



Challenges for SMEs During the Covid-19 Pandemic: The Importance of Innovation and Digitalization

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ABSTRACT

Even though SMEs have significantly contributed to economic growth, the COVID-19 pandemic has resulted in many businesses in this sector failing. Therefore, the right strategy is needed so that they can deal with environmental changes. This research will test whether digitalization and innovation significantly impact improving market performance. Data was obtained by giving questionnaires to 72 SMEs owners in Yogyakarta Province. SMEs that are used as research objects are selected based on criteria, namely those that use e-commerce. Respondents' answers will be tested with a validity test, and a reliability test will then be tested for consistency with Cronbach's alpha. The study results show that although innovation and digitalization have a significant impact, innovation is more dominant in improving market performance. The results of this study have implications for SME owners to apply the right strategy significantly to innovate both in products and markets. For the government, the significance is the need for supporting facilities so that business owners, especially small firms, can easily carry out innovation and digitization.

Keywords: *Digitalisation, Innovation, Market performance, SMEs*

1. INTRODUCTION

Small and medium enterprises (SMEs) significantly contribute to economic growth because they can absorb most of the workforce and most businesses in this sector [1], [2]. International, national, and regional stakeholders realize that SMEs' important role in increasing wealth and developing innovation cannot be ignored, especially in low-income countries [3]. Even though they have a strategic role, the rapidly changing environmental conditions, including the COVID-19 pandemic, have resulted in SMEs facing problems. SMEs must adapt to new economic and social realities, rethink corporate business strategies, and create new business models to achieve long-term priorities [4].

One strategy SMEs can implement to reduce costs is digitalization because digitization can expand market reach and facilitate communication with customers. Digitalization is an exciting phenomenon growing because digital transformation allows companies to simplify operations, create new business models, find

new customers, and face new competitors [5]. To respond to environmental uncertainties, including the COVID-19 pandemic, SMEs need the right strategy so that the organization runs efficiently and effectively. Digitalization is the right solution because, in addition to increasing productivity, digitalization can also reduce a company's risk so as not to lose the market [4]. The current knowledge and experience are being challenged due to the rapid changes in the market; therefore, companies need the correct information to satisfy customers. Companies will quickly adjust to consumer changes with a good digitalization strategy [6].

Intense competition between SMEs is challenging, so owners can create innovations, namely developing new products and understanding market tastes [7]. Product innovation is mandatory for companies to be able to face challenges in globalization and technological demands. Innovation is an essential factor for organizational success because it can get new customers and markets [8]. Innovation can come from within or from outside the company. Innovation from within the company is created

from new ideas from employees within the department. In contrast, innovation from outside is related to unique views and opinions from the environment outside the organization [9]. Based on the results of previous studies, this research will prove whether digitalization and innovation will significantly impact improving the SMEs market performance. This research has implications for SMEs owners and the government regarding the importance of the right strategy to face increasingly fierce competition.

2. RELATED WORK

The RBV theory explains that organizations in this context are SMEs that must apply the right strategy to use resources more efficiently. The ability to process resources efficiently is more important than the external factors companies face [10]. The ability to process resources efficiently will contribute to strategy implementation, which can ultimately improve

developments and create better performance [5]. Results in Australia state that digital transformation can be used as a fundamental strategy, especially post-pandemic crisis recovery [4]. Other findings in Zimbabwe state that SMEs must increase capabilities that allow them to exceed existing targets and achieve market growth and profitability [6].

