

## Competitive Intensity, Innovation Capability and Dynamic Marketing Capabilities

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### Abstract

Competition intensity (CI), innovation capability (IC) and dynamic marketing capabilities (DMCs) are still an interesting problem for studies in scientific research. This study aims to determine the extent of the ability of innovation in mediating the effect of the intensity of competition on dynamic marketing skills. Quantitative descriptive becomes the method used in this study, with simple linear regression analysis and SPSS v 23 and Amos v. 23 software as a calculation tool, beginning with the measurement of the model using Confirmatory Factor Analysis (CFA) and Product of Coefficient Strategy analysis: Single Mediation Model, with a sample of 189 MSMEs engaged in the processing industry in Sukabumi. This study shows that the innovation capability variable (IC) can mediate the influence of competition intensity (CI) on dynamic marketing capabilities (DMCs) on MSMEs in Sukabumi, West Java, Indonesia in 2018.

### Keywords

Competitive Intensity, Innovation Capability, Dynamic Marketing Capabilities

## 1. Introduction

The process of marketing research plays an important role in the company's performance, especially in terms of marketing, which means that there is a positive relationship between marketing research and marketing performance. Dynamic marketing capabilities provide one of the strategic solutions in order to improve marketing performance which in turn will improve

company performance. Therefore, it is necessary that the company provides sufficient funding for market research, provide appropriate and adequate facilities to improve the business environment and make it more responsive to customer needs, and development strategies must be placed to improve staff performance and increase their contribution to the organization (Ayuba & Kazeem, 2015) and the uncertain intensity of competition will trigger companies to improve marketing capabilities by keeping up with developments in the business environment (Hoque, 2017). This causes companies to have more abilities to improve their ability in various lines to increase the strategic capacity of the company.

Entrepreneurs or entrepreneurs who have innovation can play a role in economic development characterized by the percentage of entrepreneurs in developing countries and developed countries (Riswanto, 2016). Table 1 presented data related to the development of MSMEs in Indonesia.

**Table 1.** Number of Micro and Small Companies in Indonesia 2013-2015

Province	Number of companies by province (unit)					
	2013		2014		2015	
	Micro	Small	Micro	Small	Micro	Small
Aceh	74,880	3,688	69,316	1,715	64,009	1,483
North Sumatra	64,034	18,854	76,227	9,836	94,979	4,043
West Sumatra	57,987	8,007	71,413	5,107	63,409	4,288
Riau	15,241	1,808	14,355	1,360	16,791	644
Jambi	22,590	2,510	25,441	2,006	22,415	1,754
South Sumatra	57,495	13,852	58,751	5,741	47,516	1,830
Bengkulu	10,595	1,111	11,310	738	11,663	618
Lampung	90,051	11,568	94,739	8,971	76,728	3,777
Bangka Belitung	9,723	1,692	7,752	515	5,914	237
Riau Islands	13,706	2,515	14,638	761	7,231	237
DKI Jakarta	20,738	19,172	15,110	22,748	28,378	6,616
West Java	382,899	106,861	437,985	60,078	421,881	58,359
Central Java	650,115	60,148	766,782	65,690	934,814	95,560
DI Yogyakarta	67,454	13,306	73,266	7,313	52,907	4,758
East Java	539,320	89,786	608,774	39,932	771,185	49,659
Banten	71,736	7,424	75,760	5,652	108,235	9,313
Bali	84,149	21,333	107,434	8,659	95,282	8,078
West Nusa Tenggara	93,694	7,484	93,645	13,586	79,764	14,527
East Nusa Tenggara	100,761	3,845	109,266	2,776	71,768	1,401
West Kalimantan	35,892	1,785	36,311	1,101	53,867	1,246
Central Kalimantan	17,456	1,285	18,936	996	11,884	715
South Kalimantan	64,235	4,155	67,674	3,192	55,564	1,913
East Kalimantan	20,689	3,694	15,866	1,855	11,084	944
North Kalimantan	-	-	-	-	1,180	120
North Sulawesi	37,091	2,594	35,527	60	39,431	39
Central Sulawesi	30,247	2,943	38,511	1,784	20,745	1,651
South Sulawesi	94,537	7,949	100,526	5,893	112,896	5,577
Southeast Sulawesi	57,180	7,864	68,711	2,845	46,084	1,186
Gorontalo	20,934	1,502	22,610	1,241	12,458	758
West Sulawesi	26,028	1,092	27,888	1,210	11,123	751
Maluku	35,208	664	36,422	218	19,312	263
North Maluku	8,328	105	7,851	107	6,939	112
West Papua	2,730	92	2,353	126	1,442	81

