The Comparison of Intellectual Capital Disclosure: Evidence from Pharmaceutical Company in Southest Asian Countries

Sigit Hermawan
Fakultas Ekonomi dan Bisnis
Universitas Muhammadiyah Sidoarjo
Sidoarjo, Indonesia
sigithermawan@umsida.ac.id

Lia Debby Milanetty
Fakultas Ekonomi dan Bisnis
Universitas Muhammadiyah Sidoarjo
Sidoarjo, Indonesia

Abstract—**Intellectual Capital is very important for the company, yet has not widely known and widely utilized alsoits disclosure in the financial statements. This study aimed to analyze the disclosure of intellectual capital on a pharmaceutical company in Indonesia, Malaysia, and Singapore. This study used qualitative analysis technique by using content analysisand also the grounded theoryresearch. The results of this study stated that each company has made intellectual capitaldisclosurein the annual report. The disclosure of intellectual capital category on pharmaceutical company in Indonesia, Malaysia and Singapore is more into the structural capitalcategory.Although every company recognizes that human resources is an important resource for the company, but this is not supported by the disclosure in the annual report. While the pattern of disclosure of intellectual capital, companies tend to disclose intellectual capital in the form of discursive.**

Keywords--intellectual capital; content analysis; intellectual capital disclosure; pharmaceutical company

I. INTRODUCTION

Intellectual Capital Disclosure (ICD) is very important for company for ICD is closely related to the problem of the relationship between companies and stakeholders. The market will improve liquidity if the company is able to express widespread intellectual capital [1]. Companies also receive extensive benefits if it is able to manage IC well as IC affect performance, competitiveness, and prosperity of the company [2]..

IC significance for the company have been widely demonstrated through research and empirical results in the company. But the significance of the IC is not yet widely known and utilized by the managers of the company. Research of [3] states that the managers of pharmaceutical companies in Indonesia not many know

the IC component, not many take advantage of, and do not know how to manage.

Meanwhile, the IC is interpreted differently by many experts. However, [4] states that the IC as the value of the company derived from the efforts that have been made to estimate the value of the company's knowledge. According [5] also divided the IC divided into three elements, namely Human Capital, Structural Capital and Relational Capital. Another meaning of IC is expressed by [6], namely the differences between the market value of businesses with tangible assets. Furthermore, [7] states that the IC is a group of assets associated with the organization's knowledge and significantly contribute to the organization's competitive position by adding key factors owned by stakeholders.

II. INTELLECTUAL CAPITAL DISCLOSURE

If the IC is a major component of intangible assets, while the ICD is how companies disclose IC in the financial statements. According to [8], ICD can be divided into three points of view, namely evidence category, news category and time orientation category. The evidence category (evidence) consists of discontinuities, numbers, monetary, and visual. While the news category (news tenor), is divided into positive, neutral, and negative. And the last is the time orientation category (time orientation) which is divided into a future orientation, the past orientation, and the unspecific time.

In connection with the ICD has been discussed, the purpose of this study was to analyze ICD pharmaceutical company in Southeast Asian countries. Selection of pharmaceutical companies as an object of research for pharmaceutical companies included in the category of high-IC intensive companies are widely used IC element in the process of strategy development and also the company's operations [9]. The Southeast Asian countries which become the object of this study are Indonesia, Malaysia, and Singapore.

III. RESEARCH METHODS

This study used content analysis method [10] and qualitative method [11]. The main purpose of the use of content analysis is to investigate the information analyst or importance of the various types of information. The use of qualitative methods is conducted by the descriptive data in the form of written words of a document or annual report of the company. Data used is a secondary data that is the annual report data of the company. The method used is content analysis to perform calculations using the phrase or word as a unit of context. In this research line method provides a starting point for the use of the phrase as the unit of analysis and includes charts, tables, and photographs into a sentence to be calculated [12].

