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INDONESIAN CONDITION: WHAT FACTORS ARE INFLUENCE MICRO ENTERPRISES TO FACE THE INDUSTRIAL ERA 4.0?

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ABSTRACT
The local businesses is facing global competition in the industrial era 4.0 is a major challenge for the economic development of the Indonesian, many policies and programs of the central and regional governments that encourage increased competitiveness of business actors, especially micro enterprises. This study identified the factors are influence the performance of Malang micro enterprises to face the industrial era 4.0. The results showed that the knowledge of Micro enterprises in Malang about Industrial Era 4.0 was still lacking. There are two variables that have a large category, namely the variable Knowledge (X2) and Business Size (X3) against Readiness (Y) with the resulting value of 0.005 and > 0.001. This means that the variable Knowledge (X2) and Business Size (X3) has a large influence on the variable Readiness (Y).

KEY WORDS
Businesses, competitiveness, enterprises, public service.

The potential possessed by micro enterprises will certainly vary according to available resources. Considering that micro enterprises is a form of local-based creative economy. The involvement of all global political stakeholders, ranging from the public sector, private sector, academia, to civil society so that industry 4.0 challenges can be managed into opportunities. Irianto (2017) states that the industry's readiness in facing the industrial era 4.0 is a major challenge that must be corrected and prepared in facing the needs and characteristics of the global market. In addition, a trusted workforce, the ease of socio-cultural arrangements as well as diversification and job creation are also industry challenges and opportunities 4.0.

According to the Central Statistics Agency of East Java Province (2018), in 2017 it was recorded that Micro enterprises in Malang Raya as a whole reached 8.58% of the total micro enterprises in East Java, equivalent to 392,526 micro enterprises. However, only a small portion of these micro enterprises understand the competition strategy and industry era standardization 4.0.

RESULTS AND DISCUSSION

According to Ghozali and Hengky (2017), the loading factor requirements of> 0.7 for confirmed studies and> 0.6 are still acceptable for explanatory studies. While the requirements for AVE value must meet> 0.5. The following is the loading factor value and AVE which can be seen in Table 1.

The results show that indicator X2.2 on the latent variable of knowledge does not meet the requirement of convergent validity with a value of 0.565 which is less than 0.6. Therefore, indicators that do not meet the requirements must be eliminated to improve the construct. Whereas the AVE score obtained by each indicator has fulfilled the requirements of > 0.5.

According to Ghozali and Hengky (2017), to measure discriminant validity the AVE square root value must be greater than the correlation between latent constructs. The following is the square root value of Average Variance Extracted (AVE) which can be seen in Table 2.

According to Abdillah and Hartono (2015), the reliability test in PLS can use two methods, that are Cronbach's alpha and composite reliability. However, composite reliability

is considered better in estimating the internal consistency of a construct (Abdillah and Hartono, 2005). Rule of thumb composite reliability value is> 0.7 although 0.6 is still acceptable. Following are the results of the internal consistency reliability tests of each construct that can be seen in Table 3.

Table 1 – Loading Factor and AVE Value

Code	Variable	AVE	*Loading Factor*	P-Value
X1	Experience	0.651		
X1.1	Age		0.807	<0.001
X1.2	Business life		0.807	<0.001
X2	Knowledge	0.524		
X2.1	Education level		0.721	<0.001
X2.2	Training activities		0.565	<0.001
X2.3	Computer and internet used		0.857	<0.001
X3	Business size	0.779		
X3.1	Total labor		0.882	<0.001
X3.2	Return (Rp/month)		0.882	<0.001
X4	Inovation	0.609		
X4.1	Frecuency of product changed		0.808	<0.001
X4.2	Inovation idea		0.838	<0.001
X4.3	Search the new product information		0.688	<0.001
X5	Network	0.547		
X5.1	Network with consummer		0.783	<0.001
X5.2	Network with supplier		0.756	<0.001
X5.3	Network with big business		0.748	<0.001
X5.4	Network with assosiation		0.632	<0.001
X5.5	Network with goverment		0.769	<0.001
Y	Readiness	0.802		
Y1.1	Ready to competed the industrial era 4.0		0.895	<0.001
Y1.2	Internalization intention		0.895	<0.001

Source: Primary data processed (2019).

Table 2 – AVE Square Root Value

	X1	X2	X3	X4	X5	Y
X1	(0.807)	0.119	0.056	0.019	0.160	-0.258
X2	0.119	(0.724)	0.442	0.424	0.321	0.509
X3	0.056	0.442	(0.882)	0.293	0.518	0.630
X4	0.019	0.424	0.293	(0.781)	0.420	0.298
X5	0.160	0.321	0.518	0.420	(0.740)	0.288
Y	-0.258	0.509	0.630	0.298	0.288	(0.895)

Source: Primary data processed (2019).

Table 3 – Internal Consistency Reliability

	Composite Reliability
X1	0.789
X2	0.763
X3	0.876
X4	0.823
X5	0.857
Y	0.890

Source: Primary data processed (2019).

The composite reliability value on all variables has met the requirements of> 0.6. So it can be concluded that each variable has a high internal consistency and good reliability so that it can be used in this study.Evaluasi Model Struktural (*Inner Model*).

Evaluation of structural models in PLS according to Abdillah and Hartono (2015) can be evaluated through R-Square values. The R-Square value is used to measure the degree of variation in the changes of the independent variable to the dependent variable. The higher

the R-Square value means the better the proposed research model. The following is a structural evaluation in this study which can be seen in Table 4.

Table 4 – Structural Evaluation

	X1	X2	X3	X4	X5	Y
R-Square						0.832
Adj. R-Square						0.797
Q-Square						0.673
Full Collin VIF	1.276	1.658	2.187	1.384	1.579	2.320

Source: Primary data processed (2019).

