Small and Medium Sized Enterprises (SMEs) Performance in Small Industrial Village from Perspective of Creativity and Online Business (E-commers)

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***Abstract*---**Purpose of this research is to know and explain influence of online business/e-commerce trading and creativity on performance of small and medium-sized enterprises (SMEs) in small industry village in east Jakarta. Out of Population of 115 administrators of this industry, samples of 90 active industry/store owners are taken based on Morgan and Kreijcie table. Samples are taken based on purposive sampling. Data collection is by giving questioners. Then the data is analyzed using linier regression. The result shows that online trading and creativity affects significantly positive to performance of this industry.

***Keywords*---**e-commers, on line business, small and medium-sized enterprises (SMEs), small industrial village.

Introduction

Entrepreneurship is one among many ways for anybody to work and get career. Sulistyowati & Lestari (2016), factor that affects performance of small and medium business is business management and strategy. Open up business will provide jobs for those who need or seek jobs. This will help government reduce

unemployment rate. Rahmadi & Ruhamak (2018), *Customer Relation Management* (CRM) and *Word of Mouth* (WOM) can affect performance of SMEs in Kediri town. Since monetary crisis in 1998, SMEs have been the reliable foundation as people's economy proven strong and continuously running relative to other businesses that are falling apart or even going bankrupt (Mittal et al., 2018; Meath et al., 2016; Perera & Chand, 2015). In Indonesia role of SMEs contribute significantly to Indonesian domestic brute. In 2019, around 5%. This business is favorable because it needs relatively small capital and it runs in less complicated way (Purnama, 2010). Therefore, these SMEs are part of economy activity unseparated from society to make living. In Jakarta it contributes 98.78% of total business running, the rest are medium and large-scale businesses. Composition of SMEs in Jakarta is as follows:

Table 1
Number and percentage SMEs in Jakarta Province

Districts	Number	Percentage (%)
Thousand Islands	3.735	0,32
South Jakarta	224.245	19,48
East Jakarta	252.953	21,98
Central Jakarta	147.745	12,84
West Jakarta	305.076	26,50
North Jakarta	217.326	18,88
Total	1.151.080	100

Resource: BPS, 2018

From above table West Jakarta constitutes 6.50%, followed by East Jakarta with 21.98%. Number three is South Jakarta with 19.48%, then North Jakarta with 18.88%. Number five is Central Jakarta with 12.84%. Last one is Thousand Islands by 0.32%. Creativity is one of the requirements to be an entrepreneur. Creativity is ability possessed by someone to identify and create new things, new ways, new model useful for himself/herself and society. According to Munandar (2009), creativity is result of interaction between individual and his/her environment, ability to make new combination based on data, information, or other existing or known-before elements. The elements are all knowledges and experiences in his/her life that he/she gets from school, family and society.

E-commerce according to Fahmi (2016), the use of information and communication technology by business doer, individual or related parties to run and manage main business process in order to get benefit in the form of security, flexibility, integration, optimization efficiency, increased productivity and profit. According to Triandini & Atmojo (2014), *E-commerce is* transaction process of goods and services by way of information system using information technology. The emergence of online-based buying selling makes various products can be seen; prices can be known even be negotiated without having to go to the shop/store. E-commerce gives benefit to business doer to increase efficiency, reduce inventory cost, increase selling, enhance relationship with customers, penetrate new market, finally financial returns. Given Indonesian population of 259 million people (Resource: BPS, 2018), it is huge opportunity for SSMEs to market their products. With current fact that more than 326 million mobile phone

