: THE FUNCTION AND LEVEL OF DISCLOSURE

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Abstract: *In this knowledge-driven economy, the users would like companies to be more transparent by providing more information on the investment of intellectual capital. Intellectual capital able to bring positive values and superior performance to the firms, thus the stakeholders demand for more information on how the intellectual capital has been invested and managed. As a result, most of the companies are calling for a voluntary disclosure of their intellectual capital which can create a value in the future. This conceptual paper discussed an overview of intellectual capital disclosure which provide relevant information for the user. The paper focuses on first, the level of intellectual capital disclosure and second, the effects of intellectual capital disclosure on firm performance.*

Keywords: *Intellectual Capital Disclosure, Level of Disclosure*

Introduction

Globally, there is an increasing demand of greater transparency in disclosing the intellectual capital information in the market place. This is because the intellectual capital information is crucially important to investors and stakeholders in which they can effectively and properly assess the value of a company's intellectual capital (Muttakin, Khan & Belal 2015). As a set of knowledge-bearing intellectual resources, intellectual capital requires effective management to enhance the value creation of the firms as well as attaining superior performance (Cohen & Kaimenakis 2007). Overall, intellectual capital are the intangible assets that are not explicitly reported on a firm's financial statement but able to bring positive effects towards firm performance (Wang, Sharma, & Darvey 2016).

Intellectual capital can be split into different categories with three major underlying intellectual capital known as human capital, structural capital and relational capital. Human capital covers knowledge that is provided by employees in the form of commitment, motivation and loyalty as well as advice or tips (Van der Meer-Kooistra & Zijlstra, 2001). This knowledge is brought into the firm by the employee and it can be earned through experience and education. Structural capital contains both the organizational and technological elements that pursue integration and coordination within the firm (Ramezan, 2011). It is consisting of a wide range of patents, concepts, models, and computer and administrative system that are created by the employees and there are generally owned by the firm as opportunities and instruments that serve the exchange and documentation of the knowledge. Relational capital is valuable knowledge that is composed of resources linked to the external relationship of the firm with customers, suppliers, creditors, networks, strategic alliances, and distribution channels (Ramezan, 2011). The satisfaction of external parties of the company is important as it could maintain the business relationship and directly improve the company's prestige and increase the company's sales.

The increase in intellectual capital disclosure is due to the fact that global trade has gradually changed to an increase demand for greater transparency for non-financial information in the market place. In a knowledge-based economy, the source of companies' economic value are no longer depends on the production of material goods but on the creation and manipulation of intellectual capital (Guthrie, Petty, Yongvanich, & Ricceri, 2004; Mouritsen, Bukh, & Marr, 2005; Ozkan, Cakan & Kayacan 2017). Therefore, this information represents an approach that can be used by related parties to measure intangible assets and to describe the results of a company's knowledge-based activities.

Previous studies have investigated the determinants of intellectual capital disclosure. Goh and Lim (2004) conducted a study on the annual report of the top 20 profit-making public listed companies in Malaysia. They found that an increasing awareness of the significance of intellectual capital disclosure has increased the competitive advantage of companies. This is because the Third Outline Perspective Plan (OPP3) which incorporates the National Knowledge Economy Master Plan was released by the Malaysian government in 2001. The plan emphasizes on the needs to increase the knowledge resources in all the activities in order to strengthen the country's competitive position. Therefore, companies have begun to realize the importance of intellectual capital in improving their business.

Abeysekera and Guthrie (2005) who studied the top 30 listed companies in Sri Lanka argue that the increased in intellectual capital disclosure is due to the recent amendments made to the Code of Intellectual Capital Property Act 1979. This act identifies technology as a major trusted area and it provides an incentive to the technologically-based industries. Such environment may encourage firms to report more of their intellectual capital. On the other hand, Petty et al. (2008) made a questionnaire survey on the professional accounting in Hong Kong in 2004. Their study reveals that the companies are more transparent in respect to their intellectual capital as compared to 10 years ago. Besides, the respondents believed that a greater intellectual capital disclosure would be rewarded with an increase in the companies' share.

Function of IC disclosure

Detailed information on the intellectual asset provided by an organization could give relevant internal information to the company's management (Mouritsen, Bukh, & Marr, 2004; Van der Meer-Kooistra & M.Zijlstra, 2001). This intellectual capital information might be used by

management in monitoring the implementation (indicator), and also to further develop the company's knowledge-based strategy (Mouritsen et al., 2004). An example of a knowledge-based strategy includes planned action that will result in giving a crucial competitive edge to an organization such as low costs, nice products or services and regional presence. Through the indicator, it enables the management to take wise actions to change the current strategy to a new one (Mouritsen et al., 2004) as well as looking at other aspects that need more attention (Van der Meer-Kooistra & M.Zijlstra, 2001). A study done by Mohd Saleh, Hassan, Jaafar, and Abdul Shukor (2010) found that the intellectual capital information is a tool that can be used by management to look in depth and to be used as a follow up method for stage evaluation of its intellectual capital.

