

## IMPROVING THE COMPETITIVENESS OF THE SMALL AND MEDIUM ENTERPRISES (SME) OF TROSO WEAVING CRAFT IN JEPARA REGENCY USING CAPITAL INTELLECTUAL ANALYSIS

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**ABSTRACT** - The aim of the research was to analyze the management of the SMEs of Troso Weaving Craft in Jepara Regency in relation to the human resources. In order that the SMEs can compete with today's industry, the SMEs are required to be able to run their businesses professionally and to innovate, as well as to implement new breakthroughs. Therefore, the management of the SMEs needs to develop their intellectual ability and competitive advantage for their products. Intellectual capital is the intangible resource that can be used as the source of sustainable competitive advantage. The measurement of IC associated with competitive advantage was made against the elements of human capital, structural capital and customer capital. Hence, this research discussed a model that relates the intellectual capital of the SMEs to the competitive advantage of the SMEs of Troso Weaving Craft in Jepara Regency. For the development of the model and hypothesis, the research used the Structural Equation Modelling (SEM), by taking the samples of 157 SMEs of Troso Weaving Craft selected in simple random sampling. The analysis results show that human capital, structural capital, and customer capital have the effect on competitive advantage. It means that the improvement of the competitive advantage for Troso Weaving Craft requires trainings in the managements of production, distribution, marketing and finance for all individuals and employees of the SMEs.

**Keyword:** *Competitive advantage, Intellectual capital, Jepara, SME, Weaving Craft.*

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### INTRODUCTION

The growth in the number of SMEs in Indonesia is growing rapidly, but it can not be offset by an increase in the competitiveness of SMEs in both local and international markets. SMEs, in doing businesses, only produce and trade, so it makes them not very capable of competing with large corporations. In order to compete with big companies, SMEs are required to be able to run their business in a professional manner and have the ability to find new break throughs in order to improve their competitiveness.

The world economy today is entering the era of knowledge-based economy. Knowledge-based economy no longer relies simply on natural resources, but the resources of knowledge, ideas and creativity. According to Ernst & Young (2006), in developed countries like the US, 60% of workers are knowledge workers. It is proven that by improving this knowledge, the companies can perform more effectively and efficiently (Hernandez and Nurozi, 2010).

Nawawi (2012) states that in order to compete competitively and maintain the viability of an organization the organization should not only develop the capabilities and competitive advantage from traditional resources (such as natural, labor, and capital resources) but also the intangible resources, such as knowledge and intellectual capital. Cabrita and Vaz (2006) also state that intellectual capital has been described as an intangible asset that can be used as a source of sustainable competitive advantage. However, the component of intellectual capital must interact to create value.

Jepara regency is one of regencies in Central Java with many SMEs in its industrial centers, such as the handicraft industrial centers of carving, sculpture and reliefs, metal industrial centers, the centers of weaving industry and others. The development concept of Jepara regency performed is to develop creative industries based on local wisdom, like Troso Weaving Craft. It is the competitive advantage which is not owned by other regions in Indonesia or the world. Troso Weaving Craft is a local potential that must be promoted in order to improve its competitiveness in the era of free market that recently requires the presence of standards and other requirements to be accepted and excel in free market competition. The number of weaving business unit in 2009 was 257 units with the total workers of 2,571 people. In 2014, it increased to 698 units with the number of workers of 10,689 people. (the Industrial and Commercial Agency, Jepara Regency, 2015).

Although the number of the SMEs of Troso weaving increased, the weaknesses of the SMEs of Troso weaving are: the majority of the business units is still in the form of individual companies; limited capital; and they have not been able to manage their finances, human resources, and marketing. The financial systems of businesses and households are still incorporated so that the business profit is often used for consumption and not for business development. The employers of Troso weaving need sufficient capital, skilled human resources, adequate raw materials, and product innovation capabilities which will produce the products that can compete with other products on the market.

### **INTELLECTUAL CAPITAL**

Intellectual capital (IC) has been widely discussed and considered important by many practitioners. IC is a factor affecting the progress of an organization. Similarly, in small and medium companies, IC is considered very important for the development of businesses which finally can improve welfare.

