

# Mediating Effects of Digital Marketing on Dynamic Capability and Firm Performance: Evidence from Small and Medium-sized Enterprises (SMEs) in Indonesia

Anton Wardaya, Sasmoko, Idris Gautama So, Agustinus Bandur

**Abstract:** *Small and Medium sized enterprises (SMEs) have proven to be the backbone of Indonesia's economy. It gives contribution to 60.34% to Indonesia GDP, 99.9% of national economic and 97% employment. Indonesia is known to be one of the most social media users. There is gap of studies to understand the role of digital marketing (DM) and dynamic capability (DC) on influencing the performance of SMEs in Indonesia (SP). This study aims to give empirical evidence about three hypothesis. First is dynamic capability has a positive direct influence on SMEs performance. Second one is dynamic capability has a positive direct influence on digital marketing capability. The last one is digital marketing capability has a positive direct influence on SMEs performance.*

**Index Terms:** *Dynamic Capability, Digital Marketing, SMEs Performance.*

## I. INTRODUCTION

Indonesia is one of the countries with the largest number of social media in the world. Based on a survey conducted by APJII (2017), the penetration of internet users was 143.26 million or 54.68% of the total population of Indonesia. When compared to internet users in Indonesia in 2014 amounting to 110.2 million users, there was an increase in internet users by 33.06 million within 2 years (2015-2017). Based on a survey conducted by APJII (2017), it was noted that there were 106 million active social media users. Based on a survey conducted by We are Social (2019), the average netizen spends time using social media is 3 hours 26 minutes / day. This indicates that using the social media has become a habit in Indonesia. The use of internet services that are often accessed by Indonesian people is chat with 89.35% and social media reaching 87.13%. According to We are Social (2019), there are 4 social media that are often used by Indonesians, such as Facebook (86.67%), Instagram (41.3%), Twitter (4.28%) and Snapchat (2.53 %).

The variety of social media accounts owned shows millennial familiarity with the use of social media. They are easy to share experiences and activities on social media. Based on survey conducted by the IDN Research Institute (2019), showed that there were 4 goals most often carried out by millennials in accessing the internet, such as messaging / chat (81.3%), browsing (77.4%), social

networking (74.4 %) and video streaming (40.7%). This proves that the internet has many functions because various activities are carried out through the internet. Millennials are generations that are connected to each other. Through social media, friendship networks and access to information are increasingly widespread. Networks that are built are not only based on the local environment such as a place to live or work, but can reach more widely. Millennials have the character to maintain solidarity in Indonesia. The presence of the internet has brought many changes. Before there was the internet, buyers needed considerable effort to find out an item. People must come to various stores to compare products with each other. But with the help of the internet, finding information about a product is getting easier. A total of 59.7% millennials are looking for a price comparison for a product through the internet before purchasing the product (IDN Research Institute, 2019). Millennial activity is inseparable from digital support. From starting culinary to tourism, it's easier to find favorite eating place references through online sites. Even millennials shop online. This shows that the millennial generation is ready to bring Indonesia to face changes due to the industrial revolution 4.0 and to make this country go massive digital revolution.

SMEs contribute 99.9% in the Indonesia's economy (Tambunan, 2007), contribute to GDP up to 60.34% (Hani, Rachmania, Setyaningsih, & Putri, 2012) and employment reaches 97%. Based on The Ministry of Cooperatives and SMEs (2017), the productivity of micro-enterprises is still far lower than that of small and medium enterprises which are more easily fragile or unstable and easily crushed due to intense competitive pressures.

Micro-businesses need to open themselves to rapidly developing technological developments, for example in utilizing digital technology that can reach large markets and cut the operational costs. According to the Annual Report of European SMEs (2016/2017), it was seen that the number of MSMEs in developed countries was also assessed by MSMEs, amounting to 99.8% while micro businesses were only 93%. While the structure of MSMEs in Indonesia is very important by micro-enterprises, which is 98.7% and unchanged in one decade. This shows that micro-businesses in Indonesia never scaling up to small or medium-sized businesses.

**Revised Manuscript Received on May15, 2019.**

**Anton Wardaya**, Universitas Bina Nusantara, Indonesia.  
(antonwardaya@yahoo.com)

**Sasmoko**, Universitas Bina Nusantara, Indonesia.

**Idris Gautama So**, Universitas Bina Nusantara, Indonesia.

**Agustinus Bandur**, Universitas Bina Nusantara, Indonesia.

## II. LITERATURE REVIEW

Dynamic capability read opportunities and threats by exploring markets and technology. The possibility of investing in relevant technology to reach market demand.(Wilden et al., 2013). Dynamic capability identifies new market opportunities and uses them. Companies that are most able to deal with market changes and technology are very fast, develop capability to feel changes and take advantage of opportunities faster than their competitors. They are more resilient, make timely decisions and are able to adapt to rapid market and technological changes (Day & Schoemaker, 2016).