Papua	9,292	663	9,413	689	6,973	484
<b>Indonesia</b>	<b>2,887,015</b>	<b>531,351</b>	<b>3,220,563</b>	<b>284,501</b>	<b>3,385,851</b>	<b>283,022</b>

Source: BPS (2018)

The development of Micro Small Enterprises (MSEs) in Indonesia in 2013 - 2015 can be seen the development of business units in 2014 amounting to 86,698 units and 163,809 business units the following year, while for MSMEs themselves according to the results of data analysis from the National Development Planning Agency, Central Statistics Agency and the United Nation Population Fund, predicts the number of micro, small and medium enterprises (MSMEs) in Indonesia in 2018 as many as 58.97 million people. While Indonesia's population in 2018 is predicted to reach 265 million. Likewise, data from the Ministry of Cooperatives and SMEs (Kemkop UKM) shows that the number of micro-businesses in Indonesia is 58.91 million units, small businesses 59,260 units and large businesses 4,987 units. Looking at the data above Indonesia as one of the developing countries allows it to become a country that has a high population of entrepreneurs or entrepreneurs, so that it can improve welfare and alleviate poverty.

The development of business units in West Java has quite a large number, reaching 199,723 business units engaged in MSMEs in 2011. Meanwhile, in 2015, the number of SMEs reached 480,240 business units according to the data presented in Table 2.

**Table 2.** Number of MSMEs in West Java Province

No.	City	Amount	No.	City	Amount
1	Sukabumi Regency	15.417	16	Majalengka Regency	7.832
2	Bogor Regency	14.505	17	Cimahi City	7.373
3	Bandung district	12.283	18	Sumedang Regency	6.061
4	Purwakarta Regency	10.762	19	Subang Regency	5.052
5	Bandung	10.701	20	Indramayu Regency	3.380
6	Bekasi Regency	10.583	21	Kuningan Regency	2.352
7	Cirebon Regency	10.488	22	Tasikmalaya Regency	2.340
8	Depok City	10.055	23	Ciamis Regency	1.467
9	Garut Regency	9.801	24	Regency of Cianjur	1.364
10	Bekasi city	9.782	25	West Bandung Regency	1.236
11	City of Tasikmalaya	9.650		<b>Total</b>	199.732
12	Sukabumi City	9.364			
13	Cirebon City	9.351			
14	Karawang Regency	9.269			
15	Banjar City	9.205			

Source: PUSDALISBANG West Java, 2018

This makes West Java a potential area in developing MSMEs in Indonesia. The government needs to conduct guidance and guidance development in order to develop its potential so this creates a good corporate management system and ultimately improves company performance. This means that with the involvement of the Government, which often conducts company site visits of government officials as a measure of governmental relations and checks how political connections affect company performance (Wang, Yao, & Kang, 2019); It gave birth to group affiliations between business units (Shin, Hyun, Oh, & Yang, 2018). And influence employers in

making financial decisions and capital structure of the company which will ultimately affect the performance of the company (Akingunola, Olawale, & Olaniyan, 2018).

Some studies related to Dynamic Marketing Capabilities (DMCs) include market orientation (Kachouie, Mavondo, & Sands, 2018; Roach, Ryman, Jones, & Ryman, 2018; Wang, Hu, & Hu, 2013), intensity of competition (Hoque, 2017), customer relationship management (Wang et al., 2013), innovation (Roach et al., 2018; Walugembe et al., 2017). This study aims to determine the extent of the ability of innovation in mediating the effect of the intensity of competition on dynamic marketing skills.

## 2. Methods

The study was taken in Sukabumi, West Java Province, Indonesia with the aim of knowing whether the innovation capability variable can mediate the effect of competition intensity on Dynamic Marketing Capabilities (DMCs) on Micro, Small and Medium Enterprises. Furthermore, the data is related to the number of MSMEs in Sukabumi. Data from the Department of Cooperatives, MSMEs, Trade and Industry in the City of Sukabumi said, the number of MSMEs in Sukabumi is engaged in the industrial sector as many as 2,425, (Office of Cooperatives, MSMEs, Trade and Industry, Sukabumi City, 2018).