Some experts have expressed the definition of IC. They interpreted it differently because the concept of IC is very broad and often fall into several categories. IC was first published by Itami (1987) in Rahim (2010) who defined IC as an intangible asset which include particular technology, customer information, brand name, reputation and corporate culture that are invaluable to a firm's competitive power. The other definition was given by Edvison and Malone (1997) who developed the Skandia Value Scheme from which their perspective on IC includes human capital and structural capital wrapped up in customers, processes, databases, brand and systems. The model developed by Stewart (1997) divides and classifies IC into three basic forms; human, structural and customer capitals.

The IC definition proposed by the Organisation for Economic Co-operation and Development (OECD, 1999) explains IC as the economic value of the two categories of intangible assets, i.e.: (1) Organizational (structural) capital and (2) human capital (Petty and Guthrie, 2000). However, Curado and Bontis (2007) states that in general, the researchers divided IC into three components, i.e.: Human Capital (HC), Structural Capital (SC), and Capital Employed (CE). Furthermore, according to Bontis et al. (2000), HC simply reflects the individual knowledge stock of an organization which is presented by its employees. Briefly, some practitioners claimed that IC consists of three main elements (Stewart 1997; Sveiby 1997; Saint-Onge 1996; Bontis 1998; Ning et al 2011; Shih et al, 2010; Cohen & Kaimenakis 2007; Sharabati et al 2010), i.e.: human, structural, and customer capitals.

### **MEASUREMENT OF IC**

Human Capital consists of knowledge, skills, ability to generate innovation, and the organization's ability to do their duties, including values, culture, and philosophy (Jaroslava, 2012). In addition, it also includes knowledge, policy, wisdom, expertise, intuition, and individual ability to fulfill the tasks and objectives. All of them are owned by an individual and can not be owned by an organization.

Structural Capital is a knowledge settled in an organization out of human capital. Structural Capital consists of market capital and organizational capital. Market capital is defined as a value in a relationship between client and organization. Organizational capital includes hardware, software, databases, organizational structure, patents, trademarks and everything that supports the productivity of individuals through collective use and their dissemination (Bontis, 2001).

Organizational capital consists of capital process and renewal and development capital including process, activity and infrastructure for the creation, use, collective, transfer and dissemination of knowledge that can contribute to organizational productivity. Renewal and development capital includes actual ability and investment for the future, such as learning, research and development, as well as patents and trademarks (Setiarso et.al, 2009).

The research on Intellectual capital had been conducted in many countries, such as the UK (Roos et.al, 1997), New York (Sveiby, 1997), Canada (Bontis, 1998), the United States (Stewart, 1997), Greece (Cohen & Kaimenakis 2007 ), Mexico (Daou et.al, 2013), Jordan (Sharabati et.al, 2010), Portuguese (Cabrita & Vaz, 2006), China (Chen et.al, 2004), Nigeria (Uadiale & Uwuigbe, 2011), Iran (Rezaian & Naeiji, 2011). On the other hand, in Indonesia, the research on intellectual capital had been conducted by Yusuf and Savitri (2009), Kuryanto and Syafruddin (2009), Widarjo (2011), Mananeke (2012), Ciptaningsih (2013), and Sudibya and Restuti (2014).

There are five indicator focuses that help initiate the process of identifying and defining the specific IC indicators, i.e.:

- Customer Focus: the focus describes the effort and quality of company's efforts in satisfying its customers through services and products.
- Process Focus: It is related to the success of technological application and also includes the actual process undertaken to create the products and services required by customers.
- Renewal and Development Focus: This indicator aims to illustrate the ability of companies in the process of long-term regeneration that will be reflected in the company's capacity to respond to future trends and events.
- Human Focus: This indicator is the most dynamic indicator and the most difficult of the five focuses of the Skandia Navigator, and it is also the most important thing. English and Baker (2006) state that IC is human capital because the other types of capital are the products of human capital.

## **COMPANY PERFORMANCE**

Nawawi (2012) states that company performance is a function of the results of work or activities in a company which are influenced by the internal and external factors of the organizations in achieving the goals set for a specific period.

The measurement of company performance can be divided into two measurements of financial and non-financial performances (Fisher, 1998). The measurement of financial performance actually shows the various actions that occur out of financial field (operational field). Improved financial returns as a result of a variety of operating performance that is the increase of consumer trust in the products or services produced by the company, increased cost effectiveness of internal business processes used by the company to produce products and increased productivity as well as employee commitment (Mulyadi and Setiawan, 2001).