Based on the analysis it is known that R-Square and Adj. R-Square scores 0.832 and 0.797. This value indicates that the R-Square value is included in the strong category of more than 0.70 so it can be said that the predictor of the model is sufficient to explain the variance well. R-Square value of 0.832 means that the experience, knowledge, business magnitude, innovation, and network variables have an influence of 83% on the readiness variable. While the Q-Square value of 0.673 indicates that Q-Square is included in the strong category of more than 0.35 so that it can be said that the model has predictive relevance and shows strong predictive validity. Full Collin VIF value <3.3 explains that in this study there was no collinearity problem.

The evaluation of the Goodness of Fit model according to Ghozali and Hengky (2017) in the warpPLS analysis uses 10 measurements namely Average Path Coefficient (APC), Average R-Squared (ARS), Average Adjusted R-Squared (AARS), Average Block VIF (AVIF), Average Full Collinearity VIF (AFVIF), Tenenhaus GoF (GoF), Sympson's Paradox Ratio (SPR), R-Squared Contribution Ratio (RSCR), Statistical Suppression Ratio (SSR), and Nonlinear Bivariate Causality Direction Ratio (NLBCDR).

Table 5 – Goodness of Fit Model

Index	Values	Standard Value	Result
APC	0.316, P=0.013	$p < \alpha$ ($\alpha = 0.05$ / 5%)	Accept
ARS	0.832, P<0.001	$p < \alpha$ ($\alpha = 0.05$ / 5%)	Accept
AARS	0.797, P<0.001	$p < \alpha$ ($\alpha = 0.05$ / 5%)	Accept
AVIF	1.441	≤ 3.3	Accept
AFVIF	1.734	≤ 3.3	Accept
GoF	0.737	*Small* ≥ 0.1, *medium* ≥ 0.25, *large* ≥ 0.36	*Large*
SPR	1	Accept if ≥ 0.7, ideal =1	Accept
RSCR	1	Accept if ≥ 0.9, ideal =1	Accept
SSR	1	≥ 0.7	Accept
NLBCDR	1	≥ 0.7	Accept

Source: Primary data processed (2019).

Hypothesis testing is done to determine the effect of a direct relationship on one construct to another construct by looking at the value of the path coefficient and P-value. If a P-Value <0.05 (Alpha 5%) is obtained, the value is significant, so the hypothesis is accepted. However, if the P-value> 0.05 (Alpha 5%), then the value is not significant, so the hypothesis is rejected.

Table 6 – Hypothesis Testing

Hypothesis	*Path Coefficient*	*P.Value*	Result
H1:Experience influences the micro enterprisesreadiness	-0.210	0.106	Reject
H2:Knowledge influences the micro enterprises readiness	0.409	0.005	Accept
H3:Business size affects themicro enterprises readiness	0.616	<0.001	Accept
H4:Innovation affects the micro enterprises readiness	0.084	0.317	Reject
H5:Network influences themicro enterprises readiness	0.259	0.059	Reject

Source: Primary data processed (2019).

The results found that are two accepted hypotheses and there are three hypotheses rejected because it has a p-value> 0.005. Knowledge and business sizevariables are influenced the readiness of the micro enterprises. Knowledge consists of the level of education as well as the use of computers and the internet that can affect the readiness of Micro enterprises in realizing the industrial era 4.0. The higher the level of education, the easier it is to absorb the use of technology, while the size of the business consists of the number of workers and turnover that can affect the readiness of Micro enterprises in facing the industrial era 4.0. Even though in its application it uses computers and sophisticated technology, it still needs human resources who are able to maximize the performance of Micro enterprises.

The experience, innovation, and network variables did not affect the readiness of Micro enterprises in facing the industrial era 4.0. Innovation is expected to be able to encourage the readiness of Micro enterprises supported by network and experience. Experience has a negative relationship with the readiness of Micro enterprises which means that the high level of age and duration of trying to reduce micro enterprises readiness. As the owner's age increases and the length of time he strives, innovation decreases (Andrianto, 2016). The network owned by Micro enterprises also does not significantly encourage the readiness of Micro enterprises to face the industrial era 4.0. This is due in the field conditions on average Micro enterprises do not have a good relationship with several associations or government institutions that can support micro enterprises performance in industry 4.0.

The results showed that the knowledge of Micro enterprises in Malang about Industrial Era 4.0 was still lacking.Knowledge and business size variables are significant influenced the readiness of the micro enterprisesto face industrial era 4.0 with the p-value 0.005 and <0.001. But the experience, inovation and network variables are not significant influenced the readiness of the micro enterprises to deal with industralization because p-value show 0.106, 0.317 and 0.059.

CONCLUSION

The implementation of delay selling activity in rice farming business was conducted by Rice Milling Unit (RMU) managed by GapoktanMutiaraTani. This unit provides mill and storage for farmers who want to delay their selling. Rice storage can be done partially so that farmers feel safe and flexible when they want to sell or take their grains. Furthermore, it is supported by warehouse facility with the capacity reaching 10 tons.

Agribusiness development in rice farming business with delay selling activity gives more benefits compared to non-delay selling activity. Regarding total cost, delay selling actors have higher cost than those non-delays selling but the difference of rice selling price per kilogram makes delay selling actors obtain more profit than those non-delays selling. Agribusiness development was also conducted by farming Business Corporation in which the farmers (i.e. farmers group MutiaraTani) in Selodakon Village runs it. As a start, pilot project with 10 hectare rice field was applied with irrigation technique starting from breeding to post-harvest.

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