THE EFFECT OF HUMAN CAPITAL, SOCIAL CAPITAL AND WORK ENVIRONMENT TO PRODUCTIVITY

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ABSTRACT

This study analyzes the competitiveness of Micro-Small-Medium Enterprises (SMEs) of doll industrial sector in West Java Province which is influenced by human capital, social capital, work environment, and productivity. The aim of this research is to know and analyze the influence of human capital, social capital, work environment directly to productivity. This research was using a survey method with a quantitative approach. The unit of analysis of this study is the doll industrial sector in West Java Province, with entrepreneurs as a unit of observation, namely a population of 191 entrepreneurs and a sample of 128 entrepreneurs. Data were obtained from survey results through questionnaires distributed to the entrepreneurs. Data were processed using statistical analysis and SEM-PLS analysis. The results showed that in the human capital, work environment, and productivity were tend to be high and social capital were tend to be low. Based on hypothesis testing, it is found that the human capital, social capital, and work environment have a positive effect on productivity; and that human capital, social capital, work environment, and productivity have a positive and significant effect on competitiveness, directly and indirectly

***Keywords**: human capital, social capital, work environment, productivity, doll's industry*

Introduction

Productivity of SMEs is still far away than a large business, seen from the ratio of large business/SMEs. In the period on 2010-2013 productivity of SMEs was 12,2 million rupiahs and on the periode 2014-2018 increased to 13,3 million rupiahs. Meanwhile, the productivity of large business reach 334,8 million rupiahs on the periode 2010-2013, while the average of productivity for micro business only 7,8 million rupiahs. Meanwhile, small business is still reach 64,7 million and medium business 112,4 million rupiahs on the periode 2013-2018. The following is a compare of contribution from SMEs to the economic in Indonesia.

Table 1

Comparison Productivity of SMEs Contribution To The Economic in Indonesia
(in millions rupiahs)

Clasification	2010–2013	2014–2018
Average of 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
Large Business's Rasio/SMEs	**25,3**	**25,1**

Source: Ministry of Cooperation and SMEs, Statistic of SMEs, 2018

Indonesia has a proportion of SMEs to all unit business is the highest than others ASEN countries, it is around 99,9 percent and then Kamboja and Laos are around 99,8 percent. Like wise on the terms of labor absorpstion, SMEs in Indonesia is absorb more workers than others ASEAN countries. In Laos total of residents who working in SMEs is 82,9 percent. Thailand 81 percent, and Kamboja 71,8 percent. From the contribution side of SMEs to national of PDB, SMEs in Indonesia able to contribute57,6 percent, while SMEs in the Brunei Darussalam, Malaysia, Philippin, Singapore and Thailand were 24; 33,2; 36; 45; and 37,4 percent. But, the contribution of Indonesian SMEs

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to exporti is still low realtively if it compare with Thailand and Malaysia. SMEs in Thailand has contribution to 25,5 percent total of export and Malaysia's SMEs around 19 percent, while Indonesia's SMEs has contribution to 15,7 percent of total export. The comparation of SMEs contribution to the economy in the ASEAN countries could be presented as follows:

Tabel 2

Comparison Productivity of SMEs Contribution To The Economic in ASEAN Countries (in millions rupiahs)

Country	Business Unit		Workers Absorb		Contributin To PDB		Export	
	Share (%)	Year	*Share (%)*	Year	*Share (%)*	Year	*Share (%)*	Year
Brunei Darussalam	98,2	2010	59	2010	24	2010	n/a	n/a
Kamboja	99,8	2014	71,8	2014	n/a	n/a	n/a	n/a
Indonesia	99,9	2013	96,9	2013	57,6	2013	15,7	2013
Laos	99,8	2013	82,9	2013	n/a	n/a	n/a	n/a
Malaysia	97,3	2011	57,5	2013	33,1	2013	19	2010
Myanmar	87,4	2014	n/a	n/a	n/a	n/a	n/a	n/a
Filipina	99,6	2012	64,9	2012	36	2006	10	2010
Singapura	99,4	2012	68	2012	45	2012	n/a	n/a
Thailand	97,2	2013	81	2013	37,4	2013	25,5	2013
Vietnam	97,7	2012	46,8	2012	n/a	n/a	n/a	n/a

Source : Asian Development Bank and Ministry of Cooperation and SMEs (2018)

Base on the phenomena and the gap, the author found some problems that faced by Doll Industry Sector in West Java Indonesia, Specially about productivity is inferior with the product from Thailand and Malaysia on the Export side. That's why, if the problems couldn't be resolved so the inclusion of MEA can be a seriously threat for the doll industry sector in west java Indonesia.