Bontis (1998) developed a measurement of corporate performance that consists of ten performance items perceived by the respondents as compared to the company's competitors in the same industry in the last few years. The ten items are: 1) industrial leadership, 2) future prospects, 3) profit, 4) profit growth, 5) sales growth, 6) return on assets after tax, 7) return on sales after tax 8) An overall response to competition, 9) the level of success in launching new products, 10) overall company success performance. The use of the business performance measurement developed by Bontis (1998) has been widely referenced and used by other researchers in whole or with various modifications.

Purnama and Setiawan (2001) conducted the measurement of company performance through market share and growth in market share. Manameke (2012) measured by market share, company effectiveness, ROI, ROE, and gross profit margin. Chen (2006) used the indicators of market share, sales growth, and profit margin on sales, while Rezaian and Naeiji (2012) used the indicators of market share, profitability, and competitiveness. Furthermore, Li et.al (2004) used two indicators of business performance

measurement both financial and non financial, i.e.; market share, growth in market share, profit margin on sales, the growth of sales, ROI, the growth of ROI, overall competitive position.

### **COMPETITIVE ADVANTAGE**

According to Quin (1992, in Nawawi, 2012), the improvement of company competitiveness is highly dependent on knowledge-based resources, such as technology of know-how and in-depth understanding of its customers. Drucker (1993, in Nawawi, 2012) argues that knowledge has become the most useful resource in today's business world. Toffler (1990, in Nawawi, 2012) claims that knowledge is the most qualified power source and the key to the shift of future power. Knowledge becomes an essential resource for competitiveness. Intellectual capital is the sum of all things which are known and given by everyone in a company that provides competitive advantage (Stewart, 1998).

Berney (1991, in Nawawi, 2012) gives four criteria that can be used by companies to help identify the resources that can support competitive advantages, i.e.:

- Precious: In order to support company superiority, a resource must be precious, in terms of having the capacity to enhance the organization's efficiency and effectiveness as well as to generate innovation
- Rare: In order to support company competitiveness, a resource must be rare because it is not widely available or difficult to obtain and highly interested
- Hard to Immitate: In order to support company competitiveness, a resource must be hard to imitate
- Hard to replace: In order to support company competitiveness, a resource must be hard to find the replacement or substitute.

Mananeke (2012) used lower cost as the indicator of competitive advantage in his research. Chen (2006) measured competitive advantage using *inventory, quality and delivery rate*, while Li *et.al* (2004) used the indicators of *cost, quality, delivery dependability, product innovation, time to market*.

### **SMALL AND MEDIUM INDUSTRY**

One of the businesses in Indonesia which has an important existence but sometimes considered to be forgotten in the policy arena is the Small and Medium Enterprises (SMEs). In other hand, when it is recognized further and deeper, its role is not just a supporter in national economic contribution (Setyobudi, 2007). The data of the Statistic Bureau Agency (BPS) shows that MSME sector absorbs 77.68 million workers, or 96.77% of the total work force which are working, and (3) the contribution of MSMEs to GDP is quite significant.

On the other hand, the Indonesian economy is still dominated by the sectors with low productivity, such as: agriculture, trade and home industries. In the sectors with low productivity, a number of micro, small and medium enterprises (MSMEs) are concentrated (Munizu, 2010). Various issues are always present in most SMEs. It can obstruct SMEs to develop well, particularly in optimizing the existing opportunities. These conditions provide appropriate signs that SMEs should be given assistance and development in accordance with their needs (Sulaiman, 2004).

### **TRADITIONAL WEAVING CRAFT OF TROSO**

Troso Weaving Craft is a traditional weaving craft which is very popular in Indonesia. The Weaving Craft in the village of Troso is one business that was inherited traditionally. According to Alam *et.al* (2013), the time the weaving started to spread in the village of Troso is unknown for sure. However, according to local people, since colonial times people have been familiar with weaving.

The complexity of the management system of the weaving industry recently performed by people troso includes the provision of capital, production process, employment, marketing system and financial management. In relation to industry, capital is the ability of companies assessed from the assets owned by them to run the business. Hence, it can be initial capital and working capital. The initial capitals are in the form of place, equipment and industrial supplies which are generally operated by the weavers of Troso through various ways. As a place of business, the entrepreneurs typically use their home as

the business place which is not separated from household activities. For medium-size entrepreneurs, they have separated their business from household activities. In this case, they provide special rooms for the business place. For the large/ medium scale entrepreneurs, they have made their own buildings (factories). Nevertheless, there are some big/ medium entrepreneurs open their shops in their village to sell their products.

