



Conference Paper

The 21ST Century Capabilities for Improving SME Performance

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Abstract

Most of business in the world, including Indonesia, consists of SMEs (around 99% of the total enterprises). With this large number of SMEs must be balanced with good performance in order to sustain and beneficial for the nation, considering their contribution that almost two-third of the national GDP. In this modern era, where everything is connected, we cannot assess SMEs performance solely on conventional products but also need to add other abilities from a founder to be able to bring the company to continue and growth. This, innovation, marketing, digital and learning capabilities are the key capabilities for the firms in their efforts to achieve superior performance especially in Indonesia. Thus, this research aimed to (i) investigate to what extend founder capabilities are effective on SME performance, and (ii) propose strategies to improve SME performance.

To answer the research objective, this research used mixed method. To assess SMEs performance through founder capabilities in doing innovation, marketing, digital, and learning, a survey was conducted. Continues with in-depth interview to explore appropriate program for improving SMEs performance. Samples for the survey were taken from different categories of SMEs (micro, small and medium) and across industrial sector, approximately 100 samples were gained for the study. For the in-depth interview, a total of seven samples from each difference SMEs group and industrial sector was drawn.

The questionnaire from the survey then analyzed using multiple linear regression to investigate the effect of independent variables (innovation capabilities, learning capabilities, marketing capabilities, and digital capabilities) toward dependent variable (SMEs performance). The result is most of the independent variables are significantly affected the SMEs performance. From the in-depth interview, the respondents suggested comprehensive detailed program for workshop, seminar, coaching, or mentoring to improve SMEs performance.

Keywords: Small Medium Enterprise, SME performance, Innovation Capability, Learning Capability, Marketing Capability, Digital Capability

1. Introduction

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World are currently dealing with the challenges of a digital economy as well as a digital transformation. These challenges were announced at the beginning of this century

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by Zimmermann (2000), who defined a digital economy to be an economy based on the digitization of information and its respective information and communication infrastructure. According to the author, this new type of economy implies challenges and opportunities, thus making it necessary for organizations to overcome the barriers imposed by the digital transformation and to take the opportunities that come with it. To cope with this new context, it is required to develop capabilities.

The government of Indonesia recognizes SMEs as key drivers of economic growth and social inclusion (OECD, 2018). SME also feature prominently in the main government development strategies, such as the five-year National Medium-Term Development Plan. Those SME (Small Medium Enterprise) might present as one of the options to fulfill those modern society needs. Based on data from Indonesian Ministry of Industry (2018), the total number of enterprises in Indonesia in 2012 were around 56.539.560 units. Meanwhile the number of SMEs were around 56.534.592 units which means it was about 99% of enterprises in Indonesia are SMEs.

In this modern, connected era, SME's performance is crucial to be able to compete and not be eroded by the times. SME in modern era cannot focus solely on conventional products but requires other abilities from a founder to be able to continue and growth. According to Soriano and Castrogiovanni (2012) the experience and knowledge of the CEOs has a positive link to the performance of these firms. Furthermore, Soriano and Castrogiovanni state that the knowledge of a founder-CEO is more important in small firms than in large firms because the management has greater leverage to impact on firm's productivity and performance in SMEs.

Superior innovation capability is a key contributor to firm performance. The capacity to innovate can assist firm in process of developing superior products to meet their customers' changing needs and demands (Verhees and Meulenberg, 2004; Li and Mitchell, 2009; Rosenbusch et al., 2011). Firms must also possess superior marketing capability to bring their products to be marketplace faster and serve the customer better than their rivals (Vorhies and Morgan, 2005; O'Dwyer et al., 2009). However in addition to innovation and marketing capabilities, firms must also possess superior learning capability to analyze their successful and unsuccessful activities in developing and launching the products as well as to acquire new knowledge so that improvement can be mad e and new ways of working more closely with customers are identified (Chaston et al., 2001; Prieto and Revilla, 2006). According to Aaker (2015) and Yoo (2013), firms are interested in the discussion on transformation in the digital age, thereby leading this research to advance theoretically in digital capabilities.

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The rapid development of this era has made it important for an SME to develop and improve performance. In the past, SME may have been limited by the geographic boundaries that caused their sales to only be obtained from the surroundings. Today's SME must be able to adapt and achieve their common goals. According to Monika Březinová and Jindřiška Průšová (2014) however, a high degree of flexibility to adapt rapidly to changing SME factors, it determines the face and reduce the growing globalization tendencies associated with the onset of multinational corporations and chains (Sok, O'Cass, & Mony Sok, 2013).

Entrepreneurship and small business research in management field has become one of the fastest-growing academic literature as well as in the number of active researchers (Landstorm and Johannisson, 2001). This study takes the view that innovation, marketing, digital, and learning capabilities are the key capabilities for firms in their efforts to achieve superior performance especially in Indonesia. While these four key capabilities are potentially related in their contribution to firm performance, the past research just mention this key factor as partial. This study contributes to the literature by showing that developing superior innovation, marketing, digital, and learning capabilities provides SMEs performance which is significant strategy to prevent competitor from imitating firms' capabilities and enhances marketplace outcomes.