users, 88 million internet users, 79 face book users, this will give more opportunity and help SMEs promote and develop the businesses by way of digital media. In Indonesia averagely a person spends 4.42 hours/day in desktop, 33 hours/day in mobile *phone,* 2.51 hours/day in TV (We Are Social, 2016), this indicates that using internet and social media has been behavior of society (Shankar et al., 2002; Xie et al., 2014). Number of internet users, cell phone users and social media users creates the shift of buying behavior of Indonesian digital consumers toward online shopping. Penetration of internet users in 2019-2020 is shown in following picture 1:
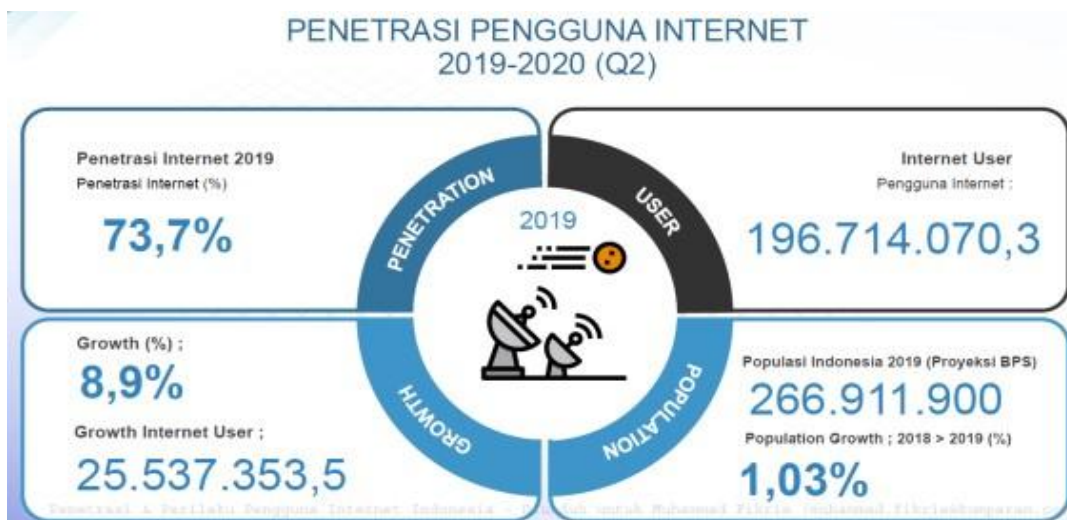

Figure 1. Penetration of internet users in 2019-2020
Source: https://kumparan.com/ accessed on 10 November 2020

Trend of internet user is increasing. This affects consumers behavior regarding buying. They are getting used to online buying. Online buying trend is very promising in the future (Gillenson & Sherrell, 2002; Arbaugh et al., 2009).

Effort performance is utilization of effort resource in various ways. One of them is profit. Based on follow-up SE2016 data, profit income of SMEs shows positive achievement even though some show decrease. One third of SMEs in Jakarta province in 2016 got decrease in profit relative to 2015. Reportedly SMEs in Jakarta province generate revenue around 27.8 trillion rupiah

To know issues in SMEs located in small industrial village in east Jakarta related to creativity and online (e-commerce) business (Rahayu & Day, 2015; Liu & Wei, 2003). A survey has been conducted by giving questioners to 20 respondents (business doers) there. These 20 respondents said that performance of SMEs is affected by some factors; they are capital, skill, creativity, online/e commerce, imported product competition. Below is the detail (response of related respondents regarding factors that affect SMEs performance.

Table 2
Response of respondents on variables that affect SMEs performance

No	Factors affecting performance of SMEs	Yes	Percentage	No	Percentage
1	Capital	11	55%	9	45%
2	Skill	13	65%	7	35%
3	Creativity	18	90%	2	10%
4	Online/e-commerce	16	80%	4	20%
5	Imported products	9	45%	11	55%

Resource: Questioner Data processed in 2020

Based on the 20 respondents as business doers in small industrial village in East Jakarta respondents answered yes that creativity affects SMEs performance and online/e commerce is the reason performance of SMEs decreases continuously. Based on those 5 factors there are two interesting factors to be researched, they are creativity and online/e commerce (Jiang et al., 2017). Purpose of this research is to analyze and explain influence of creativity on performance of SMEs in small industrial village in east Jakarta and to analyze and explain influence of online/e commerce on performance of SMEs in small industrial village in east Jakarta.

Method

Venue of research is decided based on phenomenon in small industrial village in Penggilingan, East Jakarta. Merchants of the shops/stores- (shoes, slippers, clothes are produced in the shops), recently revenue is declining continuously yearly. COVID-19 case which was starting in end of February 2020 added to that. Type of research is quantitative. Quantitative research is a method emphasizing on measurement aspect objectively to social phenomenon. Gathered data is numbers according to Sugiyono (2016), research methodology is scientific way to gather data for certain purpose and use.