The working capital is in the form of money which is usually raised privately by the employers by saving money, selling land / house, debt to a friend or by a grant from their family. In this case, only a few employers who seek capital through bank loans. The money capital is used to buy / add equipment, raw materials, hire labor and partly for the marketing cost of their products.

To anticipate the competitive market situation, Trosow weaving craftsmen strive to increase their production by considering the quality, quantity and variety. Therefore, they create working divisions in competitive production through work specifications such as *ngeteng*, *malet*, dyeing, weaving, pattern / pictures and so forth. In addition, to meet the production targets, a lot of workers are required to fill the fields of production work. Within this competitive era, skilled workers are needed, especially for handling the specialized work which is the most influential in the goods market, namely the work of pattern / picture and color processing. Generally, workers only work in production, while the working areas of management and marketing are generally handled by employers.

### THEORETICAL FRAMEWORK AND HYPOTHESIS

Intellectual capital has the uniqueness and differences in its development and management at each company. According to Calderira and Ward (2001), the company's resources which are difficult to have, or which requires a complicated process to get can be the uniqueness of the company. At this time, SMEs are required to optimize the IC with the development based on their knowledge so that SMEs are expected to focus on their efforts to manage (through) IC. SMEs can learn how to use a combination of the elements of human, structural and relational capital they have to improve their own capacity to compete in global markets (Mertins, 2006). Human capital can interact with organizational capital to create, acquire, and generate customer capital which will then reach a high financial prosperity and company success. Wong and Aspinwall (2004) in Cohan and Kaimenakis (2007) argue that SMEs are closer to their customers so that it allows them to acquire knowledge in a more direct flow and faster than large companies. Marr et al (2004) in Murthy and Mouritsen (2011) used the new form of a strategy map to visualize how the IC elements interact to create value by describing how intangible assets are converted into tangible results.

Therefore, this research discussed a model that relates the intellectual capital of SMEs to the competitive advantage of the SMEs of Trosow Weaving Craft in Jepara. SMEs can achieve a competitive advantage for a long period of time when they pursue and optimize the IC strategy. The increase of SMEs' competitive advantage will also increase SMEs' competitiveness. Human capital, structure capital (organization) and social capital (relational) in SMEs, when combined or integrated, can generate competitive advantages which are profitable and can promote their sustainable competitiveness. This model is represented in Figure 1. In this model, the competitive advantage is the dependent variable, while the intellectual capital is the independent variables.

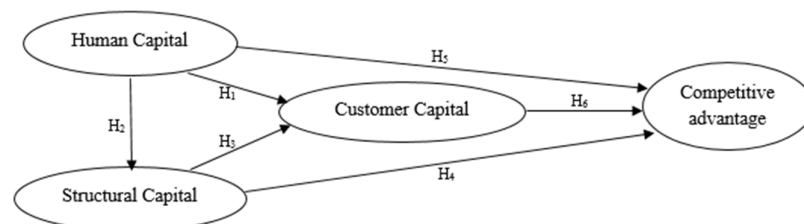


Figure 1. Theoretical Framework  
Sources: Ning, et al. (2011); Soret et al (2010)

Competitive advantage is an indicator to determine company's level of competitiveness. However, It is likely that only a few companies achieve the competitive advantage of the three types of intellectual capital (human capital, structural capital and customer capital) they have. Sometimes not all the elements of intellectual capital play a role in company's competitive advantage.

## METHODOLOGY AND RESULTS

To test the research model and answer the questions related to the competitive advantage of SMEs, a questionnaire given to 157 units of the SMEs of Troso weaving craft in Jepara is required. All items in the questionnaire were measured using a 5-point Likert scale.

Of 157 respondents who were taken using simple random sampling, it can be obtained that the respondents were dominated by male respondents. Most SME owners were aged between 31 and 40 years old (30%), and 27% of them aged between 41 and 50 years. The age over 51 years was only 16%.