2. Conceptual Framework and Hypotheses



Figure 1: Conceptual framework Modified From: O'Cass and Sok (2012), Doole et.al (2006), and O'Dwyer et.al (2009), Carlos and Brinkhues (2016).

A firm capability is defined as the bundle of interrelated processes for performing tasks (O'Cass and Sok. 2012). It is, as such, very important for firms to develop superior capabilities that enable them to achieve superior performance in specific markets.



2.1. SME Performance in Indonesia

Indonesia has many small and medium-sized enterprises (SMEs). In 2014, according to data from the Ministry of Co-operatives and SMEs which include the agricultural sector and follow a turnover and asset-based SME definition, there were 59.3 million enterprises: 98.75% were micro-enterprises, 1.15% were small enterprises and 0.1% were medium-sized enterprises.

According to data from the Asian Labor Productivity Organization (APO), Indonesia's average labor productivity (GDP per worker) was slightly higher than the ASEAN average in 2016: USD 24 300 compared with USD 21 900. However, this aggregate figure hides strong variations within the Indonesian SME sector. According to data from the Ministry of Co-operatives and SMEs, GDP worker in micro-enterprises was only 3% of GDP per worker in large enterprises, while GDP per worker in small enterprises and medium-sized enterprises was respectively 16% and 31% that of large companies. Productivity growth over the period was modest across all business size classes, with average annual rates of 1.1% among micro-enterprises, 0.3% among small enterprises, and 0.6% among medium-sized enterprises (World Bank Enterprise Survey data).

In terms on contributions, Indonesian SMEs actively invest in tangible assets, but less so in intangible assets. According to World Bank survey data, only 2% of Indonesian firms invest in R&D, although the proportion goes up to 10% in the case of companies employing more than 100 employees. Low R&D investments are also reflected in innovation outcomes: only 5% of small enterprises (5-19 employees) and 9.7% of medium-sized enterprises (20-99 employees) have introduced a new product and/or service in Indonesia in the last three years. The large informal sector of Indonesia is likely to drag down business investment activity, both in the form of tangible and intangible assets (Setyawan & Wajdi, 2015).

Besides that, entrepreneurial attitudes are generally healthy in Indonesia. Nearly half (47.7%) of the Indonesian adult population (aged 18-64) see opportunities to start a business in the area where they live; perceived levels of entrepreneurship capabilities to exploit such opportunities are also high (Global Entrepreneurship Monitor -GEM-data). On the other hand, business ownership is widespread and is a contributing factor to the average small size of Indonesian SMEs. Women represent about 37% of total self-employed people; however, only 6% of them are employers with permanent paid workers, compared with 12% of the male self-employed.



2.2. Marketing Capabilities

The role of marketing capability in driving SME performance has also been significant interest to scholars (Doole et al., 2006; O'Dwyer et al., 2009). This study defines marketing capability as the bundle of interrelated processes a firm has in place to facilitate successful development, evolution and execution of marketing mix strategies against competitors (O'Cass and Sok, 2012). In the SME context, marketing capability is often faced with poor resources such as cash flow and market expertise as well as tactical and strategic customer-related issues (Doole et al., 2006; O'Dwyer et al., 2009). Even though such constraints exist among SMEs, O'Dwyer et al. (2009) argue that SMEs always place an emphasis on marketing capability as the key for competitiveness. Being small size, nimble and targeting small market segments, SMEs can afford to pay great attention, offer friendly and outstanding services as well as provide tailored products to the specific needs of customers, all of which serve as the bases to achieve SME performance.

H1: Marketing capability has a significant positive relationship with SME performance

2.3. Innovation Capabilities

There has been a significant interest among scholars on the role of innovation capability in driving SME performance (e.g., Li and Mitchell, 2009; Rosenbusch et al., 2011). Innovation in SME cluster is crucial to improve their business performance. Innovation leads to ability to create product and business process with property rights and intangible assets (Bek et al., 2013). Innovation capability is defined in this study as the bundle of interrelated processes a firm has in place to facilitate the implement successful development, evolution, and execution of product innovation (O'Cass and Sok, 2012). According to scholars such as Li and Mitchell (2009) and Rosenbusch et al. (2011), among others, SMEs with strong innovation capability will gain a competitive edge against competitors, enabling them to achieve superior performance. Even SMEs generally face considerable resource scarcity (Terziovski, 2010), they are often successful innovators (Verhees and Meulenberg, 2004; Rosenbusch et al., 2011). It is because SMEs are small and nimble, thus enabling them to be flexible and can introduce new products quickly to the marketplace to satisfy the customer's constant changing needs.

