Which is More Important, Digital Marketing or Payment Gateway? Research on SMEs Business Performance

Dekeng Setyo Budiarto[(✉)], Rani Eka Diansari, Arista Natia Afriany,
Lulu Amalia Nusron, and Vivian Evan Seta

Faculty of Business, Universitas PGRI Yogyakarta, Yogyakarta, Indonesia
dekengsb@upy.ac.id

Abstract. Small and Medium Enterprises (SMEs) significantly contribute to economic growth, especially in developing countries, including Indonesia. Even though they have an essential role, SMEs still experience problems in facing competition, especially in implementing technology. Implementing technology is one of the hopes for SMEs to survive in uncertain conditions such as the current Covid-19 pandemic. The strategy most used by SMEs in implementing technology is digital marketing followed by payment gateways. The purpose of this study is to test whether digital marketing and payment gateways affect the performance of SMEs. This study uses primary data by distributing questionnaires to 110 SMEs owners in the Special Region of Yogyakarta. Hypothesis testing using multiple linear regression with purposive sampling as a data collection technique. The results show that digital marketing and payment gateways have a significant effect on the performance of SMEs. Payment gateways are more critical because they have a higher beta coefficient than digital marketing variables. The results of this study can provide implications for SMEs owners to apply technology to survive in the face of environmental uncertainty. The research results have implications for the government to support SMEs owners in the form of workshops or training on the use of information technology so that their performance will be better.

Keywords: Business performance · Digital marketing · Payment gateway · SMEs

1 Background

It has been agreed by various researches that SMEs have a significant contribution to economic growth, especially in developing countries [1]. SMEs have an immense contribution, namely >60% of Gross Domestic Product which can increase economic growth [2]. In addition, SMEs can absorb >90% of the workforce, and >90% of businesses worldwide are in the SMEs category [3]. Despite having a very significant contribution, SMEs have various obstacles, especially in the implementation of technology, affecting performance [4].

They were referring to the RBV theory (resource-based view) that an organization's ability to maintain competitive advantage is highly dependent on skills in managing its

resources. This capability is essential for SMEs because of the limited resources they have. RBV theory divides capabilities into 3, namely physical capability, human capability, and organizational capability. Physical capability is an organizational capability in technology and geographical location; human capability is an organizational capability in managing human resources such as training, work experience, analytical skills, while organizational capability is an ability in planning and control [5].

The Covid-19 pandemic that has lasted for two years has greatly affected the performance of SMEs. Most SMEs experienced a decline in income of >80%, so a unique strategy was needed so that SMEs were able to survive. One strategy that is relevant to current conditions is the implementation of technology, namely utilizing digital marketing and payment gateways [6]. Digital marketing is essential because it can reduce time and costs, facilitate communication with consumers and reach a broader range of consumers, thereby increasing organizational flexibility [7]. Payment gateways are essential for organizations because they reduce recording errors, facilitate the reconciliation process that is carried out automatically and make it easier for consumers to make transactions [8]. The growth of this payment gateway is very rapid because it can simplify the transaction process by integrating data between sellers and electronic payment providers so that they are safer to use [8–10].

A lot of research on the performance of SMEs and technology implementation has been done, but it is still interesting because: First, the findings of several previous studies are inconsistent [3, 7, 11]. Second, the ability and capability of SMEs to compete at the global level are very limited [5]. The third, SMEs owners still have a dilemma whether to focus on innovation or improve performance [12]. The purpose of this study is to test the implementation of digital marketing and payment gateways in enhancing the performance of SMEs so that the hypothesis proposed is whether digital marketing and payment gateways affect the business performance of SMEs (Table 1).

2   Method

This research was conducted in the Special Region of Yogyakarta, consisting of 4 regencies, namely Sleman, Bantul, Kulonprogo, Gunung Kidul and one city, namely Yogyakarta. The data collection technique uses purposive sampling with specific criteria, namely: 1) SMEs that use online marketing; 2) Using a payment gateway; 3) The running of the business more than one year. We are testing research data using Pearson correlation and Cronbach alpha tests, while hypothesis testing uses multiple regression.

This study uses SME owners as respondents by filling out a questionnaire. Questionnaires were given to 110 SMEs owners who manage culinary businesses. We chose The type of culinary business because several previous findings stated that most SMEs have a culinary business [11, 13]. This research went through two stages of testing, namely data testing and hypothesis testing. They test data using a validity test with Pearson correlation and reliability testing using Cronbach alpha. The validity test uses a significance of 5%, while the reliability test uses a cutoff of 0.6.