Literature Review

According, Putti et al., (1989:345) the increase of productivity could be achieved by minimizing all things of cost include on utilizing human resource (do the right thing) and increase output maximizing (do the right thing). Y.Hendayana (2019:25) Productivity has a Significant effect on the competitiveness of Batik entrepreneurs in the West Java Province of Indonesia.

According Mayo (2000), since this time to measure competitiveness of company as more using physical resource (tangible asset) and it can be measured base on the perspective of finance. The excellence of human resource on the institution or company are an important thing that couldn't be negotiable (Mathis & Jackson, 2003). Knowledge asset that have an institution or company there's on the human resource (*Human Capital*).*Human Capital* according Stewart etal (1988) is an intellectual capital, source from innovation and improvement that can't be measured. The theory of human capital was first introduce by Theodore W. Schultz as a kind of capital that can be used as investment.
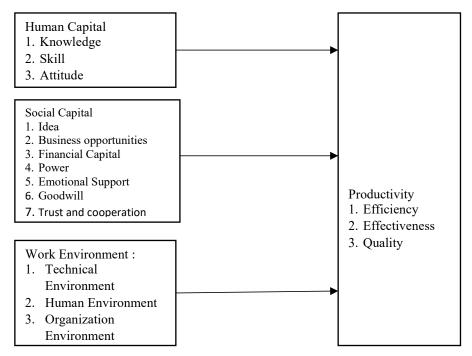
The theory of social capital is firstly was discussed on the periode 1916 (Lin 2017) contemporary of social capital is offered first time by Bourdie (1986) who said social capital is all resource of actual concept or potential, that related by ownership a networking that is durable or less relationship with institution who are known. Social capital is same with the source of information, the ide, opportunities of business, fund access, power, support, goodwill, trust and cooperation that provided by individu network and business network (Baker, 2000)

According Amstrong (2014) work environment is a part of work design that could be increase effectiveness and productivity of organization, and ensure the organization become a good place to work and condusively to work. Companies management should have a pay attention work environment for the employee. The research by Osibanio et al., (2015) is show that managers and policy maker must use these factors as consideration when formulate a

employee policy to have efficiency and productivity of employee. According Snell & Bohlander (2013) that gibe more flexible is a good way to increase performance and employee motivation. According Opperman (20029) work environment is a combination from three sub or main environment, are : (1) Technical Environment. (2) Human Environment. (3) Organization Environment.

Framework of Thinking
Figure 1
Framework of Thinking

Research Method

This type of research is verificative research, is a research that can be used to test a hypothesis or variable influences. The result of research that obtained and then processed and take a conclusion and decision. 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.

Tabel 3
Summary of Research Method

No	Research Competence	Types
1	Based on Method	Quantitative
2	Based on purpose	Explanatory Survey
3	Unit Analysis	SMES organization Center for Creative Industries Subsector of Doll Industry in West Java Province
4	Observation Unit	doll SMEs enterpreneur in West Java
5	Analysis	Verificative (SEM-PLS)

Source: variety source (processed)

Hypothesis 1 (H$_1$)
"Human Capital have positive influence to productivity"
Base on The Hypothesis 1 so could be inform statistical hypothesis as follows:
H$_0$: $\neq 0$:   Human capital don't have positive influence to productivity.
H$_1$: $= 0$:   Human capital have positive influence to productivity.

Hypothesis 2 (H$_2$)

"Social capital have influence positive to productivity"
Base on The Hypothesis 2 so could be inform statistical hypothesis as follows:
H$_0$: $\neq 0$:   Social capital don't have positive influence to productivity.
H$_1$: $= 0$:   Social capital have positive influence to productivity.