H2: Innovation capability has a significant positive relationship with SME performance



2.4. Learning Capabilities

The role of learning in relation to SME performance has become a major research focus (e.g., Garcia-Morales et al., 2006). This study defines learning capability as the bundle of interrelated processes a firm has in place to diagnose staff training needs, to analyze the firm's unsuccessful activities, to communicate the lessons learnt from the firm's past experiences across the entire firm, and to learn new relevant knowledge to undertake the firm's business activities (Sok and O'Cass, 2011). Learning capability has been treated as a significant indev of a firm's competitiveness (including SMEs) (Jerez-Go'mez et al., 2005). Moreover, learning capability can foster SMEs' ability to identify and respond to market cues better, faster, and cheaper than rivals as well as underpins the SMEs' competences needed to efficiently develop new products (Prieto and Revilla, 2006; Sok and O'Cass, 2011). This provides SMEs greater opportunity to achieve superior performance. Importantly, learning capability also enables SMEs to identify new strategies as well as channels or networks to work more closely with customers, which will then allow them to differentiate themselves from their rivals (Sok and O'Cass, 2011)

H3: Learning capability has a significant positive relationship with SME performance

2.5. Digital Capabilities

Digital technologies are reshaping traditional business strategy as modular, distributed, cross-functional, and global business processes that enable work to be carried out across boundaries of time, distance, and function (Maçada & Brinkhues, 2016). These technologies are also transforming the structure of social relationships for both the consumer and the enterprise with social media and social networking (Bharadwaj, El Sawy, Pavlou, and Venkatraman 2013; Kohli and Grover 2008). Consumers are demanding more powerful, faster devices to communicate messages, while businesses are seeking cutting-edge, cost-effective tools to cope with complex challenges (Chekwa and Daniel, 2014).

H4: Digital capability has a significant positive relationship with SME performance



3. Methodology

3.1. Sample and Procedure

Data from the National Development Planning Agency, the Central Statistics Agency, and the United Nation Population Fund, predict the number of micros, small and medium enterprises (SMEs) in Indonesia in 2018 as many as 58.97 million people. With using the Slovin sample size for limited prior information, the sample needed is between 99.999830423 ~ 100. This research uses purposive sampling method. A purposive sample is a non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Neetij Rai, 2015).

3.2. Measures

The design of this research questionnaire is consisting of few parts. The first part is to gather the business profile to know the category of their SME. The next part is gathering the respondent innovation capabilities, marketing capabilities, learning capabilities, and digital capabilities aspect through some question related to their business activity. It is distributed online to the local entrepreneur community or business forum. The five key constructs of this study are innovation capability, learning capability, marketing capability, digital capability, and SME performance. Multi-item scales were adapted from those employed by prior studies. Marketing capability was assessed using a 9-item scale based on the work of Vorhies and Morgan (2005). A seven-point scale was used ranging from 1 "much worse than major competitors" to 7 "much than major competitors". The scale used to assess innovation capability was adapted from Hurley and Hult (1998) and Calantone et al. (2002), while learning capability was assessed using a 5-item scale adapted from Calantone et al. (2002), Salavou et al. (2004) and Garcia- Morales et al. (2006). A seven-point scale was used ranging from 1 "not at all" to 7 "extensively". Digital capability was adapted from José Carlos et al (2016). A seven-point scale was used ranging from 1 "strongly disagree" to 7 "strongly agree". SME performance was assessed using a 3-item scale derived from Morgan et al. (2009). A seven- point scale was used ranging from 1 "much worse than major competitors" to 7 "much better than major competitors".



Variabel	Sources	Items
SME Performance	Morgan et al. (2009)	Performansi bisnis saya, dibandingkan dengan pesaing lain
		7-poin skala 1 = "jauh lebih buruk dari pesaing" dan 7 = "jauh lebih baik dari pesaing"
		SMEP1: Telah menguntungkan (profitability)
		SMEP2: Telah dapat mengembalikan investasi awal (ROI)
		SMEP3: Telah mencapai target finansial (financial goals)
Marketing Capability	Vorhies and Morgan (2005)	Aktivitas pemasaran bisnis saya, dibandingkan dengan pesaing lain
		7-poin skala 1 = "jauh lebih buruk dari pesaing" dan 7 = "jauh lebih baik dari pesaing"
		MC1: Telah melakukan pekerjaan yang efektif dalam menentukan harga produk
		MC2: Telah menguji strategi pemasaran untuk produk baru
		MC3: Telah meluncurkan produk baru
		MC4: Telah menarik dan mempertahankan distributor terbaik
		MC5: Telah mengembangkan dan menjalankan program iklan dan promosi
		MC6: Telah menganalisa informasi pasar
		MC7: Telah memanajemen penjualan (sales)
		MC8: Telah mengembangkan strategi pemasaran kreatif
		MC9: Telah mengimplementasikan strategi pemasaran menjadi tindakan
Innovation Capability	Hurley and Hult(1998)	Di bisnis ini, saya memiliki aktivitas, rutinitas, proses bisnis, dan perilaku untuk
	Calantone et al.(2002)	7-poin skala 1 = "tidak sama sekali" dan 7 = "secara luas menerapkan"
	Salavou et al.(2004)	IC1: Memanfaatkan teknologi terbaru yang tersedia
		IC2: Mengembangkan produk baru
		IC3: Memperpanjang rentang produk dalam bisnis saya
		IC4: Meningkatkan kualitas produk yang ada
		IC5: Meningkatkan fleksibilitas produksi
Learning Capability	Calantone et al.(2002)	Di bisnis ini, saya memiliki aktivitas, rutinitas, proses bisnis, dan perilaku untuk
	Salavou et al.(2004)	7-poin skala 1 = "tidak sama sekali" dan 7 = "secara luas menerapkan"
	Garcia- Moralesetal.(2006)	LC1: Menelaah kebutuhan pendidikan dan pelatihan karyawan saya

TABLE 1: Measurement Model.