Each sentence containing ICD assessed or considered as a form of intellectual capital expression which are then identified based on the main IC components i.e. human capital, structural capital and relational capital, and classify each word, phrase, graphics and images into the point of view of intellectual capital disclosure , namely the evidence category, news category, and time orientation category [13]. The more sentences related to IC presented the company, the better quality of the ICD.

This research used the secondary data in the form of pharmaceutical company's annual report registered on Indonesia Stock Exchange (BEI), Bursa Malaysia and Singapore Stock Exchange. This secondary data obtained via the Internet, which is accessed through the BEI documentation www.idx.co.id, Bursa Malaysia is accessible through www.bursamalaysia.com and Singapore Stock Exchange that accessed through www.sgx.com as well as research database that can be accessed through the company website. The nameof pharmaceutical companies understudy namely from Indonesia are PT. Merck TBK, PT.Tempo Scan Pacific TBK, PT. Indofarma Tbk, PT. Kimia Farma (Persero) Tbk, and PT. Kalbe Farma TBK. For pharmaceutical companies from Malaysia are Caring Pharmacy Group Berhad, CCM Duopharma Biotech Berhad, Hovid Berhad, Kotra Industries Berhad, and Pharmaniaga Berhad. For the pharmaceutical companies from Singapore are Eu Yan Sang International Ltd., Haw Par Corporation Ltd., Pharmesis International Ltd., Star Pharmaceutical Ltd., and Tianjin ZhongXin Pharmaceutical Group Co., Ltd. Data analysis techniques used in this study is content analysis method.

IV. RESULTS AND DISCUSSION

The results of this study were divided into several sections. The first is about the IC category, which consists of HC, SC, and RC. The second is about the pattern of IC disclosure, which consists of evidence category, time orientation category, and the news category.The explanationsare as follows:

1. Intellectual Capital Category

TABLE 1. COMPARISON OF IC DISCLOSURE CATEGORIES

Category IC / Country	Indonesia		Malaysia		Singapore	
	amount	%	Amount	%	amount	%
Human Capital	588	72%	97	12%	127	16%
Structural Capital	1,045	43%	480	20%	916	37%
Relational Capital	762	61%	249	20%	242	19%

Source: Processed Data

Based on Table 1 it can be seen that for the category of HC disclosure, pharmaceutical companies in Indonesia more than 72% compared to Singapore by 16%, and Malaysia by 12%. Pharmaceutical companies in Indonesia are exposing the human capital in sub-category of training and development, employee safety, employee relations and employee measurement. While pharmaceutical companies in Malaysia and Singapore in human capital revealed only at the sub-category of training and development.

Furthermore, for the category of SC disclosure, pharmaceutical companies in Indonesia are also having more disclosure by 43% compared to Singapore (37%), and Malaysia (20%). This is because pharmaceutical companies in Indonesia are more often in disclose the structural capital. However, either pharmaceutical company in Indonesia, Malaysia and Singapore disclose the structural capital in the sub-category of management process, technology process, information systems, management philosophy, corporate culture, and financial relations.

For the disclosure of RC category, pharmaceutical companies in Indonesia also more disclose RC by 61% compared to the pharmaceutical companies in Malaysia (20%) and Singapore (19%). This is because pharmaceutical companies in Indonesia are more frequent in expressing relational capital than pharmaceutical companies in Malaysia and Singapore. However, the pharmaceutical companies in Indonesia, Malaysia and Singapore have disclose the relational capital almost in all sub category, namely builds a brand, build corporate image, business partners, distribution channel, and market share.

Meanwhile, based on Table 1 also can be seen that the pharmaceutical companies of Indonesia, Malaysia, and Singapore having more disclose IC in the category of structural capital.This is because the annual report analyzed a lot of discuss the operations of the company during the period which can be associated with several sub categories of structural capital. In annual report, every company recognizes that human resources are a very important resource for the company. However, the lack of disclosure of the human capital shows that the statement is not supported by the recognition of the company. It is evident that the company is

more often revealed structural capital and relational capital than human capital.

