The Relationship between Human Capital, Relational Capital and Capital Structure in Encouraging Business Performance: A Study in Creative Industry of Batik Trusmi, Cirebon District, West Java, Indonesia

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Abstract---Aim the research is to test the level of relationship between Human Capital dan Relational Capital with Structure Capital dan Business Performance that develops the Batik creative industry in Trusmi in Cirebon District, West Java. The research respondents regarding business and workers in this industry sectors amounted to 10 creative industries with 10 employees each. The research method is survey, primary data sources with questionnaires, interviews and observations as a data collection tool on the object of analysis. Test data using the validity, reliability and classical assumptions test with product moment assessment analysis tools and determination. The results of the study indicate that the level of the relationship between; 1) Human Capital and low Category Capital Structure, 2) Human Capital and Financial Performance are very low, 3) Human Capital and Financial Performance are very low, 4) Human Capital and Optional Capital are strong category, 5) Working Capital and Very low financial performance, and 8) Capital structure and business performance are very low. Being able to separate from the levels built by dominant variables gives a low influence except between Capita Humans and Relational Capital giving strong ones.

Keywords---Human capital, Relational capital, Structure capital, Business performance dan industry creative

I. INTRODUCTION

The existence of creative industries in Indonesia is not as lucky as creative industries in other countries such as in Malaysia for example. This Malaysia industry contributes 1.27% of the country's income (Creative Industry Business Study, MDEC 2008) and is able to provide 0.4% or 45,031 jobs for the population of the country or equivalent to 10,890,000 workers in the sector out of the total population of 28.31,000 Creative Study, MDEC 2008). While the opportunities offered by this industry in developed countries such as UK 4.50%, Hong Kong 5.30%, United States 5.90 %%, Taiwan 3.60%, Australia 3.80% and Singapore 3.40% (Center for Hong Kong University's Culture Policy Research HD, Baseline Study on Hong Kong Creative Industries, 2013).

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In a company there are two categories of assets, namely Tangible Assets and Intangible Assets. In operation, the two assets have different characteristics according to their functions. Assets that are tangible will depend on intangible assets. Tangible Assets the functional level will be determined by how the Intangible Assets exist. In other words, the better intangible assets will have an impact on both tangible assets and vice versa. In a further context, Intellectual capital or IC is a knowledge capital owned by an organization or company that consists of three components, namely human capital (HC), structural capital or SC, and relational capital or RC (Sigit Hermawan, 2013: 1). Specialy IC is the most recognizable form of science and technology that is owned by the organization of every personal worker it has. As an intangible asset has advantages over tangible assets because of the ability of IC in moving physical and non-physical resources to achieve company goals. This means that if the Creative Industry has a good IC it will be able to manage information and science and technology by human capital (HC). Apart from that an industry has a work structure, procedures and good work systems to determine the direction of the company in achieving its objectives with structural capital (SC), and will also have good relations with internal and external parties of the company by having relationship capital (RC).

The business conditions of batik in Cirebon district, especially in Trusmi, have a pattern of development that combines traditional elements as a hereditary effort from generation to generation with modernization as an unavoidable demand of the times. This fact has a big influence in optimizing IC well, those who will be able to manage physical and non-physical resources will ultimately be able to improve the performance and competitiveness of the business. The opportunity to optimize IC is important to see such a big opportunity for Batik products that have been designated as authentic Indonesian products by UNESCO. But besides opportunities also a quite heavy challenge because of the flood of products Chinese batik (printing) with low prices and consumers find it difficult to distinguish it will make local Batik products (Cirebon) not sold in the market and will shut down the Batik Trusmi-Cirebon industry.