Variabel	Sources	Items
		LC2: Meningkatkan basis pengetahuan dan keterampilan dalam bisnis saya
		LC3: Mempelajari pengetahuan baru yang relevan untuk melakukan kegiatan bisnis saya
		LC4: Menganalisis kegiatan perusahaan yang tidak berhasil (unsuccessful activities) dalam bisnis saya
		LC5: Mengkomunikasikan pelajaran yang dipetik (lesson learn) dari pengalaman sebelumnya ke seluruh perusahaan / bisnis saya
Digital Capability	(Maçada & Brinkhues, 2016)	Selama menjalankan bisnis, saya cenderung
		7-poin skala 1 = "sangat tidak setuju" dan 7 = "sangat setuju"
		DC1: Lincah, memiliki fleksibilitas dalam proses organisasi dan perubahan (Agility)
		DC2: Mengintegrasikan, membangun, dan mengkonfigurasi kompetensi internal dan eksternal untuk mengatasi lingkungan yang berubah (Responsiveness)
		DC3: Dapat menampilkan informasi bisnis secara visual (Visualization)
		DC4: Menata kelola semua data dan informasi (Governance)
		DC5: Mempunyai konektivitas ekosistem bisnis yang multi- saluran untuk efisiensi komunikasi (Multi-channel ecosystem)

4. Data Analysis and Result

4.1. Validity and Reliability Test

Test validity refers to the degree to which the test measures what it claims to measure. Test reliability refers to the degree to which a test is consistent and stable in measuring what it is intended to measure. This validity test conducted toward 27 questions from both of independent and dependent variable indicators. This validity and reliability test used the R value based on the calculation on SPSS.

Validity test of the product moments of Pearson Correlation used comparison of R table, where if the c alculated value of R is greater than the R table, then the questionnaire is declared valid, vice versa. Reliability test in this case refers to the Alpha value generated in the SPSS output, where if Alpha value greater than R table then the questionnaire items used are declared reliable or consistent, vice versa. The total sample of this research (N) is 107 so the df is 105 (N-2) and the level of significant



is 0.10 so the R table is 0.1599. From the test, shown the R value of each indicator and its Cronbach alpha is more than R table, so all the variable is valid and reliable.

able	Indicator	R xy	Cronbach Alpha	Variable	Indicator	R xy	Cronbach Alpha
E Performance	SMEP1	0.891	0.847	Innovation Capability	IC1	0.780	0.811
	SMEP2	0.829			IC2	0.845	
	SMEP3	0.838			IC3	0.877	
keting ability	MC1	0.674	0.781		IC4	0.794	
	MC2	0.760			IC5	0.819	
	MC3	0.768		Learning Capability	LC1	0.786	0.801
	MC4	0.744			LC2	0.819	
	MC5	0.694			LC3	0.810	
	MC6	0.835			LC4	0.771	
	MC7	0.815			LC5	0.754	
	MC8	0.834		Digital Capability	DC1	0.859	0.810
	MC9	0.803			DC2	0.830	
					DC3	0.749	
					DC4	0.820	
					DC5	0.833	
	MC3 MC4 MC5 MC6 MC7 MC8 MC9	0.768 0.744 0.694 0.835 0.815 0.834 0.803		Learning Capability Digital Capability	LC1 LC2 LC3 LC4 LC5 DC1 DC2 DC3 DC4 DC5	0.786 0.819 0.810 0.771 0.754 0.859 0.830 0.749 0.820 0.833	СС

TABLE 2: validity and reliability test output.

4.2. Classical Assumption Test

The classical assumption test is a statistical test used to determine the relation between variables, including normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, and linearity test. To do the regression analysis, there are some key assumptions that should be noted. All this classical assumption test is passed, and the data is clear to analyze by multiple linear regression.

4.3. Method of Successive Interval (MSI)

Methods of Successive Interval is a method to convert ordinal data into interval data. Ordinal data is a qualitative data; thus, it should be changed into quantitative data. Data



which are generated from the Likert scale are ordinal data, in order to do the analysis, the data should be converted into numerical data. (Sarwono, n.d.)

4.4. Multiple linear regression

In this research, there are four independent variables that tested toward one dependent variables. Those four independent variables are the capabilities (marketing capability, innovation capability, learning capability, digital capability) and the dependent variable is SME performance. Multi linear regression method help this research to analyze the relationship of all those capabilities toward SME performance. Before doing MLR, ordinal data that has been collected through a Likert scale in questionnaire is changed to the interval scale first through a method called, Method of Successive Interval (MSI).