Population of this research is all SMEs business doers in small industrial village, East Jakarta. There are 115 kiosk owners. Population according to Sugiyono (2016), population is generalization area consisting of objects/subjects that have certain quality and character determined by the research to study and draw conclusion. Method of data gathering is by distributing questioners as determined. Method used is purposive sampling that is kiosk owner who has had the kiosk more than 3 years.

Analytical tool in this research is simple and double regression. Regression is analytical tool to seek influence between dependent variable and independent variable. Dependent Variable is creativity and e-commerce while independent variable is performance.

Discussion

Below is respondent characteristics based on gender, residence, education, age, shop ownership status and monthly average income. By gender 60% is male and 40% is female. By residence majority of 78.9% live in East Jakarta, by education

44,40% is high school graduate. By age 34% is 20-30 years old, 66% is above 30 years old.

Testing of instrument

According to Sugiyono (2016), validity testing is to validate questioner. A questioner is valid if statements in questioner can reveal things to be measured by questioner. According to Ghozali (2018), criteria of validity in validity testing by comparing value of *corrected item–total correlation* ($r_{calculate}$) with value r_{table}. If value $r_{calculate}$ is more than r_{table} so an indicator is valid and vice versa. In this validity testing foundation of decision making uses r_{table} with accuracy level is 90%, or error level is 10%. From number of respondent or N=90, value r_{table} is 0,1745. Below is result of validity testing of talent variable:

Table 3
Result of validity testing of creativity variable

Statement	$R_{calculate}$	R_{table}	Information
Always look for new idea	0,866	0,1745	Valid
dare to appear before other does	0,719	0,1745	Valid
aware of changing in the environment	0,666	0,1745	Valid
always come up with up-to-date idea			
idea is fresh, never before in market	0,672	0,1745	Valid
Complex idea is a challenge	0,749	0,1745	Valid
very interested to develop new idea			
Challenge to face creative idea	0,6323	0,1745	Valid
Interested with new things	0,654	0,1745	Valid

Resource: Primary Data Processed, 2021

From above table it can be explained that correlation coefficient of testing of question table 1-7 is valid, because $r_{calculate}$ > r_{table} (0,1745), meaning all instruments can be continued for analysis by using regression.
Moreover, to measure validity of online instrument variable. Table 5 below shows it:

Table 4
Result of validity testing of online variable

Question	$R_{calculate}$	R_{table}	Information
To download fast and easy	0,661	0,1745	Valid
Gadget doesn't consume many memory	0,767	0,1745	Valid
Secured and trusted information quality	0,798	0,1745	Valid
Easy access to online shop	0,621	0,1745	Valid
Appearance of product's photo is as good as the original	0,689	0,1745	Valid
Service given meets expectation	0,658	0,1745	Valid
Easy to find address of online shop	0,890	0,1745	Valid
Easy to access address of online shop	0,680	0,1745	Valid
Quality of online shop features is interesting	0,634	0,1745	Valid
Simple transaction steps via online shop	0,665	0,1745	Valid

Less time-consuming, economical, less effort	0,689	0,1745	Valid
Accessible anywhere as long as internet is available	0,790	0,1745	Valid

Resource: primary data processed, 2021

From above table, it can be explained that correlation coefficient from each question statement 1 to 12 is valid, that is $r_{calculate} > r_{table}$ (0,1745), meaning all questions meet the condition for analysis using regression. Below is result of validity testing of performance of SMEs in small industrial village

Table 5
Result of validity testing of performance variable of SMEs

Question	$R_{calculate}$	R_{table}	Information
Marketing to determine performance	0,643	0,1745	Valid
Marketing based on target to determine performance achievement	0,652	0,1745	Valid
Capital to determine performance	0,636	0,1745	Valid
Capital to determine power of competition	0,840	0,1745	Valid
Entrepreneurship knowledge to determine performance achievement	0,609	0,1745	Valid
Entrepreneurship knowledge to determine power of competition	0,633	0,1745	Valid
Skill of shop manager to determine performance	0,778	0,1745	Valid
Skill of shop manager to influence progress of the company	0,623	0,1745	Valid
Planning to determine success of SMEs	0,678	0,1745	Valid
Planning to determine future of SMEs	0,622	0,1745	Valid