Dynamic capability affects the performance of SMEs (Lin and Wu, 2014). Dynamic capability is built and redeveloped owned resources. SMEs that are closely related to customers, suppliers and partners. Dynamic capability has a positive influence on the performance of SMEs with a changing environment.

Dynamic capability increases the efficiency, speed and efficiency of SME responses to environmental turbulence, which in turn improves SME performance. Freeing SMEs can take advantage and profit to increase profits while adjusting operations to save costs associated with products and services. This dynamic capability enables SMEs to survive and grow by being able to adapt to their external environment (Wilden, Gudergan, & Nielsen, 2013).

In a growing market, dynamic capabilities enable companies to identify important market signals, evaluate new processes or services or products and respond to market changes. Information technology creates an environment where competitive advantage can be enhanced through process excellence, service excellence and intimacy with customers. Digital marketing capability affect long-term customer relations (Wang, Hu, & Hu, 2013).

Network resources are mediation of entrepreneurial orientation towards company performance (Jiang, Liu, Fey, & Jiang, 2018). Marketing capability has a positive influence on the performance of SMEs(Rezaei, Ortt, Rezaei, & Ortt, 2018; Sok, Cass, & Mony, 2013), namely SME finance (Merrilees, Rundle-thiele, & Lye, 2011), SME goals and competitors (Cacciolatti & Hee, 2016). Marketing capability is the main determinant of competitive advantage of SMEs. Marketing capability are adaptive and allow SMEs to adapt their strategies to rapidly changing markets (Day, 2011).

Competitive strategies mediate marketing capability with SME performance. This competitive strategy makes costs lower and the market reach broader (Martin, Javalgi, & Cavusgil, 2016). Digital-based marketing makes SMEs more effective and can reduce costs in various ways (Day, 2011). Entrepreneurial orientation by mediating marketing capability increases company performance higher than the direct path from entrepreneurial orientation to company performance (Martin & Javalgi, 2016).

### A. Hypothesis

The higher the dynamic capability of an SME to change and adapt to the environment, the higher the response of SMEs in terms of revenue generated (Karimi, 2015). According to another study, Ringov (2017), dynamic capability and environmental dynamics will be moderated

by the difficulties of the company's asset base. Previously based on previous research, Jantunen, Tarkiainen, Chari, & Oghazi (2018), companies that have the capacity to identify opportunities and coordinate their resources can renew their business models and support business changes using technology and market changes. First hypothesis is:

H1: Dynamic Capability has a positive direct influence on firm performance

Digital marketing makes it possible for companies to provide accurate insights about customers, markets, competitors, environmental trends, distributors, alliance partners, communities that are done online (Barrales-molina, Martínez-lópez, & Gázquez-abad, 2013). SMEs in Indonesia already have a Facebook Fan Page and are interested in the concept of trading through Facebook. Currently what has been commonly used by SMEs in Indonesia is SMS Text (Syuhada & Gambetta, 2013).

H2: Dynamic capability will positively influence digital marketing capability

Marketing orientation and marketing strategies moderate the relationship between marketing capabilities and SME performance (Cacciolatti & Hee, 2016). SME marketing capabilities improve the superiority and differentiation of new products with the help of technology (Kim, Shin, & Min, 2016). Social media is a successful tool for building brands and attracting new customers and building relationships with customers. The use of social media affects sales and customer commitment to the brand (Bezawada, 2013). According to previous research (Syuhada & Gambetta, 2013), SMEs in Indonesia argue that Facebook can increase buying interest from prospective buyers, when prospective buyers receive recommendations from friends on social networks. The last hypothesis is:

H3: Digital marketing capability will positively influence firm performance

## III. METHODS

### *Operational Definition of the Constructs and Their Measurement*

Table 1 contains the operationalization of the constructs that have been used in this paper as well as their corresponding indicators and their measurements

### *Sample and Data*

The respondents are the owner or the manager / supervisor of SMEs which is located in Indonesia, specific in Jakarta, Bogor, Depok, Tangerang, Bekasi regions. The SMEs engaged in the culinary sector were involved in this study. From 100 questionnaires distributed online, finally 90 valid questionnaires were collected while 10 questionnaires were invalid. The sample consisted of 22 culinary businesses in South Jakarta, 15 in West Jakarta, 14 in



Central Jakarta, 14 in North Jakarta, 12 in East Jakarta, 1 in Bogor, 1 in Depok, 9 in Tangerang and 2 in Bekasi. The average number of workers in SMEs is 15 people and the maximum number of workers is 90 people. The average age

of the establishment of SMEs is 5 years, while the maximum age is 10 years. The respondent is the owner or the manager / supervisor of business.