To face increasingly fierce competition with competitors, SMEs need an appropriate and efficient strategy, namely innovation. Innovation will encourage organizations to create new products or services the market needs. For owners, innovation is the primary motivation for changing the economy's structure to promote business development worldwide [1]. Findings in Ghana show that innovation is crucial to improving market performance, which can ultimately improve the quality of life of the people [3], [11]. Findings in Indonesia show that SMEs that innovate will survive in competition to achieve better performance [7]. Organizations with the power to innovate can stay to

Table 1. Validity testing of innovation variable

	ln1	ln2	ln3	ln4	ln5
ln1	1				
ln2	0.700**	1			
ln3	0.680**	0.916**	1		
ln4	0.704**	0.627**	0.671**	1	
ln5	0.572**	0.474**	0.504**	0.646**	1
Total	0.854**	0.892**	0.904**	0.849**	0.739**

** Sig. < 1%

Table 2. Reliability testing of each variable

Variable	N	Cronbach Alpha
Innovation	5	0.902
Digitalization	4	0.829
Market Performance	6	0.881

Table 3. Hypotheses testing

Variable	Beta	T	Sig.
Innovation	0.501	5.677	0.000**
Digitalization	0.395	4.485	0.000**
F Value: 56.915 Adj. R Square: 0.612			0.000**

** Sig. < 1%

organizational performance [11]. Currently, SMEs face challenges due to rapid technological changes, to face these challenges, digitization is a strategy that must be implemented by owners [12]. Findings in Malaysia explain that organizations capable of digital transformation will more quickly follow market

create excellence and achieve better performance than their competitors [11]. The company's ability to win signals from customers or suppliers will make it easier for companies to innovate according to their needs. At the same time, if competition gets more challenging, opportunities to create innovations will open up more,

and data and information exchange are needed, which leads to new knowledge and innovation [9].

3. MATERIAL AND METHOD

This study used a questionnaire given to 72 SMEs owners throughout Yogyakarta Province. The questionnaire was submitted via Google Forms using a purposive sampling technique based on the criteria that SMEs use e-commerce. This study uses 3 variables, namely innovation, which consists of 5 questions with indicators adopted from previous studies [3]. Furthermore, the digitization variable consists of 4 questions with indicators adopted from earlier studies [12]. Finally, the market performance variable consists of 6 questions adopted from previous research [3]. Before analysis, all questions will be tested with validity (The example of validity test for innovation variable in Table 1) and reliability tests (Table 2) so that the questions are easy to understand and that the answers to questions are consistent. After being declared valid and reliable, the final data will be used for further analysis to test the hypothesis (Table 3).

4. RESULT

This research was conducted for 4 months at the end of 2022 in various SME sectors throughout the Yogyakarta area. The results of distributing questionnaires using the Google form obtained 72 respondents, with a total of 65% female respondents and 35% male respondents. Most SMEs are in the culinary field, namely 80% with e-commerce usage < 3 years. These results show that the COVID-19 Pandemic created a new phenomenon regarding the increase in online transactions.

The research results prove that innovation plays an essential role in the development of SMEs, especially in facing increasingly fierce competition between SMEs and large companies [1]. In a small scope, for example, a home industry can contribute to economic growth, thereby reducing urbanization in big cities, so innovation is needed [3]. Companies with extensive innovation capabilities will respond more quickly to environmental changes and create new skills for better conditions [11]. Innovation means that companies will generate creativity and unique concepts to provide solutions to various contemporary problems faced by companies [8]. Customers, suppliers, and industry are essential factors in influencing company innovation because the efficiency of company operations will depend on the interaction of various factors [9].

Digitalization by SMEs will make it easier for them to enter new markets, understand market tastes, and create opportunities. Digitalization can revolutionize traditional marketing strategies into digital marketing, increasing SMEs' market share and operating

Challenges for SMEs During the Covid-19 Pandemic performance [2]. Digitalization is a practical solution for SMEs to expand marketing and save costs more efficiently [12]. To digitize, companies need a digital platform to integrate information. With digitalization, companies can understand market trends, helping businesses customize their service offerings accordingly [5]. New technologies will create new products; new products will create new markets and new values for consumers that will benefit the company in the long term [13].

5. CONCLUSION

The conclusion that can be drawn from the analysis results is that innovation and digitalization can improve a company's market performance, so owners need to enhance their capabilities. With digitalization, companies can save costs, and with creation, companies can compete against their competitors. The limitation of this study is that it does not classify SMEs affected by Covid-19. Suggestions for future research are to separate SMEs that are positively or negatively affected because it will affect performance [14]. Then, this research only measures marketing performance (one functional area); future research may consider overall company performance or all functional areas [11].