Besides functioning as a management tool in developing a specific strategy, the intellectual capital disclosure is also constructive as external information for stakeholders such as investors, partners and clients (Mouritsen et al., 2004). By putting extra focus on its employees, relationship with clients and partners, this intellectual capital could effectively gauge the work efficiency by the respective parties within the company. Besides making a company more attractive for investors, future partners, clients as well as to the employees, this information helps them to assess a company's potential for future earnings.

Failure to provide relevant information on intellectual capital externally may lead to the deterioration of the company's financial position and loss of competitiveness in the long run (Brüggen et al., 2009). It might happen when the potential investor fails in valuing the company's worth due to restriction of these knowledge resources. Lack of reporting on intellectual capital externally will result in lack of information to investors on the development of a company's intangible resources. As a consequence, it makes the investors' perception of risk higher. Companies with large intellectual capital resources may have problems in finding funds on attractive conditions, as lack of information about investment in intellectual capital could lead to an underestimation of future earnings (Van der Meer-Kooistra & Zijlstra, 2001).

Unfortunately, some companies are reluctant to disclose their intellectual capital to external stakeholders. This is because they are afraid of disclosing too much intellectual capital information to the outsiders because this would give an insight into their competitive advantages and can possibly signal the weak aspects of the organization (Vergauwen & van Alem, 2005; Yi & Davey, 2010). Van der Meer-Kooistra and Zijlstra, (2001) found that a company reluctant to disclose externally because by offering more information on the intellectual capital it can be interpreted by a financial analyst as a sign of strength as compared to the competitors, and also it is a sign of commitment of a company's management to realise its goals.

The level of intellectual capital disclosure

Prior research has proved that intellectual capital disclosure has gained importance in recent years. The studies done by Kamath (2017) in India, Oliveras, Gowthorpe, Kasperskaya, and Perramon (2008) in Spain, Cordazzo (2007) in Italy, Vandemaele, Vergauwen, and Smits (2005) in The Netherland, Sweden and the UK, and Campbell and Abdul Rahman (2010) in Marks & Spencer Company have shown that the level of intellectual capital disclosure has significantly increased.

The recent study of Kamath (2017) on intellectual capital disclosure on 200 firms in India found that disclosure level increase with market capitalization in two period, 2010-2011 and 2013-2014. The publicly listed companies in 12 industries were categorized into well- diversified, mid-cap and small-cap. For the well-diversified firms, external capital disclosure increase significantly as compared to human capital and organizational capital. Meanwhile, human capital and external capital disclosure in mid-cap firm increase significantly and lastly, small-cap firms witness the fastest increasing disclosure level among all the categories.

Oliveras et al. (2008), which looked at content analysis on the annual reports of 12 large listed companies in Spain, shows that the volume of intellectual capital disclosure over a 3 years period (2000 -2002) has significantly increased. They found that, the total number of intellectual capital disclosure had increased from 3,406 observations in 2000 to 6,095 observations in 2002. This increase in disclosure is due to the change of Spain as a knowledge-based economy.

Furthermore, Cordazzo (2007) also discovered that intellectual capital disclosure in the Italian IPO prospectus has increased over the years from 1999 to 2002. This finding seems to suggest that managers believe that this information is important in the valuation of their firms by the capital market. This is similar to Vandemaele et al. (2005) who investigated the intellectual capital disclosure in the years 1998, 2000 and 2002 on the 20 greatest market capitalizations for three different countries (The Netherland, Sweden and UK). By using sentences as the recording unit (0 for no intellectual capital information, 1 for providing qualitative information, and 2 for providing quantitative), they found that there were an increasing trend of the intellectual capital disclosure for the respective year. It has proven that intellectual capital has become an important tool to share the companies' knowledge resources with the outsiders.

In addition, Campbell and Abdul Rahman (2010) examined the intellectual capital disclosure of Marks & Spencer's annual report over a 31 year period from 1978 to 2008. It shows that the company had disclosed about 33 numbers of text themes intellectual capital in 1978. Then, the total number of text was increased to 131 in 1988, 163 in 1998 and 256 in 2008. They found that there is a significant increase in the number of textual clauses devoted to intellectual capital disclosure over time and a marked increase over the previous level since the late 1990s. They argued that as the structure of economies change it is reflected in the intellectual capital reporting and this annual reporting will change according to the users' needs in future.

In contrast, previous studies have also shown that the level of intellectual capital disclosure in the annual report is relatively low. Such disclosures are found in the studies done by Bontis (2003) in Canada, Brennan (2001) in Ireland, Yau, Chun, and Balaraman (2009) in Malaysia, and Yi and Davey (2010) in China.

Yi and Davey (2010) who studied on Chinese companies' annual report for the year 2006 found that the level of intellectual capital disclosure is not too high. It shows that the average number of intellectual capital attributes per company was at 9.08 from the total score of 16. Also, Yau et al. (2009) found that the extent and nature of voluntary intellectual capital disclosure of public listed companies in Malaysia was low in 2003. Both studies argue that this low level of intellectual capital disclosure is due to the low level of awareness of the important intellectual capital information and there is no established and generally accepted framework to the quantity of the intellectual capital information.