2. The Pattern of Intellectual Capital Disclosures

TABLE 2 INTELLECTUAL CAPITAL DISCLOSURE CATEGORY (in item disclosure)

Category	Indonesia	Malaysia	Singapore
A. Evidence			
1. Discursive	1,807	985	1,888
2. Numerical	207	93	140
3. Monetary	234	129	314
4. Visuals	451	109	245
B. Time Orientation			
1. Forward Looking	69	58	59
2. Past Oriented	85	71	98
C. News			
1. Positive	136	70	110
2. Negative	20	10	12
3. Neutral	584	111	302

Source: Data Processed

Based on Table 2 can be seen on IC disclosure categories are divided into three, namely evidence, time orientation, and news categories. Based on Table 2 above, for evidence category, the pharmaceutical companies in Indonesia, Malaysia, and Singapore more used the discursive expression patterns (non-numerical) or description of any intellectual capital with words and sentences. This is because, the disclosure of intellectual capital in the annual report, is mostly done by describing every bit of information. Furthermore, in the form of monetary (numerical), the pharmaceutical company in Malaysia, and Singapore and disclosures in visual form in the last position. While pharmaceutical companies in Indonesia in the disclosure of intellectual capital more used discursive and visual patterns.

For time category (Time Orientation Category) the pharmaceutical companies of Indonesia, Malaysia, and Singapore more used past oriented form in expressing IC. This is because the report is a report on the annual the company's performance reporting such period. Thus**,** any report either in the form of intellectual capital or financial statements is a historical description. Although the annual report is a historical description, but in the annual report also contains information about plans for the future of the company, targets to be achieved in the next few years, and optimism in the next year, so the company also disclose the intellectual capital in the form of forward looking.

For the category of news *(News Tenor Category),* in expressing the intellectual capital, the pharmaceutical companies in Indonesia, Malaysia and Singapore are equally many express to in the neutral category. This is because

in the annual report matters related to intellectual capital, companies tend to report it as information only. While positive value is the form of company effort in showing optimism and to maintain good corporate image. Nevertheless, the company continued to show deficiencies in the disclosure of intellectual capital though the reasons of external company.

Based on analysis of existing data, pharmaceutical companies in Indonesia, Malaysia and Singapore have disclosed IC. Although presented with different patterns of disclosure. In the category of IC, companies either from Indonesia, Malaysia and Singapore are further highlight SC compared with RC or HC. The company disclosed SC on sub category management process and technology process, information systems, philosophy and culture, and financial relations. After SC, many companies express IC into RC category. All pharmaceutical companies in Indonesia, Malaysia, and Singapore disclosed all sub category RC, namely to build brand, establish a corporate image, business partners, distribution channels, and share market.

Although each company recognizes that human resources are an important resource for the company, this statement is not proven by the company. Companies tend to be more often disclosed SC and RC compared with HC. However, the pharmaceutical companies in Indonesia, in expressing HC are more varied than pharmaceutical companies in Malaysia and Singapore. The pharmaceutical companies in Indonesia expressed HC on sub-category of training and development, employee safety, employee relations, and employee measurement. While pharmaceutical companies in Malaysia and Singapore only expressed HC on sub-category of training and development.

Meanwhile, on the pattern of IC disclosure in the category of evidence either the companies in Indonesia, Malaysia and Singapore at the moment disclosed IC more into discursive forms (non-numerical). In pharmaceutical companies in Malaysia and Singapore the form of disclosure in sub-category of monetary (numerical), came in second place, and form of visual expression in the last position. While in Indonesia disclosures in visual form occupies the second position after the discursive (non-numerical), while the monetary and numerical form were in third and fourth positions.