REFERENCES

- [1] 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, doi: 10.3390/su12062562.
- [2] D. S. Budiarto, M. A. Prabowo, and N. B. Azman, "Evaluating the important role of women in maintaining the sustainability of SMEs," *J. Telecommun. Digit. Econ.*, vol. 11, no. 2, pp. 180–193, Jun. 2023, doi: 10.18080/jtde.v11n2.664.
- [3] S. Afriyie, J. Du, and A. A. I. B. N. Musah, "Innovation and marketing performance of SME in an emerging economy: The moderating effect of transformational leadership," *Int. J. Innov. Manag.*, vol. 24, no. 4, 2020, doi: 10.1142/S1363919620500346.
- [4] K. Alam, M. A. Ali, M. O. Erdiaw-Kwasie, P. A. Murray, and R. Wiesner, "Digital transformation among SMEs: Does gender matter?," *Sustain.*, vol. 14, no. 1, pp. 1–21, 2022, doi: 10.3390/su14010535.
- [5] S. Khin and T. Ho, "Digital technology, digital capability and organizational performance," *Int. J. Innov. Sci.*, vol. 11, no. 2, pp. 177–195, 2019, doi: 10.1108/IJIS-08-2018-0083.
- [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,

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no. 2, pp. 746–757, 2020, doi:
10.3846/btp.2020.12149.
- [7] L. Gwee and I. G. A. K. Giantari, “The role of competitive advantage mediates the effect of innovation on business performance,” *Am. J. Humanit. Soc. Sci. Res.*, vol. 5, no. 1, pp. 222–230, 2021.
- [8] P. Kittikunchotiwut, “The roles of organizational learning capability and firm innovation in the relationship between entrepreneurial orientation and firm performance,” *J. Asian Financ. Econ. Bus.*, vol. 7, no. 10, pp. 551–561, 2020, doi: 10.13106/jafeb.2020.vol7.no10.651.
- [9] A. Distanont and O. Khongmalai, “The role of innovation in creating a competitive advantage,” *Kasetsart J. Soc. Sci.*, vol. 41, no. 1, pp. 15–21, 2020, doi: 10.1016/j.kjss.2018.07.009.
- [10] D. S. Budiarto, M. A. Prabowo, S. Uyob, and R. E. Diansari, “Diversification strategy and its impact on sustainability: Research on Indonesian SMEs,” *Int. J. Appl. Econ. Financ. Account.*, vol. 13, no. 1, pp. 40–49, 2022, doi: 10.33094/ijaefa.v13i1.612.
- [11] A. C. Pisicchio and A. M. M. Toaldo, “Integrated marketing communication in hospitality SMEs: analyzing the antecedent role of innovation orientation and the effect on market performance,” *J. Mark. Commun.*, vol. 27, no. 7, pp. 742–761, 2021, doi: 10.1080/13527266.2020.1759121.
- [12] Z. Yousaf, M. Radulescu, C. I. Sinisi, L. Serbanescu, and L. M. Păunescu, “Towards sustainable digital innovation of smes from the developing countries in the context of the digital economy and frugal environment,” *Sustain.*, vol. 13, no. 10, 2021, doi: 10.3390/su13105715.
- [13] B. Shishko, “Storytelling in the digital era: Perspectives on age and gender,” *Trames A J. Humanit. Soc. Sci.*, vol. 26, no. 4, pp. 397–411, 2022, doi: 10.1057/9781137365293.
- [14] T. S. Manolova, C. G. Brush, L. F. Edelman, and A. Elam, “Pivoting to stay the course: How women entrepreneurs take advantage of opportunities created by the COVID-19 pandemic,” *Int. Small Bus. J. Res. Entrep.*, vol. 38, no. 6, pp. 481–491, 2020, doi: 10.1177/0266242620949136.

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