TABLE 3: Table of MLR	Significant Level.
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ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
	Regression	196.141	4	49.035	11.146	.000 ^b		
1	Residual	448.744	102	4.399				
	Total	644.885	106					

a. Dependent Variable: SMEP

b. Predictors: (Constant), DC, IC, MC, LC

Based on Table 3, we can look that a probability level of significance value is 0.000^* . So, the probability is much below than 0.05. With this table also shown that the calculated F value is 11.146 > F table (4,107) = 2.46. Then the MLR model can be used to predict the SME Performances and the model can generate through the population.

 TABLE 4: Percentage of Correlation Table.

Model Summary ^b								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson			
1	.551ª	0.304	0.277	2.097486	1.933			

a. Predictors: (Constant), DC, IC, MC, LC

b. Dependent Variable: SMEP

Based Table 4, those output we can look that the R value is 0.551. It means that these independent variables (marketing capability, innovation capability, learning capability, and innovation capability) have a moderate correlation with the SME performances. While the number of determination coefficients (R square) is 0.304 or equal to 30.4%



means as much 30.4% of variance in the dependent variable (SME Performance) which can be explained by independent variables.

Coefficients ^a									
Mod	del	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearit	y Statistics	
	В	Std. Error	Beta				Tolerance	VIF	
	(Constant)	3.163	1.137		2.783	0.006			
1	МС	0.118	0.046	0.306	2.577	0.011	0.484	2.067	
	IC	-0.044	0.069	-0.069	-0.636	0.526	0.578	1.73	
	LC	0.14	0.083	0.212	1.683	0.095	0.429	2.33	
	DC	0.097	0.079	0.154	1.226	0.223	0.43	2.325	

TABLE 5: Coefficient Table for SME Performance Equation.

a. Dependent Variable: SMEP

Shown on those Table 5 that significant value of MC (marketing capability) is 0.011 which less than 0.05. It means that marketing capability is the independent variable that affect SME performance as big as 30.4% significantly describes the population. In the other hand, on the 0.1 significant value, learning capability (0.095) also significant affect SME performance and describes the population. While the significant value of IC and DC is more than 0.05 and 0.10 means that these two capabilities do not describe SME performance on population, but on the sample of this research.

Concurring to the Coefficients table, the value of constant is 3.163 and the value of marketing, innovation, learning, and digital capability, as an independent variable of this research are 0.118, 0.044, 0.140 and 0.097 respectively. While the significant variable is only marketing capability and learning capability, it could be stated from the coefficient regression that the formula of the regression is as follows;

Equation 1: SME Performance Equation

SME Performance = 3.163 + 0.118 Marketing Capability + 0.140 Learning Capability

4.5. Two-Way ANOVA

Before doing the ANOVA for answering research question number two and three, the data should distribute normally. The significant value is 0.645 which is more than 0.05, means the data is normally distributed.

Shown on Table 7 that SME Category consist of three category (micro, small, medium) and the business industry consist of 9 categories listed on the table exclude two category that do not have the sample (automotive and event organizer).



Tests of Normality							
	Kolmogorov-Smirnova			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Standardized Residual for SMEP	0.075	107	0.164	0.99	107	0.645	

TABLE 6: Normality Test of Two-Way ANOVA.

a. Lilliefors Significance Correction

	Betwe	en-Subjects Factors	
		Value Label	Ν
	1	Mikro	74
SME Category	2	Kecil	27
	3	Menengah	6
	1	Kuliner	30
	2	Fashion	23
	3	Jasa	33
Business Industry	4	Pendidikan	4
	5	Agribisnis	2
	6	Retail	9
	8	Kerajinan Tangan (Handcraft)	6

TABLE 7: List of SME Category and Industry.

Table 8 represent the homogeneity of the variance of the variable. The significant value is 0.640 which more than 0.05 means that the variance of the SME Performance variable is homogeny. So, the homogeneity assumption is fulfilled.

TABLE 8: Homogeneity Test for Two-Way ANOVA.

Levene's Test of Equality of Error Variances ^a					
Dependent Variable: SME Performance					
F	df1	df2	Sig.		
.826	14	92	.640		

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Category + Industry + Category * Industry

From the Table 9 the focus is on the significant value of each variable. The significant value of variable Category (SME Category) is 0.933 which more than 0.05, means that there is no difference betwee n the SME performance and its category (micro, small, medium). Other than that, the significant value of the industry is 0.012 which less than 0.05, means that there is a difference between the SME performance and its industry (culinary, services, fashion, etc.).

Tests of Between-Subjects Effects									
	Dependent Variable: SME Performance								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.				
Corrected Model	182.492 ^{<i>a</i>}	14	13.035	2.594	0.003				
Intercept	3022.346	1	3022.346	601.341	0				
Category	0.7	2	0.35	0.07	0.933				
Industry	87.685	6	14.614	2.908	0.012				
Category * Industry	35.874	6	5.979	1.19	0.319				
Error	462.393	92	5.026						
Total	11417.849	107							
Corrected Total	644.885	106							
a R Squared =	283 (Adjusted F	2 Squared = 174)							

TABLE 9: Significant Level of Difference in ANOVA.