On the pattern of IC disclosure in the category of time orientation, the pharmaceutical companies both in Indonesia, Malaysia, and Singapore, most exposing the IC in the form of past-oriented. This is because in the annual report, company tends disclosed the results of company performance in the current period so the data disclosed in the annual report is a historical data. Nevertheless, the company continues to describe the plan and optimism in the future of company so the company also disclosed IC into the forward looking sub-category. On the pattern of IC disclosure in news category, the pharmaceutical companies both in Indonesia, Malaysia, and Singapore express in neutral category, because each IC disclosed by the company is worth

informative. While the positive value in the second position, this is a company's effort in showing optimism and to maintain good corporate image. Nevertheless, the company still showed deficiencies in the IC disclosure, although the reason is from the company's external.

In connection with these results stating that the pharmaceutical companies in Indonesia, Malaysia, and Singapore have disclosed IC in various categories. In this study disclosed that many pharmaceutical companies in the three countries reveals IC activities such as those in Tables 1 and 2. By the disclosure of IC which conducted by pharmaceutical companies in the three countries, it shows about the significance of IC activity for increased performance, competitiveness, and prosperity. It supports the study conducted by [14] and [15]. With the disclosure of the IC by pharmaceutical companies strongly support the theory of signal (signaling theory) where the company has a high quality company that can provide a good signal to the market [16]. IC activity disclosed in the annual report will provide full information to analysts so that the stock market will give a good signal to the market. In addition to supporting the signaling theory, IC disclosure also supports the stakeholders theory. Because the IC disclosure in the annual report will provide information to the company's stakeholders on how intangible assets are managed and provide increased earnings and value to the company.

Further relevant results of this study on the pattern of disclosure of the IC, has similarities with the research of [17] conducted in large companies Australia and Hong Kong, as well as the study of [18] conducted in the banking companies listed on the Stock Exchange. The equation is that most companies have yet to implement a systematic framework in expressing IC in annual report. The disclosure of IC performed mostly fall into the discursive category. It is also the case in this study, pharmaceutical companies in Indonesia, Malaysia, and Singapore has not shown any systematic use of the framework in the IC report. In addition to the annual report from the pharmaceutical companies in Indonesia, Malaysia, and Singapore who studied mostly also provides information on the IC in the form of discursive.

Meanwhile, according to the results of this study, the pharmaceutical companies in Indonesia, Malaysia, and Singapore, have conducted a pattern of IC disclosure. This pattern is formed based on the number of IC disclosure on the components in the annual report. In this study showed the certain patterns in the disclosure of IC. This pattern is evident from the disclosure of IC which is found in most pharmaceutical companies in detail. These patterns are as follows, the IC component most disclosures on all pharmaceutical companies are present at SC. In the evidence category the disclosure of IC the most are on the discursive category, while the numerical and monetary are in the second or third position and visually be the last for pharmaceutical company in Malaysia and Singapore. While in the Indonesian pharmaceutical company, the visual category is at the second position, and monetary and numerical categories were in third or

fourth position. In the news tenor category or reporting categories, the disclosure largest in neutral category, then the positive category and the last is the negative category. While at the time orientation category the most disclosures of intellectual capital is in category of past oriented.

V. CONCLUSION

Based on the results of the study concluded that all annual report published by the pharmaceutical company in Indonesia, Malaysia, as well Singapore all has disclose of IC, but with various portions and patterns of disclosure. For IC category, the company more disclose in the form of SC than any other category. Although companies recognize that human resources are an important resource, but the disclosure of which is relatively small compared with the SC. On the ICD pattern, in the evidence category, many companies disclose IC in the form of discursive than the other subcategory. On ICD pattern in news category, many companies disclose IC into neutral sub-category. However, the company also does little disclosure into positive sub-category. It aims to maintain good corporate image. In ICD pattern in the category of time orientation, companies tend to disclose to the past oriented. However, the company also revealed the intellectual capital in the form of forward looking, but the disclosure of which is less than the past oriented.

