

THE EFFECT OF HUMAN CAPITAL AND SOCIAL CAPITAL ON PRODUCTIVITY OF COMPETITIVENESS

(Case Study in the Creative Industries Sub Sector of doll industry in West Java Province Indonesia)

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ABSTRACT--*This study analyzes the competitiveness of the creative industry subsector of the doll industry in West Java Province which is influenced by human capital, social capital, and productivity which have an effect on the competitiveness. The aim of this research is to know and to analyze the effect of human capital, social capital, directly and through productivity on competitiveness. This research used a quantitative approach as a survey method. The unit of analysis of this study is the SMEs (small and medium enterprises) Center of the doll Industry Subsector Creative Industry in West Java Province, with entrepreneurs as the observation unit, with a population of 191 entrepreneurs and a sample of 128 entrepreneurs. Data obtained from the survey results through a questionnaire distributed to entrepreneurs. Data were processed using descriptive statistical analysis. Likewise, human capital, social capital, and productivity have significant and positive effects on competitiveness. These findings suggest that productivity can be an intervening variable for competitiveness. The effect of this research is expected to increase the competitiveness of the doll industry in Indonesia's West Java Province.*

Keyword--*human capital, social capital, productivity, competitiveness, doll industry*

I. Background

Competitiveness, according to Porter (2009), is formed by the company's competitive-structure strategy, resource conditions, demand conditions, and the existence of related and supporting industries. Competitiveness itself is impacted by productivity as it is seen from the aspects of efficiency, effectiveness, and quality (Ward, et al., 1998). In turn, productivity and competitiveness are also impacted by (1) human capital consisting of knowledge and skills; (2) social capital consisting of ideas, business opportunities, financial capital, power, support, goodwill, and trust / cooperation (Baker, 2000). However, in the fact of reality, the average productivity of SMEs is still left far if it compared to large businesses. It is seen from the ratio of large businesses / SMEs. In the 2010-2013 period the productivity of SMEs was 12.2 million rupiah and in the 2014-2018 period it increased to 13.3 million rupiah. Meanwhile, the productivity of large businesses reached 334.8 million rupiah in 2010-2013, while the average productivity of micro businesses was only 7.8 million rupiah. Meanwhile, small businesses still reached 64.7 million and medium businesses 112.4 million rupiah in 2013-2018. The following is a comparison of the contribution of SMEs to the economy in Indonesia.

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Table 1: *productivity comparison of SMEs contribution to the economy in Indonesia (on million rupiah)*

Classification	2010–2013	2014–2018
Average SMEs	12,2	13,7
Micro Business	7,4	7,8
Small Business	62,0	64,7
Medium Business	104,5	112,4
Large Business	309,9	334,8
Ratio Large Business /SMEs	25,3	25,1

Source: Ministry of Cooperatives and SMEs, Statistics of SMEs, 2018

Table 2: *Amount of Entrepreneurs in the Creative Industries Subsector of Doll Industry in West Java Province 2014-2018*

N	Year	Bandung	Cikampe k	Bekasi	Amou nt
1	2014	76	109	51	236
2	2015	66	106	50	222
3	2016	62	99	50	211
4	2017	65	92	47	204
5	2018	53	92	46	191

Source: Disperindag West Java Province Cooperative SMEs Office (2018).

The amounts of doll entrepreneurs and the employee of the doll Industry Subsector Creative Center in West Java Province in 2018 are as follows.

Table 3: *The Amount of Doll Entrepreneurs and The Employee of The Doll Industry Subsector Creative Center in West Java Province In 2018*

N	Center Data	City	Entreprene ur	Employee
1	Industry center of Doll Sukamulya, Warung Muncang	Bandung	53	287
2	Industry center of Doll Cikampek	Cikampek	92	368
3	Industry center of Doll Bekasi	Bekasi	46	220
		Amount:	191	875

Source: Disperindag Department of West Java Province Cooperative SMEs (2018).

Based on Table 2 and Table 3, competitiveness and productivity for the creative industry of the doll subsector in West Java Province increased the decline in each doll center, while updated data in 2018 Central Bureau of Statistics West Java Province industrial center data for Bandung City in boneka Sukamulya area there are 17 entrepreneurs with 75 employees, and the Warung Muncang industry data center area receives 36 entrepreneurs with 212 employees, boneka Cikampek industry data center 92 entrepreneurs with 368 employees, and boneka Bekasi center data center 46 entrepreneurs with 220 employees work.

Based on the explanation above, the researcher is interested in knowing the general figure of human capital, social capital, productivity, and competitiveness at the SMEs centers of the Creative Industries of the Doll Industry Subsector in West Java Province.