For the significant value of category and industry is 0.319 which more than 0.05 means that there is no interaction between the SME performance and its scale of SME nor the industry. The researcher also calculates the significant value of gender and the value is 0.705 which more than 0.05, means that there is no difference between the SME performances and the owner gender.

While there is a significant difference between SME performance and the industry, the researcher use posts hoc analysis to know which industry that have a significant difference with SME performance. Table 5.18 shown that the industry that have significant difference that affect the performance of SME are fashion, services, agribusiness, retail, and handcraft.

No	Industry 1	Industry 2	Sig.	Difference
1.	Fashion	Services	0.001	Significantly different
2.	Fashion	Agribusiness	0.020	Significantly different
3.	Fashion	Retail	0.016	Significantly different
4.	Fashion	Handcraft	0.014	Significantly different

TABLE 10: Two-Way ANOVA Table of Conclusion.



4.6. Analysis of Qualitative Data

The MLR analysis showed that researcher hypotheses were supported and there were significant positive effects. Thus, a rather complex theoretical model was produced. At the same time, the explained variance for overall SME performance (output construct) was moderate (30,4%). Therefore, through a qualitative method, researcher argue that researcher may be able to explain overall performance better by adopting a wider array of causal assumptions. To get the data the researcher uses in-depth interview method that is done to 7 different respondents with some criteria. The seven respondents were chosen to represent the population of their industry. Researchers have 7 main industries that will be described as what forms of programs are appropriate for problems in their industry relating to the capabilities of their owners. The industry is culinary, fashion, services, education, agribusiness, retail, and handcraft. The list of all respondents and some information about the business owned by the respondents will be shown in Table 11.

Informants' pseudonym	Business Name	Domicile	Industry	Category
Mr. L	Kiwae	Yogyakarta	Culinary	Small
Mrs. A	Bara the Label	Bandung	Fashion	Micro
Mr. J	Sharing Vision	Bandung	Services	Medium
Mr. S	Eduka System	Bandung	Education	Small
Mr. M	Kebun Sayur Surabaya	Surabaya	Agribusiness	Small
Mr. F	Glamour Home Indonesia	Jombang	Retail	Medium
Mrs. I	Poduska	Bandung	Handcraft	Micro

	TABLE 1	1: Res	pondent's	Profile.
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Based on the coding analysis through in-depth interview, researcher has conducted an interview using the framework from the questionnaire. The main purpose of holding this method is to answer the second research objective, namely, to propose a program or strategy to improve the SME performance. Researcher summarizes the proposed program through the coding results quoted from the sentence of the interviewees. Researcher also tries to explore what potential allows for development in each industry through the ability or knowledge they want to get. The table below describes the programs that are important for each industry.



No 1.

Industry	Proposed program
Culinary	Management strategy in the culinary business
	Making Standard Operating Procedure (SOP) for culinary busi
	Human resource management and people management train
	Marketing strategies for culinary business

TABLE 12: Proposal Program for Improving SME Performance.

		Making Standard Operating Procedure (SOP) for culinary business
		Human resource management and people management training
		Marketing strategies for culinary business
2.	Fashion	Find product value in the fashion business
		How to make an SOP and handle outsourcing in the fashion industry
		Determine the right market for the fashion business
		Processing external data based on the market for product development
		Make a solid and effective internal team in the fashion business
3.	Services	Determine a sophisticated marketing strategy for the service business
		Workshop for skills in managing a service business
		Streamline management of IT systems within internal service companies
		Evaluating website improvements as an effective marketing strategy
4.	Education	Develop effective work for development and time management in the internal team
		Adjust the team's vision and mission at the startup company
5.	Agribusiness	Pricing strategies in the agribusiness sector
		Increase company value and products to be accepted by the market
		Monitor technology and its development for the effectiveness of agribusiness company activities
		Ways to increase learning interest and knowledge for employees as a means of business progress
		Do effective expenditure to maximize revenue in the agribusiness sector
		Maximize the marketplace as an effective and safe sales and marketing strategy
		A good and effective approach to dealing with competitors
6.	Retail	How to increase your revenue effectively in the retail business
		Create an effective and efficient website as a medium of sales in the retail business
		How to see and adopt market potential through new trends
		Increase the knowledge base of employees, control employees, and manage teams that are good for retail businesses
7.	Handcraft	Maximizing social media as a strategy for branding the handicraft business
		Foster a sense of confidence and self leadership for hiring employees
		How to delegate tasks properly and correctly to craftSMEn as a means of developing a handicraft business



5. Discussion of Findings

The performance equation of SMEs which is only influenced by marketing capability can be caused by several factors. The first factor is due to the indicator in evaluating the performance of the SME itself which refers to only three indicators, namely (profitability, ROI, and financial goals). Indicators whose majority of measurements are numerical, certainly tend to refer to marketing capabilities as measured by weaknesses in determining product prices, running advertising and promotion strategies, managing sale, and implementing marketing strategies into actions. Closely the relationship between indicators on MC and SMEP variables makes both variables have a good correlation.