Brennan (2001) also found that the level of disclosure of intellectual capital attributes by 11 Ireland listed companies in 1999 was low. This is because the Irish companies make only a little progress in measuring intellectual capital and hence, seems to be little interest and demand for improvement in the measuring and accounting of the intellectual capital assets. Bontis (2003) who made a study on content analysis of 10,000 Canadian corporations' annual report found that a list of intellectual capital related terms yielded a significantly small number of disclosures. He argues that the corporations are generally concerned about their relationship with the capital market and because of this have develop a strategic and tactical initiative for a voluntary disclosure of the intellectual capital. However, these initiatives may initially be used for internal management purposes only and intellectual capital report to stakeholders- focus is not likely as their main goal.

Some prior researches were conducted to investigate the level of intellectual capital disclosure among the Government-Linked Companies (GLCs). Firer and Williams (2005) found that the Singapore's GLCs are likely to disclose more of their voluntary intellectual capital information than the Non-GLCs. They argue that this finding is support the senior government official and the board may directly or indirectly influence the disclosure policies in support of the initiatives by government policies. Besides, Yau et al. (2009) also found that the Malaysian GLCs are more extensive in their overall intellectual capital disclosure so as to meet the investors and stakeholders' expectations. These expectations are in terms of greater transparency and compliance to the expected role of good corporate management that develops the nature of intellectual capital for future success with argument that the politically sensitive companies would use more extensive voluntary disclosure policy to improve investors' relationship and reduce political cost.

The effects of intellectual capital disclosure on firm performance

According to Chen, Cheng, and Hwang (2005) and Ramezan (2011) intellectual capital has a positive impact on market value and financial performance. This finding shows that the investors place a higher value for a firm that has better intellectual capital efficiency, because firms with better intellectual capital efficiency yield greater profitability and revenue growth. Orens, Aerts, and Lybaert (2009) found that a greater intellectual capital disclosure in continental Europe is associated with lower information asymmetry, lower cost of equity and lower rate of interest paid. They argue that this finding proves that the financial analysts and investors use intellectual capital information to support their investment decision. They use intellectual capital information to add value to the financial statement information in order to assess the firm's value and its future profitability. A similar study done by Petty, Ricceri, & Guthrie (2008) found that 91% out of the total respondents of financial professionals in Hong Kong use intellectual capital reports in making decision externalities. The respondents want the companies to be more transparent and to provide more information on their intellectual capital so that they can make a wise decision.

According to Brüggen, Vergauwen, and Dao (2009), the company can publicly provide evidence about their true values and their wealth creation capabilities by disclosing intellectual capital information, which in turn may enhance the company's reputation. Arvidsson (2011) who used questionnaire survey on investors-relation managers among the largest companies listed on the Stockholm Stock Exchange found that there was a significant increase of the non-financial information which is related to the intellectual assets in a corporate disclosure. The

reason for disclosing these knowledge resources to outsiders is to explain the role of intangible assets in the value-creation process and their links with corporate strategy. Besides, Abeysekera and Guthrie (2005) studied 30 top listed firms in the Colombo Stock Exchange and they found that the firm disclosed their corporate image as promoting their firm's value. They also appear to promote their image indirectly as a responsible corporate citizen by taking care of the community and the environment.

In addition, Williams (2001) and Sonnier, Carson and Carson (2009) found that the amount of intellectual capital disclosure is reduced when the intellectual capital performance is too high. This negative association may support the suggestion that a firm reduces its intellectual capital disclosure when its performance reaches a threshold level for fear of losing the competitive advantage. For example, the high level of intellectual capital performance achieved by a firm may have resulted from creativity and innovations introduced by key employees. If a firm discloses its intellectual capital success, a competitor would take this as a signal to entice the employees of the firm into changing their employer. Similarly Bozzolan, Favotto, and Ricceri (2003) also found that although managers would like to offer additional relevant or useful information to the public, they are concerned about the risk of such information being used by their competitors. Either by having a poor intellectual capital base or a good one, managers will encounter risks. If a company has a poor intellectual capital base, the disclosure may have a negative effect on its reputation in the capital market, as it may be perceived as an unsuccessful actor in the knowledge-based economy.

Conclusion

Many firms and even countries have now changed their basic principles of strategy by focusing more on the investment in intellectual capital in order to reposition them in the knowledge-based economy. As a result, most of the companies are calling for a voluntary disclosure of these knowledge-based resources. This is because organizations believe that they have provide the relevant information for managers, investors and stakeholders in understanding how their resources, many of which is intellectual capital which can create a value in the future. Previous studies have found that the level of intellectual capital disclosure is increase. Thus, the scenario indicates the awareness of the firms on the importance of disclosing their intangible assets that can offer advantages not only to the firms but to the stakeholders as well.

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