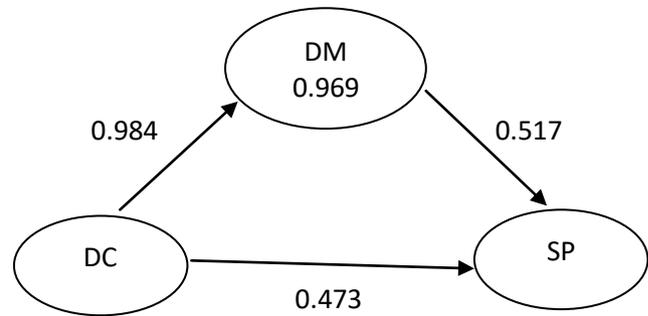
**Table 1: Operationalization Of The Constructs**

Constructs	Operational Definition	Components	Number of Indicators*
Dynamic Capability	The ability to assemble all available resources to deal with rapid changes in the environment due to rapid technological developments. (Lin & Wu, 2014)	Sensing Seizing Reconfiguration	12
Digital Marketing Capability	The ability of businesses to market their products and services by using digital technology in obtaining customers, promoting brands, retaining customers and increasing sales (Ellonen, 2012)	Customer Informations Customer Needs Customer Relations Customer Communication	9
SMEs Performance (SP)	The results achieved in an SME in order to achieve goals accompanied by effort and process. (Sidik, 2012)	Sales Growth Profit Growth	6

\*All indicators were measured with a 1-7 point Likert scale. 1=totally disagree. 2=disagree. 3=partially disagree. 4=partially agree. 5=agree. 6=totally agree

**IV. RESULTS**

The model was tested with Smart PLS. Table 2 shows the quality criteria of the model. The constructs are superior to the criteria of 0.85 in the composite reliability. The R Square (R<sup>2</sup>) for the relationship between the constructs DC and DM is 0.969, this shows that DM can explain the strengthening of DT; the R<sup>2</sup> between DM and SP is 0.974. These two relationships are statistically significant. Also the results of the AVE and the composite reliability of the constructs are substantially higher. The mediator model and its statistic results are shown in the Figure 1.



**Fig. 1: Mediator Model Results**

**V. DISCUSSION**

The hypothesis that this paper tested was a mediator model itself. The model states that the mediator role played by DM on the relationship between DC and SP. Based on the statistical result, this hypothesis is proven, DM mediates the relationship between DC and SP.

**Table 2: Quality Criteria Of The Model**

	R <sup>2</sup>	AVE	Composite Reliability	Cronbach's Alpha
DC	0	0.905	0.991	0.990
DM	0.969	0.957	0.993	0.992
SP	0.974	0.973	0.995	0.994

**Table 3: Path Coefficients**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (IO/STDEV)	P VALUE S
DC → SP	0.473	0.473	0.101	4.701	0.000
DC → DM	0.984	0.984	0.003	345.640	0.000
DM → SP	0.517	0.517	0.101	5.107	0.000

**VI. CONCLUSION**

This paper has showed that DM acts as a mediator on the relationship between DC and



SP. In the context of emerging countries, this research has presented the Indonesia case in which due to the lack of effective support for SMEs.