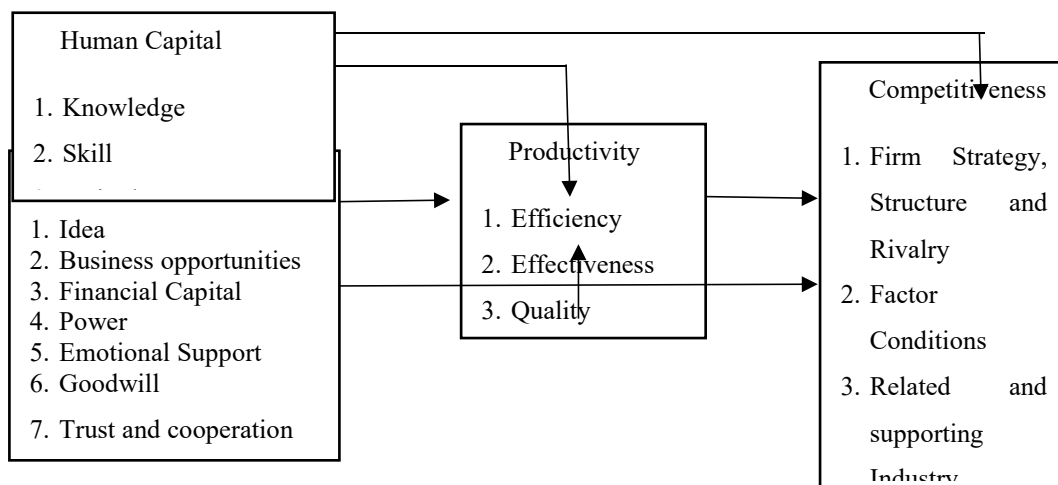
II. Literature review

The previous theory from Porter (1986, p. 51) argued that competitiveness is closely related to the implementation of generic strategies, in this case the application of cost strategies, differentiation and focus are the main points of creating competitiveness. The development of the definition of competitiveness was also conveyed by Barney (1991, p. 93) who conveyed how to use the strategy to be superior to its competitors. The two previous theories presented earlier emphasize the uniqueness of a company that cannot be imitated by competitors to be successful in market competition. The term productivity is used to cover constructs such as efficiency, output, motivation, individual performance, organizational effectiveness, production profitability, cost-effectiveness, competitiveness, and quality of work (Harris, 2004). In this case, the measurement of productivity can be exchanged with an assessment of performance, an assessment of production capabilities, and measurement of quality control, not just a ratio of output to input. However, Walter & Walters (2010: 2) argued that productivity means "to produce more output with equal or fewer inputs". In addition, Tinofirei (2010: 13) defines productivity as "the efficiency with regard to the conversion of physical inputs [labor and capital] into physical outputs [goods and services]". According to Matthewman & Matignon (2004: 8), "Human capital is the sum of knowledge, skills, experience, and other relevant workforce attributes that reflect the organization's workforce and drive productivity, performance, and the achievement of strategic goals".

The Social Capital Theory was discussed at the first discussion in 1916 (Lin 2017). Contemporary Social Capital was first offered by Bourdie (1986) who said social capital is the whole source of actual or potential concepts, which are associated with ownership of a network that is durable having more or low relationship with ownership of a network that is durable having more or low reciprocal relationships among known institutions.

Framework of Thinking

Figure 1: Framework of Thinking



Research Method

This type of research is descriptive research, it is conducted to find out and be able to explain the competence of the variables examined in a situation. "So, research with descriptive methods is a research that will describe or explain the problems related to the question of the existence of variables independent. The unit of analysis in this study is the SMEs Center of the doll Industry Subsector Creative Industry in West Java Province. The observation unit (population of respondents) in this study were entrepreneurs in the SMEs Center of the Creative Industries Subsector of the doll Industry in West Java Province who were 191 respondents.

Table 4: *Summary of Research Method*

N	Research Competence	Types
1	Based on Method	Quantitative
2	Based on purpose	Explanatory Survey
3	Analysis unit	SMES organization Center for Creative Industries Subsector of Doll Industry in West Java Province
4	Observation Unit	doll SMEs entrepreneur in West Java
5	Analysis	Descriptive (score frequency)

Source: variety source (processed)

III. Results and Discussion

Competitiveness (Y) is an endogenous latent variable consisting of four dimensions (manifest variable), namely: (1) Competition-Structure-Strategy (Firm Strategy, Structure, and Rivalry); (2) Resource Conditions (Factor Conditions); (3) Related and Supporting Industries; and (4) Demand Conditions. Each of these dimensions has certain indicators that can be measured. In total there are 12 items to measure this variable. Entrepreneurs' responses to the latent variable Competitiveness based on the binomial score percentage line, can be presented as follows.