Hypothesis 3 (H$_3$)
"Work Environment have positive influence to productivity"
Base on The Hypothesis 3 so could be inform statistical hypothesis as follows:
H$_0$: $\neq 0$:   Work environment don't have positive influence to productivity.
H$_1$: $= 0$:   Work environment have positive influence to productivity.

Based on the descriptive analysis from all variables of laten exogen and endogen, the following decription of recapitulation for all variables and dimensions

Result and Discussion

Test of hypothesis is done by using SEM-PLS, consist of two step. First step is evaluation of outer model or measure model, includes outer loading values (valid if outer loading > 0,5 and the ideally outer loading > 0,7), average variance extracted (AVE) valid if ? 0,5, and composite reliability (CR) valid if > 0,7, and cronbach's alpha valid if > 0,7. The measurement model is explain the proportion of each variant manifest variable that can be seen in the laten variable. By the measurement model can be known the manifest variable is more dominant on showing laten variable. This thest on the principles is a undimensionality test (validity and realibility) every laten variable bu using Confirmatory Factor Analysis (CFA)

Second step is evaluating inner model (structural model), includes value on latent variable correlations, path coefficients, and R-square (R^2), it means the diversity or variance of endogen construct that able to explain by eksogent constructs simultaneously. In here is analysis a influence for each exogenous latent variable to endogenous latent variable.
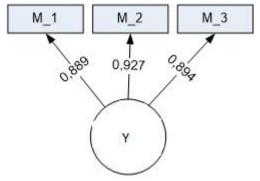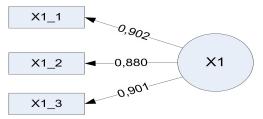

***Figure 2 Measurement Model Productivity Variable* (Y)**
Source : Output SEM-PLS Primary Data,2019

The measurement model is figure out of outer loading every dimensitons on this variable. This Outer loading is represent absolute contribution from each manifest variable (dimensions or indicator) on reflection the variable laten. The result of calculate is shos that all dimensions have path loading/coefficient > 0,50 which show that every dimension as significantly able to reflection laten variable. This productivity is state by effectiveness (Y_2) as amount 0,927, that show dimensions is stronger on shaping laten variable of productivity in doll industry sector in west java, it is followed bu quality (Y_3) as amount 0,894. In this cas, dimensions of efficiency (Y_1) with the path coefficient as amount 0,889 is show the dimensions which lower on shaping laten variable of productivity is compared others dimensions.

The result of measurement also show that cronbach's alpha = 0,883; Composite Reliability = 0,930; and Average Variance Extracted = 0,816. All value is show that measurement model of laten variable productivity has been fulfill fit model.
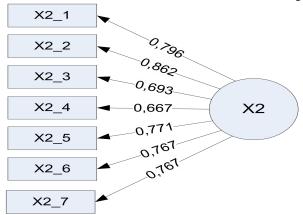
Source : Output SEM-PLS Primary Data,2019
Figure 3 Measurment Model Human Capital Variable **(X1)**

The measurement model is figure out outer loading every dimensions on this variable. Outer loadings is represent absolute contribution from each manifest variable (dimensions or indicator) on reflection laten variable. The result of calculating is show that all dimensions have a path loading/coefficient > 0,50 which shoe that every dimensions significantly able to reflection laten variable human capital by result test of measurement model could be seen path coefficient for each manifest variables. The biggest estimation of path coefficient on the laten variable human capital is stated by knowledge (X1_1) as amount 0,902, that show the stronger dimension on shaping laten variable human capital in the doll industry sector in west java province is followed by attitude (X1_3) as amout 0,901. in this case, dimensions of skill (M_2) by path coefficient as amout 0,880 indicates dimension relatively lower on shaping laten variable human capital than others dimensions. The result of calculating also show the value of cronbach's alpha = 0,875; Composite Reliability = 0,923; and Average Variance Extracted (AVE) = 0,799. All value is indicate that measurement model of laten variable human capital has been fulfill fit model. In other words, all manifest variable has been valid and reliable on measuring laten variable of human capital.
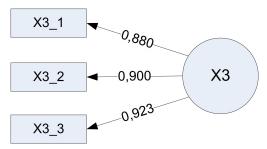