Table 1. Variable Measurement

Variables	Definition	Indicators
Business performance [4]	Business performance is the achievement of organizational goals as measured by three indicators from previous research.	1. Increase of sales 2. Increase of profitability 3. Revenue exceeds the target
Digital Marketing [14]	Digital Marketing is a way of promoting or selling products through digital media/internet platform.	1. Increase of promotion 2. Attractive sales promotion 3. Ease of communication between sellers and buyers
Payment Gateway [15]	Payment gateway-based Fin-tech is an online payment system according to transactions measured by 4 indicators.	1. Easy to use 2. Easy to control 3. Flexible 4. Easy to understand

3   Result and Discussion

Based on the time that has been set, the researchers succeeded in collecting questionnaires according to the research target. The next step is to analyze the characteristics of the respondents shown in Table 2. The analysis results are not surprising that according to several previous studies, most of them are micro-businesses (88%) with a limited number of employees. However, the exciting result of the analysis is that the educational background of the SMEs owners, who are mostly non-graduates, this finding becomes a challenge for further research to examine the educational experience of the SMEs owners.

After analyzing the respondent's description, the next step is to test the data, namely the validity and reliability tests. The validity test uses Pearson correlation with a significance of 5%, while the reliability test uses Cronbach alpha with a cut-off of 0.6. The validity test results showed that all instruments were valid (Table 3) and reliable (Table 4). Table 3 is an example of validity testing for digital marketing variables with 7 questions.

After analyzing the data, the next step is to test the hypothesis to prove whether digital marketing and payment gateways affect the performance of SMEs. Hypothesis testing using multiple regression with a significance of 5% (Table 5). The test results show that digital marketing and payment gateways affect the performance of SMEs. These results support previous findings, which explained that SMEs had limited resources. The right strategy is needed to make it more efficient, namely by implementing technology, including digital marketing [5]. In addition, payment gateways can provide convenience for business owners because they increase efficiency, protection is easy to use so that consumers are more comfortable [10]. Furthermore, the owner's perception of the importance of technological progress and changes in consumer tastes are also needed to face increasingly fierce competition and an increasing broad market. Changes in consumer

Table 2. The Analysis of Respondents Characteristics

		Yogyakarta	Sleman	Gunung Kidul	Kulon Progo	Bantul	Total
Business size	Micro	18	17	23	20	19	97
	Small	3	2	1	2	2	10
	Medium	2	-	-	-	1	3
Gender	Male	6	10	8	10	12	46
	Female	22	13	11	12	6	64
Education	Bachelor	9	10	12	6	9	46
	Others	15	12	9	15	13	64
The Use of Digital Marketing	<3 years	21	15	20	15	14	85
	3–5 Years	10	3	3	5	-	21
	6–10 Years	1	-	-	2	1	4
Running of Business	<3 Years	15	10	16	9	25	75
	>3 Years	9	12	4	8	2	35

Table 3. The Validity Test of Digital Marketing Variable

No	Question	Pearson Correlation
1	Advertising in digital marketing is beneficial in providing information	0.752**
2	The advertisements delivered by the company through are helpful in introducing the product	0.797**
3	The range of product promotions is vast; everyone can see it by visiting an account through digital marketing	0.695**
4	The delivery of product messages/information from the company to consumers through pictures/photos is exciting and innovative	0.731**
5	Posts through digital marketing accounts provide clear and easy-to-understand information	0.525**
6	I am interested in and like the company's promotion strategy through digital marketing	0.770**
7	Both sellers and buyers are equally active in discussing products through digital marketing	0.414**

tastes and buying behavior quickly can be followed by SMEs with marketing communications through internet media [7]. Furthermore, it can be explained that digital marketing is more important than payment gateways because electronic payments are an implication of e-commerce which SMEs widely use [8].

Table 4. Reliability Test Results

Variables	Cronbach Alpha	Conclusion
Digital Marketing	0.793	Reliable
Payment Gateway	0.854	Reliable
Business Performance	0.839	Reliable

Table 5. Regression Analysis

Variables	B	t	Sig.
Digital Marketing	0.379	4.733	0.000**
Payment Gateway	0.216	2.658	0.009**
F Value: 22.778			0.000**
Adj. R^2: 0.231			