The Sukabumi Government is promoting and increasing productivity in order to succeed in developing MSMEs in the Sukabumi region. This is expected that the marketing of Sukabumi's MSME products can penetrate regional and superior markets at the national level and be able to compete abroad so that in the end it can help national economic growth and also reduce unemployment (Sumartini & Riswanto, 2017), this is proof empirically that MSMEs in Sukabumi run dynamically and are full of innovation.

Descriptive quantitative research methods were chosen to be used in this study and simple linear regression analysis and SPSS v 23 and Amos v 23 software was selected as analytical calculation tools. The research instrument is a questionnaire distributed to 189 research respondents, namely the Micro, Small and Medium Enterprises in Sukabumi, West Java Province, Indonesia. Confirmatory Factor Analysis (CFA) was used to test the research model as well as the instrument's validity and reliability test. Furthermore, after the FIT Model has been produced, an analysis will be conducted using the Product of Coefficient Strategy: Single Mediation Model - The Normal Theory Approach (Baron & Kenny, 1986; Preacher & Hayes, 2004). The paradigm of this research can be described as in Figure 1.

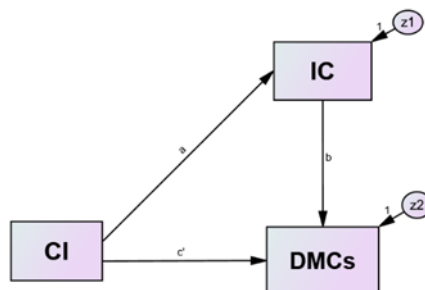


Figure 1. Research Paradigm of Dynamic Marketing Capabilities

### 3. Results

The results of testing the measurement model using Confirmatory Factor Analysis (CFA) to validate the proposed instrument and model.

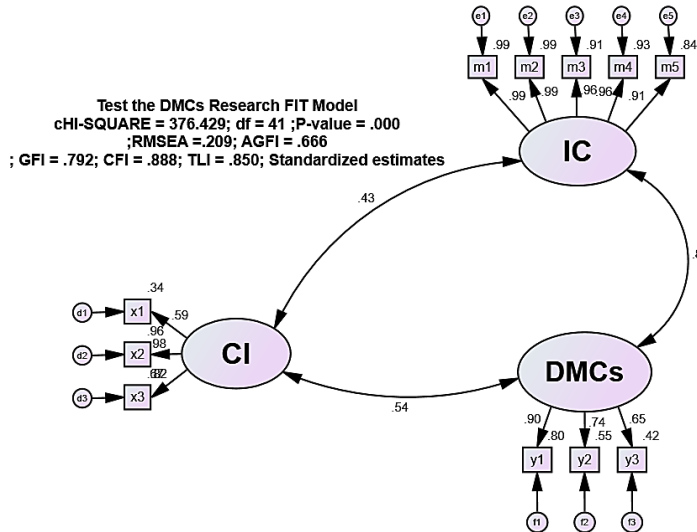


Figure 2. Measure of the test items (all items)

Figure 2 shows a test of model measurement for business performance research. From the picture above shows that the calculated value for the Chi-square is 376,429, with df = 41 and p-value = 0,000 with the value of the Root Mean Square Error of Approximation (RMSEA) = 0.209; AGFI = 0.666; GFI = 0.792; CFI = 0.888; TLI = 0.850. In addition, from the output count in the estimate of standardize Regression Weight section, all have a value of > 0.50 so that the item is considered valid, so there are no items to be corrected. Table 3 and Table 4 are the result of calculation of Amos Output version 23 regarding covariances and implied covariances. Meanwhile, Table 5 and Table 6 are for Implied Correlations and Factor Score Weights.