The respondents' business duration was mostly from 3 to 10 years (68%), 15% of them have run their business for 21 to 30 years, 13% of them have been in the business for 11 to 20 years and only 4% was longer than 31. In terms of respondents' educational level, it was dominated by the respondents of elementary and junior high graduates by 32.5% respectively, 26% in high school, and the college graduates were only 8%.

For the model development and hypothesis testing, the research used the SEM from the statistical software package of AMOS. As a structural equation model, AMOS has been frequently used in the research of marketing management and strategic management. AMOS causal model shows the measurement and structural problems and was used to analyze and test the hypothesis (Ferdinand, 2005). *Confirmatory Factor Analysis* of Exogenous Construct

Confirmatory factor analysis of exogenous constructs in this research is shown in Table 1.

Table 1. Standardized Regression Weights Confirmatory Factor Analysis for Exogen Construct

			Estimate
X <sub>6</sub>	<---	Human Capital	.857
X <sub>5</sub>	<---	Human Capital	.814
X <sub>4</sub>	<---	Human Capital	.098
X <sub>3</sub>	<---	Human Capital	.102
X <sub>2</sub>	<---	Human Capital	.803
X <sub>1</sub>	<---	Human Capital	.704

Source: Primary data is processed, 2015.

Table 1 shows that there are the indicators with the value of loading factor lower than 0.50, namely X<sub>3</sub> and X<sub>4</sub>. Therefore, the indicators are removed from the model. Further confirmatory test of exogenous construct was conducted in the second phase with the results as shown in Table 2.

Table 2. Standardized Regression Weights Confirmatory Factor Analysis Revised for Exogen Construct

			Estimate
X <sub>6</sub>	<---	Human Capital	.857
X <sub>5</sub>	<---	Human Capital	.816
X <sub>2</sub>	<---	Human Capital	.803
X <sub>1</sub>	<---	Human Capital	.702

Source: Primary data is processed, 2015.

The revision results of confirmatory testing of exogenous constructs in Table 3 show that all indicators have the values of loading factor higher than 0.50. This means that the indicators of X<sub>1</sub>, X<sub>2</sub>, X<sub>5</sub>, and X<sub>6</sub> are stated to be invalid.

### Confirmatory Factor Analysis of Endogenous Construct

The test results of confirmatory factor analysis of endogenous constructs in Table 3 show that the indicators with the value of loading factor lower than 0.50 are X<sub>9</sub>, X<sub>12</sub>, X<sub>13</sub>, X<sub>18</sub> and X<sub>19</sub>. Therefore, the indicators are removed from the model. The confirmatory test results of endogenous construct in the second phase (Table 4) indicate that the entire indicators have a value of loading factor higher than 0.50, so it can be concluded that the endogenous variable indicators can be stated to be valid.

Table 3. Standardized Regression Weights Confirmatory Factor Analysis For Endogen Construct

			Estimate
X12	<---	Structural Capital	.134
X11	<---	Structural Capital	.705
X10	<---	Structural Capital	.676
X9	<---	Structural Capital	.230
X8	<---	Structural Capital	.743
X19	<---	Competitive Advantage	.184
X20	<---	Competitive Advantage	.721
X21	<---	Competitive Advantage	.696
X22	<---	Competitive Advantage	.685
X23	<---	Competitive Advantage	.721
X24	<---	Competitive Advantage	.748
X7	<---	Structural Capital	.738
X13	<---	Customer Capital	.362
X14	<---	Customer Capital	.755
X15	<---	Customer Capital	.723
X16	<---	Customer Capital	.656
X17	<---	Customer Capital	.705
X18	<---	Customer Capital	.262

Source: Primary data is processed, 2015.

Table 4. Standardized Regression Weights Confirmatory Factor Analysis Revised for Endogen Construct

			Estimate
X11	<---	Structural Capital	.704
X10	<---	Structural Capital	.681
X8	<---	Structural Capital	.730
X7	<---	Structural Capital	.753
X14	<---	Customer Capital	.772
X15	<---	Customer Capital	.731
X16	<---	Customer Capital	.644
X17	<---	Customer Capital	.710
X20	<---	Competitive Advantage	.723
X21	<---	Competitive Advantage	.699
X22	<---	Competitive Advantage	.684
X23	<---	Competitive Advantage	.714
X24	<---	Competitive Advantage	.752

Source: Primary data is processed, 2015.