On the other hand, based on researcher data, for other independent variables such as innovation, learning, and digital reality in Indonesia it is still not properly implemented by SME owners. This is possible because the SME owners or businesses at SME have not accommodated more innovative products. The owners still tend to apply conventional methods in accordance with the indicators in this variable, namely utilizing the new available technology. The owner also lacks the initiative to develop new products and extend the range of products. As a

result, the quality and flexibility of the products are classified as not optimal. Even if the market in Indonesia is seen from this side, there is a tendency to underestimate high-innovation products with relatively high prices.

The second point is in terms of variable learning capability. The many sources of information to increase knowledge in fact have not significantly helped the performance of SMEs in the field of learning from the SME owner. Reviewed from this variable indicator, the business owner still does not implement the development of knowledge both internally on his employees and externally on company activities. For the last point, digital capability is also less of a concern for SME owners. Despite the highly developed technological developments in this digital era, in fact digital roles such as integrated systems, information visualization, corporate governance, and ecosystem connectivity are still difficult things for SME owners to do.

Even though in Indonesia in fact it still does not maximally maximize all four capabilities, the findings signify the importance of these four key capabilities as precursors of financial performance in SMEs and the effectuation activity through SME. Importantly, this study extends previous research which either focuses on large firms or separately examines marketing capability, innovation capability, learning capability, and digital capability. The findings also reaffirm the view that, regardless of the size and the context



of firms operating in, doing more of one thing increase the returns to the firms of doing more of another in the context of capabilities sets.

The results provide managers practical implications that in the quest for building superiority in the marketplace, SMEs must pay attention to developing these four key capabilities. Further, due the fact that in Indonesia there is so massive development through business incubator in conventional startup or SME, the recruiter or the founder must have some criteria in gathering the SME owner who want to be incubated. As is known that SMEs play a role in two thirds contributing to GDP in Indonesia. Therefore, these four capabilities must ensure to its owner and company culture that they (SME) constantly offer new products, seek for new quickly and serve the customer better than others as well as keep analyzing their business activities (particularly their unsuccessful ones) so that improvement can be made. Once the owner can develop and deploy four key capabilities simultaneously and effectively, they can obtain the right messages from the market and always capturing the market needs also deliver the right product to them. These outcomes serve as the bases for improving SME performance.

6. Limitation and Future Research

This study is subject to some limitations that need to be addressed and acknowledged. First, the number of samples categorized as minimum sampling in term of industry sector, domicile, and SME scale. It because of the limited time of doing this research. Whereas the number of SMEs in Indonesia is very large with a variety of industrial sectors and spread across many islands in Indonesia. Hence, future studies may replicate this study using greater amount of sample and multiple respondent so then maybe the correlation can categorize as medium or high correlation. Second, the result of this study draws upon the subjective approach for gathering the SME owner with the data is less predicted the actual phenomenon of what they do in their business. Future research may attempt to gather data from professional approach such government agency like Kementerian Koperasi. Third, the data are drawn from a sample of emerging economy, Indonesia and adopted from the real data in Cambodia; thus, the generalizability of the result is limited. Hence, future studies may replicate this study in different industry context or different settings (i.e. other emerging economies such as Vietnam, Laos, Philippine, where SMEs play vital roles in contributing to national economies as it does to Indonesia and Cambodia) to help validate the generalizability of the findings. While our model is a solid start, it is not comprehensive. Obviously, much more can be learned from expanding and refining the current model. A fertile avenue for future research is to



expand the capability to capture other aspects of capabilities such operation capability and their complementary effect which will be of interest both owners, managers and researchers.

References

- [1] Aaker, D. (2015). Four ways digital works to build brands and relationships. *Journal* of *Brand Strategy*, 37-48.
- [2] Badan Pusat Statistik. (n.d.). Statistik UMKM tahun 2012 2013. Retrieved April 5, 2019, from https://www.bps.go.id/
- [3] Bek, M. A., Bek, N. N., Sheresheva, M. Y., & Johnston, W. J. (2013). Perspectives of SME innovation clusters development in Russia. *Journal of Business & Industrial Marketing*, 28(3), 240-259.
- [4] Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & and Venkatraman, N. (2013). Digital business strategy: toward a next generation of insights. *Mis Quaterly (37.2)*, 471-482.
- [5] Calantone, R., Cavusgil, T., & Zhao, Y. (2002). Learning orientation, firm innovation, and firm performance. *Industrial Marketing Management*, 515-524.
- [6] Carlos, Antonio; Brinkhues, Rafael. (2016). Digital Capabilities as Driver to Digital Business Performance. *Twenty-second Americas Conference on Information System.* San Diego.
- [7] Chaston, I., Badger, B., & Sadler-Smith, E. (2001). Organizational learning: an empirical assessment of process in small UK manufacturing firms. *Journal of Small Business Management*, 139-151.
- [8] Chekwa, E., & Daniel, A. (2014). Digital Technology: Transforming Lifestyles And Business Practices. *International Journal of the Academic Business World*, 77-84.
- [9] Doole, I., Grimes, T., & Demack, S. (2006). An exploration of the management practices and processes most closely associated with high levels of export capability in SMEs. *Marketing Intelligence and Planning 24*, 632-647.
- [10] Europian Union. (2003). *What is SME?* . Retrieved from Eropian Union: ec.europa.eu/growth/smes/business-friendly-environment/sme- definition_en
- [11] Garcia-Morales, V., & LLorens-Montes, F. V.-J. (2006). Organisational learning categories; their influence on organisational performance. *International Journal of Innovation and Learning 3*, 518-536.
- [12] Hurley, R., & Hult, G. (1998). Innovation, marketing orientation, and organizational learning: an integration and empirical examination. *Journal of Marketing*, 42-54.