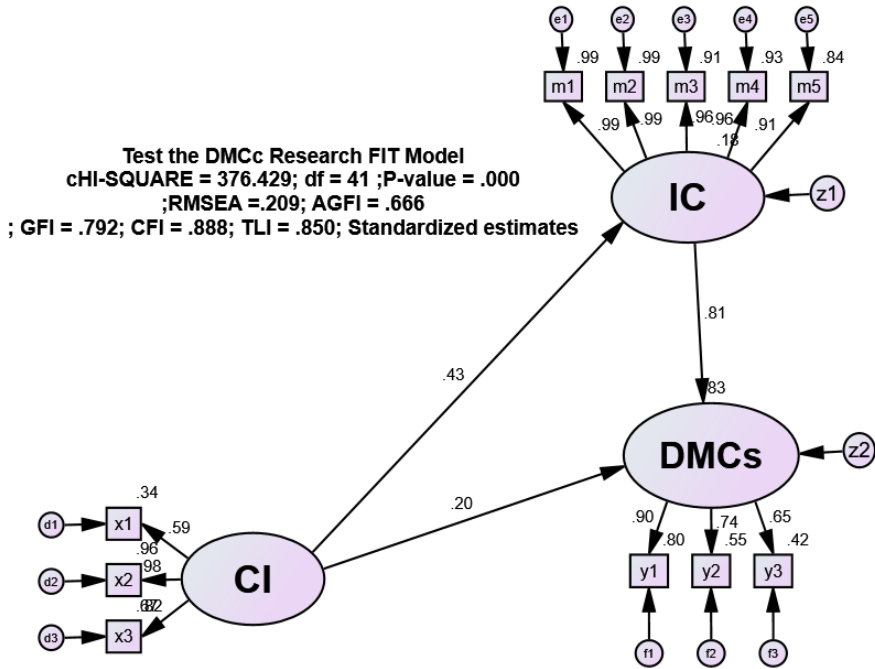
Table 3. Covariances

			Estimate	S.E.	C.R.	P	Label	Correlations
IC	<-->	DMCs	.8550	.1005	8.5115	***	par_9	.8908
IC	<-->	CI	.3307	.0719	4.5991	***	par_10	.4287
DMCs	<-->	CI	.3752	.0741	5.0612	***	par_11	.5449

Table 4. Implied Covariances

	m5	y3	x3	x2	x1	y2	y1	m4	m3	m2	m1
m5	1.0836										
y3	.4310	.6097									
x3	.4328	.2936	1.6770								

<b>x2</b>	.4934	.3347	1.2818	1.5257								
<b>x1</b>	.3037	.2060	.7889	.8993	1.6095							
<b>y2</b>	.5091	.3049	.3468	.3953	.2433	.6490						
<b>y1</b>	.7850	.4702	.5348	.6097	.3752	.5554	1.0648					
<b>m4</b>	.9642	.4583	.4602	.5247	.3229	.5413	.8348	1.1036				
<b>m3</b>	.9286	.4413	.4432	.5053	.3110	.5213	.8039	.9874	1.0425			
<b>m2</b>	.9752	.4635	.4655	.5307	.3266	.5475	.8443	1.0371	.9987	1.0632		
<b>m1</b>	.9876	.4694	.4714	.5374	.3307	.5544	.8550	1.0502	1.0113	1.0622	1.0889	



**Figure 3.** Model fit DMCs

From the results of the measurement test, the model produced a model for measuring business performance as in Figure 3. Furthermore, analysis showed the effect of market orientation on business performance which is empirically mediated by dynamic marketing capabilities.

**Table 5.** Implied Correlations

	Estimate*	m5	y3	x3	x2	x1	y2	y1	m4	m3	m2	m1
<b>m5</b>	.8368	1.0000										
<b>y3</b>	.4234	.5302	1.0000									
<b>x3</b>	.6704	.3211	.2903	1.0000								
<b>x2</b>	.9578	.3838	.3470	.8013	1.0000							
<b>x1</b>	.3439	.2299	.2079	.4802	.5739	1.0000						
<b>y2</b>	.5550	.6070	.4847	.3324	.3973	.2381	1.0000					
<b>y1</b>	.8044	.7308	.5836	.4002	.4783	.2866	.6681	1.0000				
<b>m4</b>	.9291	.8818	.5587	.3383	.4044	.2423	.6397	.7701	1.0000			
<b>m3</b>	.9121	.8737	.5536	.3352	.4007	.2401	.6338	.7630	.9206	1.0000		
<b>m2</b>	.9865	.9086	.5757	.3486	.4167	.2497	.6591	.7935	.9574	.9486	1.0000	
<b>m1</b>	.9877	.9091	.5761	.3488	.4169	.2498	.6595	.7940	.9580	.9492	.9871	1.0000

\* Squared Multiple Correlations

**Table 6.** Factor Score Weights

	m5	y3	x3	x2	x1	y2	y1	m4	m3	m2	m1
CI	.0000	.0039	.0537	.5251	.0197	.0056	.0121	.0001	.0001	.0005	.0006
DMCs	.0105	.1145	.0065	.0634	.0024	.1646	.3520	.0253	.0208	.1396	.1514
IC	.0301	.0032	.0000	.0002	.0000	.0045	.0097	.0724	.0596	.3999	.4338

Figure 3 shows the research model shows that the intensity of competition can be mediated by the influence of the ability of innovation to dynamic marketing capabilities. Table 7 is an explanation related to the results of the research analysis. The results of the Procedure Matrix analysis by Hayes, (2017).