The importance of IC for creative industries is also supported by several studies, including in the study of Sigit Hermawan (2013) which found that the importance of IC in relation to the performance of creative industries, Cohen and Kaimenakis (2007) stated that IC management contributed positively to the performance of small and medium enterprises and Medium Sized Enterprises or SME's) in Greece. The results of the F-Jardon and Martos (2009) study on IC management in Argentina state that the dimensions of IC, namely structural capital, directly influence the performance of SME's existing wood in Argentina. While other dimensions such as human capital and relational capital indirectly influence through structural capital towards the performance of timber companies (SME's) in Argentina. The results of the two studies are also supported by the research of St-Pirre and Audet (2011) and Steenkamp and Kashyap (2010) which state that IC influences and is important for the performance of SME's. This study is an answer to the findings in the field regarding the above conditions, which will discuss Human Capital and Relational Capital in the Correlational Perspective with Structure Capital in encouraging Financial Performance. Apart from that, each dimension of the variable will also be analyzed about the performance of the batik creative industry from the perspective of financial and non-financial performance.

II. LITERATURE REVIEW

The role of IC in improving the business performance of the batik creative industry needs to get more special attention in an effort to answer consumer needs and win the competition. This variable contribution will have a very strong impact between 50% and 90% on value creation by the firm, while the value creation by the firm has an impact of 10% to 50% (Sigit Hermawan 2013: 2). By definition this IC can be explained from several literary sources as follows. The Society of Management Accountants of Canada (SMAC)define intellectual assets as follows: In balance sheet, intellectual knowledge-based items, which the company owns which will future stream of benefits for the company (IFAC 1998).

According to Sveiby (1998) "The invisible intangible part of the balance sheet can be classified as a family of three, individual competence, internal structural, and external structure ". Meanwhile Leif Edvinsson as quoted by Brinker (2000: np) equate intellectual capital as the sum of human capital, and structural capital (for example, relationships with consumers, technology networks information and management). According to Klein and Prusak "... we can define intellectual capital operationally as intellectual material that has been formalized, captured, and leveraged to produce a higher valued asset "(Stewart 1994). According to Sveiby (1998) "The invisible intangible part of the balance as classified sheet a family of three, individual competence, internal structural, and external structure ". Meanwhile Leif Edvinsson as quoted by Brinker (2000: np) equate intellectual capital as the sum of

human capital, and structural capital (for example, relationships with consumers, technology networks information and management).

Many management experts expressed the opinion that intellectual capital has three main components or elements (in Sigit Hermawan, 2013) such as Stewart 1998, Sveiby 1997, Saint-Onge 1996, Bontis, et al, 2000 namely:

1.Human Capital Human capital (HC) is a lifeblood in intellectual capital. Here is the source of innovation and improvement, but it is a component that is difficult to measure. Human capital is also a place to source very useful knowledge, skills, and competencies in an organization or company. HC reflects the collective ability of the company to produce the best solution based on the knowledge possessed by the people in the company. Human capital will increase if the company is able to use the knowledge possessed by its employees (Saudi, 2018). Moon and Kym (2006) provide examples that are included in the HC section are employee capabilities, employee satisfaction and employee sustainability. For employee sustainability this is important because it is related to the entry and exit of employees. Companies with high employee sustainability will be easier to achieve company goals because they are no longer confused with the entry and exit of employees. Whereas Chen et al (2004) and Sharabati et al (2010) add that employee creativity is also an important part of human capital.

2.Structural Capital or Organizational Capital (Organizational Capital) Structural capital (SC) is the ability of an organization or company to fulfill the company's routine processes and structures that support employees' efforts to produce optimal intellectual performance and overall business performance. For examples the company's operational systems, manufacturing processes, organizational culture, management philosophy and all forms of intellectual property owned by the company. Or according to Bontis (2001: 45) is everything that will be left in the office when employees go home. Meanwhile CIMA, 2005: 2, defines SC as knowledge within the company. It consists of organizational routines, procedures, systems, culture and databases. For example, organizational flexibility, documentation services, the existence of a knowledge center, the existence of a knowledge center, general use of information technology, and organizational learning capacity. SC can also be said or synchronized with Organizational Capital (OC). IFAC is one party that equates between SC and OC. According to IFAC (1998: 9), organizational capital (OC) includes organizational capabilities developed to meet market needs as well as patents. Thus every patent, trademark, management tool, improvisation technique, information technology system, or research and development business that is implemented or will be implemented Strategy and Business Journal, Vol 1 No. 2, October 2013 (pp. 98 - 115) ____ _____ to develop effectiveness and company profitability can be categorized in organizational (structural) capital.