ACKNOWLEDGMENT

REFERENCES

[1] Bruggen, A., P Vergauwen., and M Dao. 2009. Determinants of Intellectual Capital Disclosure : Evidence From Australia. *Journal of Intellectual Capital*. Vol: 47. 2. 233-245.

[2] Hermawan, S., dan U.I. Mardiyanti. 2016. Intellectual Capital dan Kinerja Keuangan Perusahaan Manufaktur High IC Intensive. *BENEFIT, Jurnal Manajemen dan Bisnis*. Universitas Muhammadiyah Surakarta. Vol 1 No 1.

[3] Hermawan, S. 2015. The Meaning of Role, Management, and Key Component Identification Intellectual Capital In Pharmacy Company. *Proceeding of 2rd International Conference For Emerging Markets*. Bali, Januari 22 – 23.

[4] Bontis, N. 2001. Assessing Knowledge Assets: a Review of the Models Used to Measure Intellectual Capital. *International Journal of technology Management*. Vol: 3 No. 1.

[5] Bontis, N., W. C. C. Keow, dan S. Richardson. 2000. Intellectual Capital and Business Performance in

Malaysian Industries. *Journal of Intellectual Capital* 1(1): 85-100

[6] The Chartered Institute of Management Accountants (CIMA). 2005. Understanding Corporate Value : Managing dan Reporting Intellectual Capital. *www.cimaglobal.com*.

[7] Marr, B., dan G. Schiuma. 2001. Measuring and and Managing Intellectual Capital and Knowledge Assets in New Economy Organizations. *Handbook of Performance Measurement.* Edisi Internasional. Gee. London.

[8] Abhayawansa, S. 2011. A Methodology for Investigating Intellectual Capital Information in Analyst Report. *Journal of Intellectual Capital.* Vol: 12. 3. 446-476.

[9] Woodcock, J. and R. H. Whiting. 2009. "Intellectual Capital Disclosure by Australian Companies". *Paper accepted for presentation at the* AFAANZ *Conference*, Adelaide, Australia. Juli 2009.

[10] Emzir. 2010. Metodologi Penelitian Kualitatif: Analisis Data. Jakarta, PT. Raja Grafindo Persada.

[11] Hermawan, S. and Amirullah. 2016. Metode Penelitian Bisnis. Pendekatan Kuantitatif dan Kualitatif. Penerbit Media Nusa Creatif

[12] Beattie, V. and J. Thomson. 2007. Lifting The Lid on The Use of Content Analysis to Investigate Intellectual Capital Disclosure. *Accounting Forum.* Vol: 31. 2. 129-163.

[13] Abhayawansa, S. 2011. *A Methodology for Investigating Intellectual Capital Information in Analyst Report. Journal of Intellectual Capital.* Vol: 12. 3. 446 - 476.

[14] Hermawan, S. 2013. Makna Intellectual Capital Perspektif The Role Theory dan The Resource Based Theory. *Jurnal EKUITAS*, STIESIA Surabaya, Vol 17 No 2.

[15] Hermawan, S., dan S. Herlina. 2013. Studi Interpretif Identifikasi dan Interaksi *Intellectual Capital* Terhadap Kinerja Perusahaan. *Jurnal Reviu Akuntansi dan Keuangan FEB Akuntansi Universitas Muhammadiyah Malang* 3(1): 335-347.

[16] Kamath, G.B. 2014. A Theoretical Framework for Intellectual Capital Disclosure. *Pacific Business Review International.* Volume 6, Issue 8.

[17] Guthrie, J. and R. Petty. 2000. Intellectual Capital : Australian Annual Reporting Practices. *Journal of Intellectual Capital. Vol: 1. 3. 241-251.*

[18] Anggraini, Y. 2013. Pemetaan Pola Pengungkapan *Intellectual Capital* Perusahaan- Perusahaan Perbankan yang Terdaftar pada Bursa Efek Indonesia Periode 2011. Jurnal Ilmiah Mahasiswa Universitas Surabaya. Vol: 2. 2.