4   Conclusion

The results show that digital marketing and payment gateways have a significant effect on the performance of SMEs. However, the beta coefficient in digital marketing is more powerful, so it can be concluded that digital marketing is more important than payment gateways. The current challenge with the Covid-19 outbreak is forcing SMEs to look for business opportunities with various creativity, expertise, and skills. The owner can create business opportunities by utilizing marketing communication elements, including advertising, publicity, promotion, and online marketing. The digital marketing strategy is part of the innovation of SME owners to switch from an old-fashioned business to a modern business. Digital marketing makes it easy for businesses and consumers because communication and transactions can be done at any time and accessed worldwide. Digital marketing followed by a payment gateway is the right solution for SMEs to face future business uncertainties. This result is important for SMEs owners because marketing orientation can lead to more competitive competition and global competitiveness [5]. This study has limitations, namely, only using SMEs that have culinary businesses. For future research, it is possible to examine other types of business, for example, based on business creativity, because this creativity affects the innovation and resilience of SMEs [12]. This study only uses a questionnaire, so the information obtained is very limited. Further research can add in-depth interview methods to bring higher quality data and information.

Authors' Contributions.   All authors have contributed to this paper, from drafting to sending the document. Dekeng Setyo Budiarto is in charge of preparing and drafting paper discussions. Rani Eka Diansari and Arista Natia Afriany are ordered to analyze data, search for literature, and distribute questionnaires. Lulu Amalia Nusron compiled research indicators and distributed questionnaires. Vivian Evan Seta distributed questionnaires, tabulated research data, and adjusted paper templates.

References

1. Udriyah, J. Tham, and S. M. Ferdous Azam, "The effects of market orientation and innovation on competitive advantage and business performance of textile SMEs," Manag. Sci. Lett., vol. 9, no. 9, pp. 1419–1428, 2019.
2. C. Jia, X. Tang, and Z. Kan, "Does the nation innovation system in China support the sustainability of small and medium enterprises (SMEs) innovation?," Sustain., vol. 12, no. 6, 2020.
3. S. M. Chege and D. Wang, "The influence of technology innovation on SME performance through environmental sustainability practices in Kenya," Technol. Soc., vol. 60, no. June 2019, p. 101210, 2020.
4. D. S. Budiarto, M. A. Prabowo, and T. Herawan, "An integrated information system to support supply chain management & performance in SMEs," J. Ind. Eng. Manag., vol. 10, no. 2 Special Issue, pp. 373–387, 2017.
5. H. J. C. Byoungho Jin, "Examining the role of international entrepreneurial orientation, domestic market competition, and technological and marketing capabilities on SME's export performance," J. Bus. Ind. Mark., vol. 2, no. 7, pp. 1–15, 2017.
6. M. Chinakidzwa and M. Phiri, "Impact of digital marketing capabilities on market performance of small to medium enterprise agro-processors in Harare, Zimbabwe," Bus. Theory Pract., vol. 21, no. 2, pp. 746–757, 2020.
7. W. M. Lim, "The influence of internet advertising and electronic word of mouth on consumer perceptions and intention: some evidence from online group buying," J. Comput. Inf. Syst., vol. 55, no. 4, pp. 81–89, 2015.
8. J. M. Sausi, J. S. Mtebe, and J. Mbelwa, "Evaluating user satisfaction with the e-payment gateway system in Tanzania," SA J. Inf. Manag., vol. 23, no. 1, pp. 1–10, 2021.
9. J. Kang, "Mobile payment in Fintech environment: trends, security challenges, and services," Human-centric Comput. Inf. Sci., vol. 8, no. 1, 2018.
10. A. Hassan, Z. Shukur, and M. K. Hasan, "An Efficient Secure Electronic Payment System," Computers, vol. 9, no. 3, pp. 1–13, 2020.
11. D. S. Budiarto, E. Vivianti, and R. E. Diansari, "Maintaining the performance and sustainability of MSMEs using E-Commerce during the Covid-19 pandemic," vol. 23, no. 3, pp. 414–425, 2020.
12. B. R. Purnomo, "Artistic orientation, financial literacy and entrepreneurial performance," J. Enterprising Communities, vol. 13, no. 1–2, pp. 105–128, 2019.
13. A. Purnomo and I. Adyaksana, "Meningkatkan penerapan SAK EMKM dengan persepsi usaha dan kesiapan pelaku UMKM," J. Bus. Inf. Syst., vol. 3, no. 1, pp. 1–13, 2021.
14. M. Chinakidzwa and M. Phiri, "Exploring digital marketing resources, capabilities and market performance of small to medium agro-processors. A conceptual model," J. Bus. Retail Manag. Res., vol. 14, no. 02, pp. 1–15, 2020.
15. L. Soutter, K. Ferguson, and M. Neubert, "Digital payments: Impact factors and mass adoption in sub-saharan africa," Technol. Innov. Manag. Rev., vol. 7, no. 10, pp. 41–55, 2019.