SC also deals with efforts to build mechanisms and organizational structures that can help employees in an effort to optimize their intellectual performance and overall business performance. An individual can have high intelligence, but if his organization has bad systems and procedures, the intellectual capital that is owned in its entirety will not reach its full potential. An organization with a strong structural model will have a culture that supports and enables individuals to try many things, also to fail, learn and try again (Bontis, 1998: 66).

3.Relational Capital or Customer Capital Relational capital (RC) or customer capital (CC), including organizational relations with outside parties such as customer loyalty, goodwill, supplier relations (IFAC, 1998: 9), and relationships with community (Moon and Kym, 2006). Meanwhile CIMA (2005: 2) defines RC as all resources related to the company's external relations - with customers, suppliers, or partners in research and development. This is part of HC and SC that relates to company relations with stakeholders (investors, creditors, customers, suppliers), as well as their perceptions of the company. For example, image, customer loyalty, customer satisfaction, supplier relations, commercial strength, negotiating capacity with financial entities, and environmental activities. According to Bontis (1998: 67), the main theme of RC or CC is knowledge of marketing channels and relationships with customers. CC also presents potential things from the organization obtained from intangible assets that have passed. These intangible assets include knowledge that is embedded in customers, suppliers, government, or related industry associations. So the essence of CC is embedded knowledge related to external relations to the company. Some examples included in the dimensions of RC or CC are brands, customers, customer loyalty, company names, backlogs orders, distribution channels, business collaboration, licensing agreements, profitable contracts, franchise agreements (IFAC, 1998: 9), basic capabilities marketing, and market intensity (Chen et al., 2004), and relations with the community (Moon and Kym, 2006). Another example is given by Marr (2008: 2) that included in RC or CC are formal relationships, informal relationships, social networks, partnerships, alliances, brand images, trust,

company reputation, customer loyalty, customer agreements, license agreements, distribution agreement , and joint ventures.

Based on the theory above, the level of relations between dimensions in the variables studied can be modeled as follows:



Figure 1: Research Mind Framework

From the framework of the above research shows that intellectual capital has three dimensions, namely 1) human capital, 2) capital structure, and 3) relational capital that has correlational to the performance of the industry both financially and non-financially. Linkages between the dimensions of the actual variable capital in the three dimensions of performance can be explained in the paradigm as in figure 2.

Based on the research paradigm above, the context of this study aims to measure the level of correlation given by human capital, structural capital and relational capital to financial performance, nonfinancial performance and the performance of creative industries in the analysis of Trusmi batik center in Cirebon Regency. The importance of this research is to find out how strong the level of relations between intellectual capital and the performance of the batik creative industry in Sentra Batik Trusmi Cirebon Regency, which can be used as a basis for decision making for relevant parties in policy making, including the development of this creative industry in the future which will come.

III. RESEARCH METHODS

The research method used in this study is a Quantitative Method, which is a research method that can be counted in number with the help of statistical methods or tools. Cooper and Schindler (2008, p.164) impose that quantitative research is "Quantitative research attempts on precise measurement of something". Thus the quantitative method is a method that seeks to provide the right measurements. As the primary data this study was obtained from direct respondents, namely batik creative industry entrepreneurs in the Trusmi-Weru District, Cirebon Regency, using questionnaires, observations, while the secondary data was obtained from various sources such as other party research, books, references, laws and regulation from other relevant agencies, such as: UMKM Cooperative Office and Industrial Trade, West Java city BPS, Business Associations in West Java.