Source : Output SEM-PLS Primary Data,2019
Figure 4 Measurement Model Social Capital Variable **(X2)**

The measurement model is figure out outer loading every dimensions on this variable. Outer loadings is represent absolute contribution from each manifest variable (dimensions or indicator) on reflection laten variable. The result of calculating is show that all dimensions have a path loading/coefficient > 0,50 which shoe that every dimensions significantly able to reflection laten variable social capital by result test of measurement model could be seen path coefficient for each manifest variables. The biggest estimation of path coefficient on the laten variable social capital is stated by business opportunities (X2_2) as amount 0,862, that show the stronger dimension on shaping laten variable social capital in the doll industry sector in west java province. In this case, dimensions of power (X2_4) by path coefficient as amout 0,667 indicates dimension relatively lower on shaping laten variable social capital than others dimensions. The result of calculating also show the value of cronbach's alpha = 0,878; Composite Reliability = 0,906; and Average Variance Extracted (AVE) = 0,582. All value is indicate that measurement model of laten variable social capital has been fulfill fit model. In other words, all manifest variable has been valid and reliable on measuring laten variable of social capital.
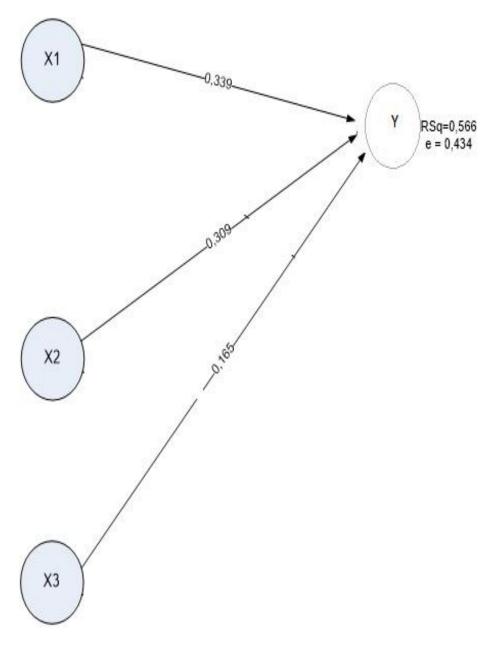
Source : Output SEM-PLS Primary Data,2019
Figure 5 Measurement Model Work Environment Variable (X3)

The measurement model is figure out outer loading every dimensions on this variable. Outer loadings is represent absolute contribution from each manifest variable (dimensions or indicator) on reflection laten variable. The result of calculating is show that all dimensions have a path loading/coefficient > 0,50 which shoe that every dimensions significantly able to reflection laten variable work environment by result test of measurement model could be seen path coefficient for each manifest variables. The biggest estimation of path coefficient on the laten variable work environment is stated by organization environment (X3_3) as amount 0,923, that show the stronger dimension on shaping laten variable work environment in the doll industry sector in west java province, is followed by human environment (X3_2). In this case, dimensions of technical environment (X1_1) by path coefficient as amout 0,880 indicates dimension relatively lower on shaping laten variable work environment than others dimensions. The result of calculating also show the value of cronbach's alpha = 0,886; Composite Reliability = 0,928; and Average Variance Extracted (AVE) = 0,812. All value is indicate that measurement model of laten variable work environment has been fulfill fit model. In other words, all manifest variable has been valid and reliable on measuring laten variable of work environment.

Source : Output SEM-PLS Primary Data,2019
Figure 6 Measurement Model All Variable

Conclusion

Based on the result of research and discussion, could be concluded that human capital generaly have a high tendency as amout 0,339, but there something need to increase such as on the dimensions of financial capital and marketing, social capital generaly have a high tendency as amount 0,309, productivity generaly have a high tendency, but there something need to increased such as on the dimensions of efficiency, and work environmtnet have a lower tendency as amount 0,165, but there is dimension of work environment that the contribution isn't large is on the dimensions of organization environment, especially on the indicator of safety or guarantee on work. Overall, human capital, social capital and work environment have a influence significantly and positive to productivity.

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