Resource: primary data processed, 2021

From above table it can be seen that coefficient correlation from question 1 to 10 is valid, because $r_{calculate} > r_{table}$ (0,1745). Reliability testing is tool to measure one questioner that is indicator of variable. A construct variable is stated variable if value of Cronbach Alphais > 0,6 (Torang 2013). Foundation of decision making in reliability testing is by using Cronbach Alpha of 0,6. Next is reliability testing on questioner addressed to 90 respondents.

Table 6
Result of reliability testing of research variable

Variable	Cronbach Alpha	Significance level	Information
Creativity	0,735	0,600	Reliable
Online business (E-Commerce)	0,768	0,600	Reliable
Performance of SMEs	0,745	0,600	Reliable

Resource primary data processed, 2021

From above table it shows all instruments are reliable or consistent. This can be seen that each instrument variable has coefficient > 0,600. According to Sugiyono (2016), simple regression is based on functional or causal relationship between

one independent variable with one dependent variable. Influence of creativity (X_1) to performance of SMEs (Y). Below is analysis result of simple linier regression creativity variable questioner addressed to 90 respondents.

Table 7
Output of simple linier regression creativity on performance of SMEs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,252	4,24		2,151	,024
	creativity	,	,106	,598	,740	,000

a. Dependent Variable: Performance of SMEs
Resource: primary data processed by SPSS20, 2021

From the result value of a is 10,252 meaning if there is no talent so consistent value of SMEs performance 10,252. Value of B (value of coefficient regression) talent variable is 0,740, meaning for every additional 1% talent level (X_1), so performance of SMEs will increase by 0,740. Because regression coefficient value is positive so it can be said that talent influences positively to performance of SMEs so regression equation is Y = 10,252 + 0,640.
Next is result of simple linier regression analysis of online business variable questioner addressed to 90 respondents.

Table 8
Output of simple linier regression analysis of online business on performance of SMEs

Model		Unstandardized Coefficients		Standardized d Coefficients	t	Sig.
		B	Std. Error	Beta		
1		28,585	3,243		8,815	,000
	Constant Online Business	,508	,084	,540	6,021	,000

a. Dependent Variable: Performance of SMEs
Resource: Primary data is processed by author, 2021

From the result, value a is 28,585 meaning if there is no online business, so consistent performance of SMEs is 28,585. Value B (Value of regression coefficient) on   *online* business variable is 0,508, meaning for every additional 1% on   *online business* (X_3), so performance of SMEs(Y) will increase by 0,508. Due to regression coefficient value is positive, it can be stated that online business influences positively SMEs performance. Therefore, regression equation is Y = 28,585 + 0,508.

Regression is used to predict dependent variable value based on independent variable value. A Regression analysis is conducted if relationship of two variables is causal or functional. To determine if two variables have causal relationship or

not, it should be based on theory or concept about both variables. Next is analysis result of double linier regression on questioner addressed to 90 respondents.

Table 9
Testing result of analysis on double linier regression analysis

Model	Unstandardized Coefficients		Standardized coefficient	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6,423	5,516		1,164	,247
creativity	,445	,130	,359	3,415	,001
Online business (E-Commerce)	,228	,096	,243	2,376	,020

a. Dependent Variable: Performance of SMEs
Resource: primary data processed, 2021

Above table shows that double regression equation model to predict SMEs performance influenced by talent, passion, online business (e-commerce) is:

$$Y = 6,423 + 0,445X_1 + 0,228X_3$$

Y is performance of UKM,
X_1 is creativity,
X_2 is online business (e-commerce).

Double regression coefficient of 0,445 and 0,282 indicates that every additional of SMEs performance for every additional respondent's answer on talent, passion and online business (e-commerce) variables. Talent variable (X_1) influences positively and significantly on SMEs performance with significance value of r 0,001 < 0,1. Passion variable (X_2) influences positively and significantly on SMEs performance with significance value of 0,047 < 0,1. Online business (e-commerce) (X_3) influences positively and significantly on SMEs performance with significance value of r 0,20 < 0,1.