Figure 2: Competitiveness Binomial Line (Y)

Based on the binomial score percentage line, the competitiveness of the doll industry SMEs in West Java Province is low with a percentage score of 56.1%. Based on its dimensions, the percentage score can be presented as follows.

Table 5: Responses of the Doll Industry SMEs in West Java Province regarding
Competitiveness (Y)

N		1	4	To	Criteria
o.	Competitiveness	-3	-5	tal	Achievement
1	<i>Firm Strategy, Structure, and Rivalry</i>	2	1	38	Low
		18	66	4	
		5	4	10	
		6,8	3,2	0,0	
2	<i>Factor Conditions</i>	2	1	38	Low
		19	65	4	
		5	4	10	
		7,0	3,0	0,0	
3	<i>Related and Supporting Industries)</i>	2	1	38	Low
		37	47	4	
		6	3	10	
		1,7	8,3	0,0	
4	<i>Demand Conditions</i>	1	1	38	High
		88	96	4	
		4	5	10	
		9,0	1,0	0,0	
		8	6	1.5	Low
		62	74	36	
	Competitiveness (Y)	5	4	10	
		6,1	3,9	0,0	

Source: appendix Data Processing (2019)

Based on the calculation results in the table above, it presents from the achievement of frequency and percentage scores for the latent variable of Competitiveness in the centers of the doll industry in the Province of West Java under study that was low (56.1%). Likewise, judging by its dimensions, Firm Strategy, Structure, and Rivalry; Factor Conditions; Related and Supporting Industries; and Demand Conditions are also low. Productivity variable (M) is an endogenous latent variable consisting of three dimensions (manifest variable), namely: (1) Efficiency, (2) Effectiveness, and (3) Quality. Each of these dimensions has certain indicators that can be measured. In total, there are 12 items to measure this variable. Entrepreneurs' responses to the latent variables Productivity based on the binomial score percentage line, can be presented as follows

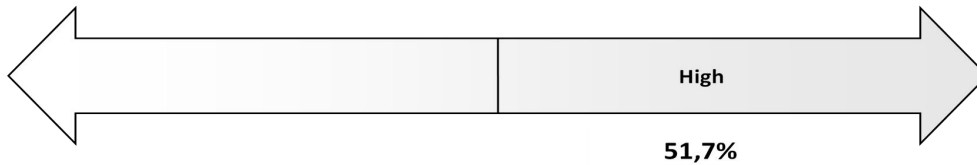


Figure 3: Productivity (M) Binomial Lines

Based on the binomial score percentage line, Productivity at the doll industry SMEs in West Java Province was high with a high percentage score of 51.7%. Based on its dimensions, the percentage score can be presented as follows.

Table 6: *SMES Respond of Doll Industry in West Java Province through Productivity (M)*

No.	Produktivitas		1-3	4-5	Total	Capaian Kriteria
1	Eficiency	f	278	234	512	Low
		%	54,3	45,7	100,0	
2	Effectiveness	f	238	274	512	High
		%	46,5	53,5	100,0	
3	Quality	f	226	286	512	High
		%	44,1	55,9	100,0	
Productivity (M)		f	742	794	1.536	High
		%	48,3	51,7	100,0	

Source: Appendix Data Processed (2019)

Based on the calculation results on the table above, it presents from the achievement of the frequency and percentage scores for the latent variable Productivity at the Center of the doll industry in the Province of West Java under study is high (51.7%). In addition, based on its dimensions, effectiveness and quality are high, while the efficiency dimension is low.

The Human Capital Variable (X1) is an exogenous latent variable consisting of three dimensions (manifest variable), they are: (1) Knowledge, (2) Skills, and (3) Attitudes. Each of these dimensions has certain indicators that can be measured. In total, there are 12 items to measure this variable.

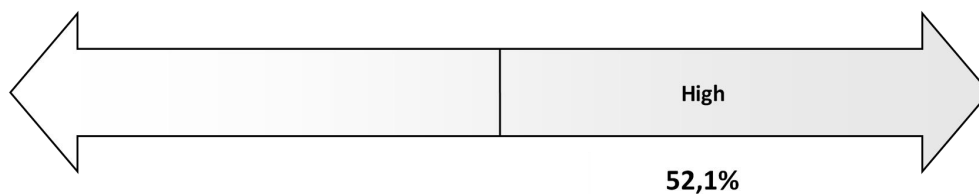


Figure 4: Binomial Line of Human Capital (X1)

Based on the binomial score percentage line, Human Capital in SMEs doll industry in West Java Province is high with a score percentage of 52.1%. Based on its dimensions, the percentage score can be presented as follows.