**Table 7.** Direct Effect

Model		Coeff.	SE	t	p	LLCI	ULCI
1 (IC)	constant	7.9694	1.0109	7.8833	.0000	5.9751	9.9637
	CI	.4368	.1060	4.1222	.0001	.2278	.6459
2 (DMCs)	constant	4.0146	.3452	11.6296	.0000	3.3335	4.6956
	IC	.3394	.0216	15.6865	.0000	.2967	.3820
	CI	.0496	.0327	1.5142	.1317	-.0150	.1142
Model	R	R-Sq	MSE	F	df1	df2	p
1	.2886	.0833	23.6624	16.9923	1.0000	187.0000	.0001
2	.7784	.6058	2.0709	142.9412	2.0000	186.0000	.0000

Table 8 shows that the coefficient  $c' = 0.050$  mean that it can be said to be insignificant ( $p = 0.132 > 0.05$ ). Because according to  $c'$  analysis results are not significant, it can be concluded, M (Innovation Capability/IC) mediates, in effect, X (Competition Intensity/CI) on Y (Dynamic Marketing Capability/DMCs). The amount of indirect effect X (Competition Intensity) to Y (Dynamic Marketing Capability) =  $ab = (0.437 \times 0.340) = 0.148$  ( $p < 0.001$ ).

**Table 8.** Direct, Indirect and Total Effects

Effects	Coeff.	SE	t	p	LLCI	ULCI
Direct	.0496	.0327	1.5142	.1317	-.0150	.1142
Total	.1978	.0477	4.1513	.0001	.1038	.2918
Indirect	Coeff.	Boot SE	Z	p	BootLLCI	BootULCI
IC	.1482	.0393	-	-	.0679	.2229
Normal theory tests	.1482	.0373	3.9793	.0001	-	-

Some studies related to Dynamic Marketing Capabilities (DMCs) include market orientation (Kachouie et al., 2018; Roach et al., 2018; Wang et al., 2013), intensity of competition (Hoque, 2017), customer relationship management (Wang et al., 2013), innovation (Roach et al., 2018; Walugembe et al., 2017). In addition, dynamic marketing capabilities (DMCs) have an important role to play in reconfiguring operational marketing capabilities, which in turn will improve organizational performance. Organizations with enhanced DMCs can initiate market disruptions and achieve high performance by defeating competitors (Kachouie et al., 2018); Meanwhile dynamic marketing capabilities (DMCs), a key component of dynamic capabilities, to improve innovation performance (Xu, Guo, Zhang, & Dang, 2018); And the latter shows that marketing

capabilities, especially market orientation, work in synergy with the ability of other organizations to form dynamic marketing capabilities that enhance company innovation (Roach et al., 2018).

Novelty from this study is that this study places the ability of innovation as a mediating variable between the influence of the intensity of competition and dynamic marketing capabilities, besides that this research was conducted on Micro Small and Medium Enterprises, which are getting more attention from the government. With the results of this study prove that there is a beneficial influence between variable's X (CI) with M (IC) and there is also a positive influence between M (IC) with Y (DMCs). In this study, a research model was produced, which linked the M variable (Innovation Capability/IC); X (Competition Intensity/CI) and Y (Dynamic Marketing Capability/DMCs), which places IC variables as mediating variables so that new models emerge that connect between the variables studied.

#### **4. Conclusion**

This study shows that the Innovation Capability (IC) variable can mediate the effect of Competition Intensity (CI) on Dynamic Marketing Capabilities of DMCs) in Micro, Small and Medium Enterprises in Sukabumi. Competition Intensity (CI) has a beneficial influence on Innovation Capability (IC) and so Innovation Capability (IC) has a positive influence on Dynamic Marketing Capabilities (DMCs). This study cannot be generalized to other MSMEs sectors, especially in large industries, because it has criteria and characteristics that are different from the processing industry sector. Therefore, it becomes an opportunity for future research to be carried out in the future for other MSMEs sectors in order to find out the extent and similarities of the results of their research.

This study recommends that the next researchers use control variables in the research sample in the form of the age of the company, the location of the company, carried out on a larger type of company or an industry that has a wider corporate network. In addition, the behavioral aspects and organizational culture will be an interesting study in future studies that are associated with dynamic marketing capabilities.

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