### Structural Equation Model (SEM)

The evaluation of measurement model fit was based on the overall model can be summarized by Figure 2.

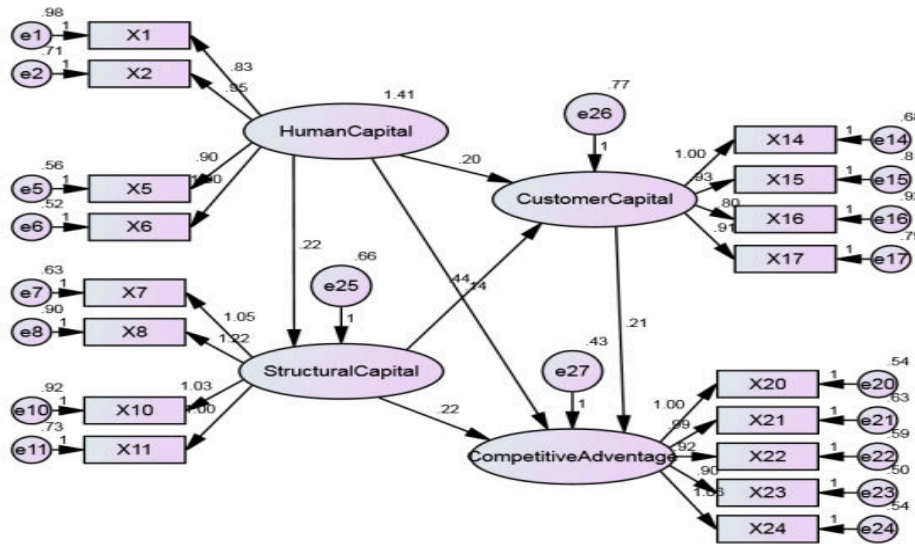


Figure 2. Structural Equation Model Analysis

Table 5. Goodness of fit of Confirmatory Factor Analysis - Structural Equation Model (SEM)

Goodness of Fit Index	Cut-off Value	Proposed Model	Evaluation Models
$\chi^2$ – Chi-square	P=5% df= 113		
	Chi-Square 138,81	173,347	sensitive
SignificanceProbability	$\geq 0,05$	0,000	sensitive
RMSEA	$\leq 0,08$	0,059	Good
GFI	$\geq 0,90$	0,889	Marginal
AGFI	$\geq 0,90$	0,850	Marginal
CMIN/DF	$\leq 2,00$	1,534	good
TLI	$\geq 0,95$	0,933	Marginal
CFI	$\geq 0,95$	0,945	Marginal

Source: Primary data is processed, 2015.

In table 5, the test against the model shows that the model fits to the data used in the research even though the level of probability is 0.000 and the significance level of the model's Chi-Square is 173.347. However, the values of RMSEA, GFI, AGFI, CMIN / DF, TLI and CFI are in the range of expected values. Based on the criteria for goodness of fit in Table 6, it can be concluded that the structural equation model (SEM) specified in this research has been fit to the data. The test results of against the values of loading factor for each of the indicators can be obtained by table 6. According to Table 6, each indicator or the dimensions forming respective latent variables shows good results, namely CR > 1.96 with the probability of < 0.05. With these results, it can be said that the indicators forming construct latent variable have shown as a strong indicator in measuring latent variables. Furthermore, based on this confirmatory factor analysis, the research model can be used for subsequent analysis without modifications or adjustments. To get a good model, the problem of the deviations from the assumptions SEM must first be tested.

Based on the data normality test to the data used in this research (Table 7) the multivariate C.R. values obtained is 0.176. the value is within the range of  $\pm 2:58$ , so it can be said that the research data are normally distributed. The evaluation of multivariate outliers was conducted using the mahalanobis distance calculations for each mean of all of the variables in a multidimensional space. With the level of  $p < 0.001$ ,  $\chi^2 (17; 0,001) = 40.79$  with the mahalanobis distance greater than 40.79 and considered as multivariate outliers. It means that there is no data in this research regarded as outliers.