Table 7: SMEs Respond of Doll Industry in West Jave Province through Human Capital (X1)

No.	Human Capital		Criteria			
			1-3	4-5	Total	Achievement
1	Knowledge	f	251	261	512	High
		%	49,0	51,0	100,0	
2	Skill	f	248	264	512	High
		%	48,4	51,6	100,0	
3	Attitude	f	237	275	512	High
		%	46,3	53,7	100,0	
Human Capital (X1)		f	736	800	1.536	High
		%	47,9	52,1	100,0	

Source: Appendix Data Processed (2019)

Based on the calculation results on the table above, it presents from the achievement of frequency and percentage scores for the latent variable of Human Capital in the Center of the doll industry in the Province of West Java that the research is high (52.1%). In addition, judging by its dimensions, knowledge, skills and attitudes are all high.

The Social Capital Variable (X2) is an exogenous latent variable consisting of seven dimensions (manifest variable), namely: (1) Idea; (2) Business Opportunities; (3) Access to Financial Capital; (4) Power; (5) Support; (6) Goodwill; and (7) Trust and Cooperation. Each of these dimensions has certain indicators that can be measured. In total, there are 14 items to measure this variable. The responses of entrepreneurs to the latent variables of Social Capital based on the binomial lines of percentage scores can be presented as follows.

The entrepreneur's response to the latent variable of Human Capital based on the binomial score percentage line can be presented as follows.

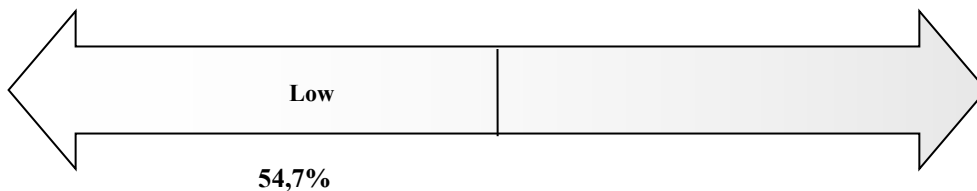


Figure 5: Binomial Line of Social Capital (X2)

Based on the binomial score percentage line, Social Capital at the SMEs of the doll industry in West Java Province is high with a percentage score of 54.7%. Based on its dimensions, the percentage score can be presented as follows.

Table 8: SMEs Respond of Doll Industry Bin West Java Province through Social Capital (X2)

No.	Social Capital		Criteria			
			1-3	4-5	Total	Achievement
1	Idea	f	134	122	256	Low
		%	52,3	47,7	100,0	

2	Business Opportunities	f	143	113	256	Low
		%	55,9	44,1	100,0	
3	Access to Financial Capital	f	179	77	256	Low
		%	69,9	30,1	100,0	
4	Power	f	126	130	256	High
		%	49,2	50,8	100,0	
5	Support	f	150	264	106	High
		%	41,4	58,6	100,0	
6	Goodwill	f	130	126	256	Low
		%	50,8	49,2	100,0	
7	Trust and Cooperation	f	119	137	256	High
		%	46,5	53,5	100,0	
Social Capital (X2)		f	981	811	1.792	Low
		%	54,7	45,3	100,0	

Source: Appendix Data Processed (2019)

Based on the calculation results on the table above, it presents from the achievement of frequency and percentage scores for the latent variable of Social Capital at the Center of the doll industry in the Province of West Java studied, which is low (54.7%). Likewise, judging by its dimensions, ideas, business opportunities, access to financial capital, and goodwill are also low, except for the power dimension, the support dimension, and the trust and cooperation dimensions, which are high.

Analysis of the effect of Human Capital, Social Capital, on Productivity refers to the first structural model, they are: partial testing: (a) Human capital (human capital) has a positive effect on productivity; (b) Social capital has a positive effect on productivity. Calculation results show that the effect of human capital on the productivity of doll industry centers in West Java Province is the greatest (with path coefficient = 0.399), followed by the effect of social capital (with coefficient path = 0.309). The simultaneous effect of Human Capital and Social Capital on Productivity is equal to $RSq = 0.566$ means that the effect of these variables is 56.6% and the remaining 43.4% is effected by other factors not examined in this model. All lane are significant, so the findings of this study indicate the importance of human capital and social capital on productivity.

IV. Conclusion

Based on the results of research and discussion, the conclusion are human capital in general has a high tendency, but there are things that need to be improved, among others, in the dimensions of financial management and marketing knowledge, social capital in general has a low tendency, productivity in general has a high tendency, but it needs to be improved include the efficiency dimension, and competitiveness in general has a low tendency, and some needs to be improved, among others, in the firm strategy, structure, and rivalry dimension. All in all, human capital, social capital, and

productivity have a significant and positive effect on competitiveness, directly or indirectly. In this case, productivity can be an intervening variable for competitiveness.

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