The population of this study were batik creative industry entrepreneurs spread in the Trusmi area (Trusmi Kulon, Trusmi Wetan, Kebon Asem, Blok Sibunder, and Panembahan), Weru District, Cirebon Regency. The number of entrepreneurs or batik artisans in all industrial and trade centers obtained from the Association of Batik Craftsmen and Entrepreneurs in Cirebon District stated that the number of batik entrepreneurs is not less than 500 artisans and 75 batik entrepreneurs. Taking into account the accuracy of data and business reality such as: 1) business continuity, 2) medium to large scale business, 3) ownership of large roadside show rooms / shops, 4) having permanent employees in accordance with Law No. 13 of 2003, 5) following the latest developments in information and technology, 6) owning and using virtual business media such as online shop, web et, and 7) managed / owned by the younger generation. Then 10 companies / entrepreneurs / batik artisans were selected from 75 companies / entrepreneurs / artisans in the area of Trusmi batik center, Weru District, Cirebon District.

Data obtained from respondents still have an ordinal scale, therefore it is necessary to do various test data so that the results are in accordance with the parameters of parametric statistics. That data will be processed using the basic concept of linear regression, the minimum data must have an interval scale. The data can be transformed from ordinal to interval by using successive interval method (MSI), Test the data needed in this study, namely: 1) Test Validity, 2) Test Reliability, 3) Classical Assumption Test, and 4) Normality Test Data. To measure the level of relationship between the independent variables and the dependent variable used, the measurement tools for the Product Moment and Correlation Coefficient measurements were used.

IV. RESEARCH RESULTS AND DISCUSSION

After data collection and data analysis with statistical assisted software, the results of the research can be presented as follows:

Variable	Human Capital	Relational Capital	Structure Capital	Financial Performance	Non Financial Performance
Human Capaital	-	0.785	0.280	0.149	0.155
Relational Capital	0.785	-	0.161	0.016	0.016
Structure Capital	0.280	0.161	-	0.004	0.155
Finance Performance	0.149	0.016	0.004	-	-
Non Finance Performance	0.004	0.034	0.155	-	-

Table 1: Res	earch Variable	e Correlation Levels
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Based on Table 1 above, it can be explained further as in Table 2 below: Tabel 1:

ole Analysis	Coefficient	Coefficient	Expa
	Corelation	Determination	

Table 2: Research Variable Correlation Degrees

No	Variable Analysis	Coefficient Corelation	Coefficient Determination	Expalanation
1.	HC WITH SC	0.280	7.84	Low
2.	HC WITH FP	0.149	2.22	Very Low
3.	HC WITH NFP	0.155	2.40	Very Low
4.	HC WITH RC	0.785	61.62	Strong
5.	RC WITH SC	0.161	2.59	Very Low
6.	RC WITH FP	0.016	0.26	Very Low
7.	RC WITH NFP	0.034	0.12	Very Low
8.	SC WITH FP	0.002	Very Low	

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The level of correlation built from eight (8) variables examined above shows that most of the variables that are correlated have a low level of relationship, namely:

- 1. HC with FP of 0.149
- 2. HC with NFP of 0.155
- 3. RC with SC of 0.161
- 4. RC with NFP of 0.34
- 5. SC with FP of 0.004

While the level of the relationship that has a strong correlation is only possessed by the HC for RC at 0.78. Thus it can be interpreted that the level of relationship or correlation that occurs from Human Capital with Financial Performance and Nonfinancial Performance in the batik creative industry in Trusmi Cirebon Regency is very low. Correlation between Relational Capital and Not financials Structure Capital and Performance is also lace. This indicates that the capital performance of relations has a low impact on organizational capital and non-financial performance. Finally, Structure Capital also has a poor / low relationship with financial performance in this batik creative industry. The only variable studied that has a strong relationship is the correlation between Human Capital and Relational Capital with a value of 0.78, this relationship has a strong impact. This means that the factor of human capital has a relationship that really determines the operational relationship with suppliers, customers, government and the surrounding community. The level of firmness of the results of this study will be more visible in the results of the analysis when viewed from the effect coefficients of each variable, it appears that out of the eight (8) variables examined only the HC effect on RC has a large effect worth 61.62%. Overall the level of correlation will be visualized in the picture as follows:



Figure 3: The Research Results Paradigm

V. CONCLUSIONS AND IMPLICATIONS

Based on the results of the above research it can be concluded that the majority of the relationships between the dimensions of the Intellectual Capital variable and other Intel Capital dimensions have very low values, except the relationship between Human Capital and Relational Capital has a strong degree. Whereas the relationship between the dimensions of variable intellectual capital and Business Performance is also low for both financial and nonfinancial performance, thus the business performance built by the creative business industry in the Trusmi batik center in Cirebon Regency has a very low relationship and contribution today with intellectual capital. Therefore this condition requires the attention of various interested parties, especially business people and the government. The running of this creative industry is currently supported more by the condition of its Human Resources, both as owners, workers and artisans who have strong relationships with suppliers, government, consumers and the environment.

REFERENCE

- [1] Al-Ali, Nermien. *Comprehensive Intellectual Capital Management*. John Wiley & Sons, Inc., Hoboken, New Jersey.
- [2] Belkaoui, Ahmed Riahi. 2003. Intellectual Capital and Firm Performance US Firm. A Study of The Resource Based and Stakeholders View. *Journal of Intellectual Capital*. Vol 4 No 2. pp 215-226
- [3] Bontis, N., and William, C. C. K., and Stanley, R., 2000, Intellectual Capital and Business Performance in Malaysian Industries, *Journal of Intellectual Capital*, Volume 1 No 1: 85-100.