Table 6. Regression Weights Confirmatory Factor Analysis - Structural Equation Model (SEM)

			Estimate	S.E.	C.R.	P	Label
StructuralCapital	<---	HumanCapital	.223	.070	3.203	.001	par_19
CustomerCapital	<---	HumanCapital	.197	.081	2.431	.015	par_14
CustomerCapital	<---	StructuralCapital	.443	.125	3.546	***	par_15
CompetitiveAdvantage	<---	HumanCapital	.144	.063	2.289	.022	par_16
CompetitiveAdvantage	<---	StructuralCapital	.218	.097	2.254	.024	par_17
CompetitiveAdvantage	<---	CustomerCapital	.213	.084	2.538	.011	par_18
X6	<---	HumanCapital	1.000				
X5	<---	HumanCapital	.899	.076	11.782	***	par_1
X2	<---	HumanCapital	.950	.084	11.332	***	par_2
X1	<---	HumanCapital	.832	.088	9.503	***	par_3
X11	<---	StructuralCapital	1.000				
X10	<---	StructuralCapital	1.031	.142	7.245	***	par_4
X8	<---	StructuralCapital	1.220	.157	7.768	***	par_5
X7	<---	StructuralCapital	1.049	.136	7.735	***	par_6
X14	<---	CustomerCapital	1.000				
X15	<---	CustomerCapital	.929	.115	8.078	***	par_7
X16	<---	CustomerCapital	.796	.110	7.251	***	par_8
X17	<---	CustomerCapital	.909	.108	8.384	***	par_9
X20	<---	CompetitiveAdvantage	1.000				
X21	<---	CompetitiveAdvantage	.990	.129	7.652	***	par_10
X22	<---	CompetitiveAdvantage	.919	.121	7.572	***	par_11
X23	<---	CompetitiveAdvantage	.899	.114	7.857	***	par_12
X24	<---	CompetitiveAdvantage	1.057	.120	8.822	***	par_13

Source: Primary data is processed, 2015.

Table 7. Assessment of Normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
X24	1.000	5.000	-.392	-2.004	-.569	-1.456
X23	1.000	5.000	-.270	-1.382	-.662	-1.693
X22	1.000	5.000	-.167	-.853	-.754	-1.929
X21	1.000	5.000	-.645	-3.299	-.384	-.982
X20	1.000	5.000	-.250	-1.280	-.618	-1.581
X17	1.000	5.000	-.257	-1.317	-1.136	-2.906
X16	1.000	5.000	-.064	-.325	-1.213	-3.103
X15	1.000	5.000	-.155	-.795	-1.168	-2.988
X14	1.000	5.000	-.087	-.444	-1.132	-2.895
X7	1.000	5.000	-.004	-.019	-.883	-2.260
X8	1.000	5.000	-.298	-1.527	-1.312	-3.356
X10	1.000	5.000	-.252	-1.288	-.998	-2.553
X11	1.000	5.000	-.139	-.710	-1.012	-2.588
X1	1.000	5.000	-.083	-.424	-1.299	-3.323
X2	1.000	5.000	.070	.360	-1.344	-3.438
X5	1.000	5.000	.041	.209	-1.174	-3.004
X6	1.000	5.000	-.024	-.121	-1.289	-3.297
Multivariate					.713	.176

Source: Primary data is processed, 2015.

## IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Previous research mostly highlight the implementation of intellectual capital in the world of banking. This research generalizes and recommends the results into other areas as well. This research proved that intellectual capital has substantial and significant effect to the competitive advantage of SMEs of Troso Weaving Craft in Jepara Regency, both partially and simultaneously. To increase competitive advantage of SMEs of Troso Weaving Craft's products, entrepreneurs need to pay close attention to:

- Customer capital needs to be improved through the increase in market intensity by opening counters, educating young generation regarding the use of weaving fabrics, and participating on exhibitions.
- Structural capital needs to be improved through production process efficiency by giving bonuses to employees that are able to generate ideas about the simplification of working process.
- Human capital needs to be improved through employee capabilities and experiences by providing cross-sectoral trainings for employees.
- Regional government is expected to provide continuous empowerment program for craftsmen equally, not only for the craftsmen who have access to the regional civil servants. Central government is also expected to uplift the image of traditional Troso Weaving Craft specifically, as well as of other craft products of other regions such as Batik, as Indonesian prime products.

The results of this research may be used for future research, especially on SMEs in other industries, and may also be broaden in research scope to a national level. Based on this research, researchers recommend others to conduct research on other industries and regions that have cultural diversity and distinct uniqueness of each SME industry.

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