## REFERENCES

1. Arifin, Z. (2015). The effect of dynamic capability to technology adoption and its determinant factors for improving firm ' s performance ; toward a conceptual model. *Procedia - Social and Behavioral Sciences*, 207, 786–796. <https://doi.org/10.1016/j.sbspro.2015.10.168>
2. Barrales-molina, V., Martínez-lópez, F. J., & Gázquez-abad, J. C. (2013). Dynamic Marketing Capabilities : Toward an Integrative Framework. <https://doi.org/10.1111/ijmr.12026>
3. Bezawada, R. (2013). The Effect of Customers ' Social Media Participation on Customer Visit Frequency and Profitability : An Empirical Investigation, 24(1), 108–127.
4. Cacciolatti, L., & Hee, S. (2016). Revisiting the relationship between marketing capabilities and fi rm performance : The moderating role of market orientation, marketing strategy and organisational power. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2016.03.067>
5. Day, G. S. (2011). Day\_2011, 75(July), 183–195.
6. Day, G. S., & Schoemaker, P. J. H. (2016). Adapting to Fast-Changing Markets and Technologies, 58(4), 59–77.
7. Hani, U., Rachmania, I. N., Setyaningsih, S., & Putri, R. C. (2012). Patterns of Indonesian Women Entrepreneurship. *Procedia Economics and Finance*, 4(Icsmed), 274–285. [https://doi.org/10.1016/S2212-5671\(12\)00342-5](https://doi.org/10.1016/S2212-5671(12)00342-5)
8. Jantunen, A., Tarkiainen, A., Chari, S., & Oghazi, P. (2018). Dynamic capabilities, operational changes, and performance outcomes in the media industry. *Journal of Business Research*, (June 2017), 0–1. <https://doi.org/10.1016/j.jbusres.2018.01.037>
9. Jiang, X., Liu, H., Fey, C., & Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and fi rm performance : A network approach, 87(February), 46–57. <https://doi.org/10.1016/j.jbusres.2018.02.021>
10. Karimi, J. (2015). The Role of Dynamic Capabilities in Responding to Digital Disruption : A Factor-Based Study of the Newspaper Industry, (January). <https://doi.org/10.1080/07421222.2015.1029380>
11. Kim, N., Shin, S., & Min, S. (2016). Strategic marketing capability: Mobilizing technological resources for new product advantage ☆. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2016.03.072>
12. Lin, Y., & Wu, L. (2014). Exploring the role of dynamic capabilities in fi rm performance under the resource-based view framework. *Journal of Business Research*, 67(3), 407–413. <https://doi.org/10.1016/j.jbusres.2012.12.019>
13. Market, I. (2017). ANNUAL REPORT ON EUROPEAN SMEs Annual Report on European SMEs. <https://doi.org/10.2873/742338>
14. Martin, S. L., Javalgi, R. G., & Cavusgil, E. (2016). Marketing capabilities, positional advantage, and performance of born global fi rms : Contingent effect of ambidextrous innovation. *International Business Review*. <https://doi.org/10.1016/j.ibusrev.2016.11.006>
15. Martin, S. L., & Javalgi, R. R. G. (2016). Entrepreneurial orientation, marketing capabilities and performance: The Moderating role of Competitive Intensity on Latin American International New Ventures. *Journal of Business Research*, 69(6), 2040–2051. <https://doi.org/10.1016/j.jbusres.2015.10.149>
16. Merrilees, B., Rundle-thiele, S., & Lye, A. (2011). Industrial Marketing Management Marketing capabilities : Antecedents and implications for B2B SME performance. *Industrial Marketing Management*, 40(3), 368–375. <https://doi.org/10.1016/j.indmarman.2010.08.005>
17. Mikro, U. (2017). Perkembangan data usaha mikro, kecil, menengah (umkm) dan usaha besar (ub) tahun 2016 - 2017, (1), 2016–2017.
18. Millennial, P. (2019). Indonesia Millennial Report.
19. Penetrasi & perilaku pengguna internet indonesia. (2017).
20. Rezaei, J., Ortt, R., Rezaei, J., & Ortt, R. (2018). functional performances Entrepreneurial orientation and fi rm performance : the mediating role of functional performances. <https://doi.org/10.1108/MRR-03-2017-0092>
21. Ringov, D. (2017). Dynamic capabilities and fi rm performance. *Long Range Planning*, 50(5), 653–664. <https://doi.org/10.1016/j.lrp.2017.02.005>
22. Screen Shot 02-08-19 at 12. (n.d.).
23. Sok, P., Cass, A. O., & Mony, K. (2013). Achieving superior SME performance : Overarching role of marketing, innovation, and learning capabilities. *AUSTRALASIAN MARKETING JOURNAL*, 21(3), 161–167. <https://doi.org/10.1016/j.ausmj.2013.04.001>
24. Syuhada, A. A., & Gambetta, W. (2013). Online Marketplace for Indonesian Micro Small and Medium Enterprises Based on Social Media, 11(Iceei), 446–454. <https://doi.org/10.1016/j.protcy.2013.12.214>
25. TAMBUNAN, T. (2007). Entrepreneurship Development: Smes in Indonesia. *Journal of Developmental Entrepreneurship*, 12(01), 95–118. <https://doi.org/10.1142/S1084946707000575>
26. Wang, E. T. G., Hu, H., & Hu, P. J. (2013). Information & Management Examining the role of information technology in cultivating firms ' dynamic marketing capabilities. *Information & Management*, 50(6), 336–343. <https://doi.org/10.1016/j.im.2013.04.007>
27. Wilden, R., Gudergan, S. P., & Nielsen, B. B. (2013). Dynamic Capabilities and Performance : Strategy, Structure and Environment. *Long Range Planning*, 46(1–2), 72–96. <https://doi.org/10.1016/j.lrp.2012.12.001>