- [4] Cabrita, Maria do Rosario., Jorge Landeiro de Vas., and Nick Bontis. 2007 Modelling The Creation of Value From Intellectual Capital : A Portuguese Banking Perspective, *Int. J. Knowledge and Learning*. Vol. 3, Nos. 2/3, pp. 266 280.
- [5] Chen, Yu-Shan. 2008. The Positif Effect of Green Intellectual Capital on Competitive Advantage of Firms. *Journal of Business Ethics*. 77:271-286.
- [6] Cohen, Sandra, and Nikolaos Kaimenakis. 2007. Intellectual Capital and Corporate Performance in Knowledge-intensive SMEs. TheLearningOrganizations. Vol 14 No 3, pp 241 262
- [7] Cooper, Donald R. & Pamela, S. Schindler. (2008). *Business Research Methods*. New York: The McGraw-Hill Companies, Inc
- [8] Hermawan, Sigit. 2011a. The Integration of Intellectual Capital and Knowledge Management to Improve the Business Performance and Achieve the Competitive Advantage. *Proceeding*. International Seminar. 22 August. Faculty of Economic and Business. Hasanuddin University. Makassar, Indonesia.
- [9] _____. 2011b. Optimalisasi *Intellectual Capital* Guna Meningkatkan Kinerja Bisnis IKM Batik dan Memenangkan Persaingan di *CAFTA*. *Proceeding*. Seminar Nasional dan *Call For Paper*. 1 Oktober. Fakultas Ekonomi dan Bisnis. Universitas Muhammadiyah Malang.
- [10] _____. 2012. Peran, Pengelolaan, dan Pemberdayaan *Intellectual Capital* Serta Perbaikan Praktik Bisnis Industri Farmasi. *Disertasi*. Tidak Diterbitkan. Fakultas Ekonomi dan Bisnis. Universitas Airlangga Surabaya.
- [11] Hermawan, Sigit dan Silvia Herlina. 2013. Studi Interpretif Identifikasi dan Interaksi *Intellectual Capital* Terhadap Kinerja Perusahaan. *Jurnal Reviu*
- [12] *Akuntansi dan Keuangan*, Volume 3 No 1 April. Program Studi Akuntansi Fakultas Ekonomi dan Bisnis Universitas Muhammadiyah Malang,
- [13] Hermawan, Sigit dan Maharis Budi Wahyuaji. 2013. Analisis Pengaruh Intellectual Capital Terhadap Kemampuan Perusahaan Manufaktur Consumer Goods di Bursa Efek Indonesia. Proceeding. Seminar Nasional dan Call For Paper. 15 Juni. Fakultas Ekonomi Universitas Muhammadiyah
- [14] Sidoarjo.Hitt, Michael A, et, al. 2001. *Manajemen Strategi : Daya Saing dan Globalisasi: Konsep.* Penerbit Salemba Empat. Jakarta
- [15] Hsu, Hsiu-Yueh (Sonya). 2006. Knowledge Management and Intellectual Capital. Dissertation. Carbondale, USA : Southern Illinois University
- [16] http://fajrinfahrezi.blogspot.com/2012/05/14-sub-sektor-industri-kreatif.html
- [17] Hussain, H.I., Abidin, I.S.Z., Ali., A. & Kamarudin, F. (2018) Debt Maturity and Family Related Directors: Evidence from a Developing Market, *Polish Journal of Management Studies*, 18 (2), 118 – 134.
- [18] International Federation of Accountants (IFAC). 1998. *The Measurement And Management Of Intellectual Capital : An Introduction*. New York. USA.
- [19] Ireland, et al. 2009. *The Management of Strategic. Concept and Cases.* 8th Edition. International Student Edition. South-Western Cengage Learning.
- [20] Khalique, Muhammad., Jamal Abdul Nassir Shaari., Abu Hasan Md Isa., dan Adel Ageel. 2011. Role of Intellectual Capital on the Organizational Performance of Electrical SMEs in Pakistan. *International Journal of Business and Management*. Vol 6, No 9. September.
- [21] Mageza, Petunia Zanele., 2004. Intellectual Capital As A Creator of Wealth and Shareholder Value For An Organization. *Short Dissertation*. Rand Afrikaans University
- [22] Saudi, M.H.M., Sinaga, O. & Rospinoedji, D., The role of tax education in supply chain management: A case of Indonesian supply chain companies, *Polish Journal of Management Studies* 18(2):304-319, December 2018.
- [23] Sharabati, Abdel-Aziz Ahmad., Shawqi Naji Jawad., and Nick Bontis. 2010. Intellectual Capital and Business Performance in The Pharmaceutical Sector of Jordan. *Management Decision*. Vol 48. No. 1. pp. 105 – 131
- [24] Sumbangan Industri Kreatif Kepada Negara Semakin Meningkat, May 25, 2016 in Editorial, Hiburan.
- [25] Stewart, Thomas A. 1997. Intellectual Capital The New Wealth of Organization. London : Nicholas Brealey.
- [26] Sveiby, K.-E. 1997. *The New Organizational Wealth: Managing and Measuring Knowledge- Based Assets.* San Fransisco: Berrett-Koehler Publishers Inc, p. 11
- [27] Kamat, R.V., Hiremath, R.S., Patil, P.A., Prasad, B.S. Qualitative analysis of 3 different market samples of swarna bhasma by using namburi phased spot test (NPST)(2018) International Journal of

Pharmaceutical Research, 10 (3), pp. 476-478. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85051012557&partnerID=40&md5=40b4bba686d1904303d1e467f1a12edf

- [28] Kavetsou, e. & detsi, . A. (2016) ionic liquids as solvents and catalysts for the green synthesis of coumarins. Journal of Critical Reviews, 3 (3), 50-55.
- [29] Amit Sharma, Surbhi Sharma, Rohit, Naresh and Bharat Parashar. "Mesua ferrae linn:- A Review of the Indian Medical Herb." Systematic Reviews in Pharmacy 8.1 (2017), 19-23. Print. doi:10.5530/srp.2017.1.5