Coefficient of determination

Based on SPSS calculation result, it is explained that coefficient result of creativity and online business (*e-commerce*) variables on SMEs performance as shown in table 10 as follows:

Table 3
Result of coefficient of determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,663a	,440	,420	4,999

a. Predictors: (Constant) creativity, Online business (E-Commerce),
Resource: Primary data processed by author, 2021

Based on table 10 it can be explained that Value of R, correlation of creativity and online business with SMEs performance shows medium relationship around 0,663 (66,3%), while value R-Square, influence of creativity and online business on SMEs Performance is around 0,440 (40%). The rest of 56% is influenced by other unresearched factors like innovation, talent, condition of environment etc. F testing is used to know if independent variables of talent (X_1), passion (X_2), and online business (e-commerce) (X_3) altogether influence significantly dependent variables of SMEs performance (Y). By using confidence level of 90%, α = 10%, df 1 (number of variable –1) = 2, and df 2 (n – k – 1) or 90 – 3 – 1 = 86, (n is number of cases and k is number of independent variables), so result for table F is 2,365. So formulated hypothesis is: based on F testing from data processing using SPSS, it can be explained in table 11:

Table 4
Quantitative parameter of F testing

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1685,741	3	561,914	22,484	,000b
	Residual	2149,247	86	24,991		
	Total	3834,989	89			

Resource: Primary data is processed by author, 2021

From output result above, Df calculate is 22,484, because F calculate > F table (22,484 > 2,365) so Ho is rejected, meaning there is significant relationship between talent, passion, and online business (e-commerce) altogether on performance of SMEs. This testing is used to know if independent variable creativity s (X_1), and online business (e-commerce) (X_2) can influence dependent variable SMEs performance to decide t table, table distribution t is sought at α = 10 %: 2 = 5% (2 sides testing), with degree of freedom (df = n – k – 1) or 90 – 3 - 1 = 86, (n is number of cases and k is number of independent variable). With 2 sides testing (significance = 0,10) result is obtained for t table around 1,663. So formulated hypothesis is:
Based on t testing, it shows value $_{calculate}$ is bigger than t_{table} (3,415 > 1,663) so Ho is rejected partially, there is significant influence between talent and performance. So, it can be concluded that talent influences performance positively.

H3: There is positive influence of online business to SMEs performance from above result value $t_{calculate}$ is bigger than t_{table} (2,367 > 1,663) so Ho is rejected, meaning partially there is significance between online business (*e-commerce*) and SMEs performance. So, it can be concluded that online business (e-commerce) influences performance positively. Result of data processing uses SPSS, it can be explained in table 12 as follows:

Table 12
Quantitative Parameter t testing

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,423	5,516		1,164	,247

	,445	,130	,359	3,415	,001
creativity	,445	,130	,359	3,415	,001
Online business (E-Commerce)	,228	,096	,243	2,376	,020
Dependent Variable: SMEs performance					

Resource: Data is processed by author, 2020

Based on above hypothesis testing result, it can be concluded that: Value $t_{calculate}$ is bigger than t_{table} (2,016 > 1,663) so Ho is rejected, meaning artially there is significant influence between passion and SMEs performance. So it can be concluded that passion influences SMEs performance positively.

Conclusion

Based on analysis result of influence of creativity and online business variables on SMEs performance, it shows that both variables give positive contribution simultaneously and partially on SMEs performance in small industrial village east Jakarta. This research is in line with research by Mabenge et al. (2020), business doer of SMEs needs innovation and creativity in order to increase performance. Creativity by way of innovation to develop product that meet consumer's need requires market. Innovation in service is a breakthrough. This has to be developed so SMEs performance can meet expectation beside that management system needs to be developed. As stated in research by Sulistyowati & Lestari (2016), that manager of SMEs contributes to performance. Role of government is totally needed by SMEs business doers especially in governance of organization, infrastructure needs to be provided by local government. This will encourage small industrial village to be modern shopping centre and becomes icon of central business in east Jakarta.

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