- [13] Jerez-Go'mez, P., Ce'spedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning capability: a proposal measurement. *Journal of Business Research*, 715-725.
- [14] Kohli, R., & Grover, V. (2008). Business value of IT: An essay on expanding research directions to keep up with the times. *Journal of the association for information* systems, 23.
- [15] Landstrom, H., & Johannisson, B. (2001). Theoretical foundations of Swedish entrepreneurship and small-business research. *Scandinavian Journal of Management*, 225-248.
- [16] Li, X., & Mitchell, R. K. (2009). The pace and stability of small enterprise innovation in highly dynamic economies: a China-based template. *Journal of Small Business Management*, 370-397.
- [17] Morgan, N., Vorhies, D., & Mason, C. (2009). Market orientation, marketing capabilities, and firm performance.. *Strategic Management Journal 30*, 909-920.
- [18] O'Cass, A., & Sok, P. (2012). Examining the role of within and between functional area resource-capability complementarity in achieving customer and product based performance outcomes. *Journal of Strategic Marketin 20*, 345-363.
- [19] O'Dwyer, M., Gilmore, A., & Carson, D. (2009). Innovative marketing in SMEs. *European Journal of Marketing*, 46-61.
- [20] OECD. (2018). *SME and Entrepreneurship Policy in Indonesia 2018*. The Organisation for Economic Co-operation and Development (OECD).
- [21] Prieto, I. M., & Revilla, E. (2006). Assessing the Impact of Learning Capability on Business Performance: Empirical Evidence from Spain. *Management Learning*, 499-522.
- [22] Rai, N., & Thapa, B. (2015). A STUDY ON PURPOSIVE SAMPLING METHOD IN RESEARCH. Kathmandu: Kathmandu School of Law.
- [23] Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 441-457.
- [24] Salavou, H., Baltas, G., & Lioukas, S. (2004). Organizational innovation in SMEs. *European Journal of Marketing 38*, 1092-1112.
- [25] Sarwono, J. (2006). Analisis data penelitian menggunakan SPSS. *Yogyakarta: Andi Offset..*
- [26] Setyawan, A., Wajdi, F., Muzakan, I., Syamsudin, & Sidiq, N. P. (2015). An Assessment of SME Competitiveness in Indonesia. *Journal of Competitiveness*, 60-74.



- [27] Smith, P. C., Schmidt, S. M., Allensworth-Davies, D., & Saitz, R. (2010). A singlequestion screening test for drug use in primary care. *Archives of internal medicine*, *170(13)*, 1155-1160.
- [28] Sok, P., & O'Cass, A. (2011). Achieving superior innovation-based performance outcomes in SMEs through innovation resource-capability complementarity. *Industrial Marketing Management*, 1285-1293.
- [29] Sok, P., Aron, O., & Sok, K. M. (2013). Achieving superior SME performance: Overarching role of marketing, innovation, and learning capabilities. *Australasian Marketing Journal 21*, 161-167.
- [30] Soriano, D. R., & Castrogiovanni, G. J. (2010). The impact of education, experience and inner circle advisors on SME performance: Insights from a study of public development centers. *Small Business Economics*, 38, 333-349.
- [31] Terziovski, M. (2010). Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. *Strategic Management Journal 31*, 892-902.
- [32] Verhees, F., & Meulnberg, M. (2004). Market orientation, innovativeness, product innovation, and performance in small firms. *Journal of Small Management 42*, 134-154.
- [33] Vorhies, D. W., & Morgan, N. A. (2005). Benchmarking Marketing Capabilities for Sustainable Competitive Advantage. *Journal of Marketing*, 80-94.
- [34] Yoo, Y. (2013). The tables have turned: How can the information systems field contribute to technology and innovation management research? *Journal of the Association for Information Systems (14.5)*, 227.
- [35] Yoo, Y., Boland Jr, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. *Organization Science 23(5)*, 1398-1408.
- [36] Zimmermann, H.-D. (2000). Understanding the Digital Economy: Challenges for new Business Models. *Americas Conference on Information Systems 2000*. California.