MSME PERFORMANCE EFFECTIVENESS DURING COVID 19 PANDEMIC PERIOD

Hariadi[1], Fitri Humairoh[2]✉, Desmiyawati[3], Nur Azlina[4]
[1,2,34]Universitas Riau
✉[2] fitri.humairoh@lecturer.unri.ac.id
Kampus Bina Widya KM.12.5, Simpang Baru, Kota Pekanbaru, Riau, Indonesia

Abstract

This research aims at examining the influence of the effect of e-commerce, innovation and accounting information systems on the MSMEs' performance in the Bengkalis district. The population method used in this research was MSMEs in Bengkalis district. The samples in this research were 100 MSMEs that fit the criteria that have been determined. The data used in this research was primary data with a questionnaire as an instrument. Additionally, the data collection in this research used purposive sampling, where the total number of respondents in this research was 100 respondents. The data analysis was done with a multiple linear regression model with Statistical Product and Service Solution (SPSS) software 25.0 version. The results obtained were e-commerce, inovation and accounting information systems that had a significant effect on MSMEs' performance.

INTRODUCTION

A country's economic growth is supported by many factors. In Indonesia, one of the factors that encourage economic growth is the growth of small businesses, it is including a traditional and modern sector called MSMEs (Micro, Small and Medium Enterprises). Bengkalis district is the fourth district with the highest number of MSMEs in Riau Province, which was 42,029 MSMEs (Antara Riau, 2018). A large number of MSMEs in terms of quantity is still not supported by adequate development in terms of quality so MSME performance is still lagging (Riau Online, 2018). Bengkalis district stated that currently, the performance of the cooperative and MSME sector is still not optimal in contributing to the economy in Bengkalis district, even though the potential in Bengkalis district is very high (Bengkalis Kab, 2019). Constraints commonly faced by MSME actors in Bengkalis district are the use of technology that is still lacking, recording and preparation of financial reports that are not adequate and very simple. Based on data from the crisis centre of the Ministry of Cooperatives and Small and Medium Enterprises, the decline in people's purchasing power due to the COVID-19 pandemic has greatly impacted the Micro, Small, and Medium Enterprises (MSMEs) sector. MSME sector players in Indonesia experienced a sales decline of up to 55% during the pandemic (Saut, 2021)

During this Covid-19 period, many MSME businesses experienced a slump, resulting in a decline in MSME turnover. It is also applied to SMEs in Bengkalis district of the 40.000 SME and MSME business people in Bengkalis, around 5000 have had a very large impact on the occurrence of the COVID-19 outbreak (Iqbal,

2020). The chairman of the Bengkalis District Chamber of Kamar Dagang dan Industri (Kadin) Masuri Masuri also stated that the economic downturn was experienced by all lines and all aspects, including one of the home industries that were members of MSMEs (Ogas, 2020). MSMEs must create a competitive advantage strategy by utilizing E-commerce technology such as the use of social media or online sales. This research continued the previous research on the effect of e-commerce applications, user personality, and corporate strategy on the effectiveness of accounting information systems and its Impact on the quality of accounting information (Nasrizal et al., 2019) and on the analysis of entrepreneurial orientation and education levels in improving the performance of MSMEs in Bengkalis district (Tanjung et al., 2019). The main objective of this research was to analyze competitive advantage strategies in the face of the covid-19 pandemic by using e-commerce, innovation and accounting information systems on SMEs in Bengkalis district. Through this research, it is hoped that MSMEs in Bengkalis district can formulate a competitive advantage strategy in the face of the COVID-19 pandemic by implementing the following: e-commerce, innovation and accounting information systems to improve MSME performance in Bengkalis district.

Feranita & Setiawan (2018) researched the role of competitive excellence in mediating the impact of market orientation and entrepreneurship orientation on MSMEs' performance with the result that competitive advantage, market orientation and entrepreneurial orientation affect the performance of MSMEs. Sil & Coryanata (2018) examined the effect of entrepreneurship competence, entrepreneurship and learning orientation toward sustainable competitive advantages in improving managerial performance on medium enterprises in Bengkulu Province which stated that entrepreneurship competence and learning orientation affect the performance of MSMEs. Wadehra (2020) researched the adoption of e-commerce by rubber industry MSMEs in Pune with the result was the adoption of e-commerce influences performance of the firm. Farida (2019) conducted factors that affected the performance of MSMEs in the city of Tegal with the results of the research were the level of education and ability to compile financial statements did not affect the performance of MSMEs.

Therefore to overcome these problems, the author is interested in re-researching and doing this research with a problem formulation. This research was conducted to contribute to MSMEs on did E-commerce affect the performance of MSMEs in Bengkalis District during Covid 19, whether innovation and accounting information systems affected the performance of MSMEs in Bengkalis district during Covid 19. This research is important to do considering that during the covid-19 period, many MSME businesses are experiencing a slump, resulting in decreased MSME turnover. This research would identify competing advantage strategies in the face of the covid19 pandemic by using e-commerce, innovation and accounting information systems at MSMEs in Bengkalis district.

METHOD

This research is designed to use a causal research with the type of research carried out is quantitative research, namely research methods based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative and statistical, to test the established hypothesis. In this research, there are independent and dependent variables on how much influence the independent variable has on the dependent variable.

The type of data used in this research was primary data obtained directly from the field. Primary data was the data used in research obtained by distributing questionnaires to respondents. The source of the data is taken from answers that have been filled in by MSME people operating in Bengkalis district. The population in this research was MSME people in the Bengkalis district area who registered with the Bengkalis District Cooperatives and Micro Small Entreprises Service totalling 42,029 MSMEs (bps.go.id). The sample is 100 SMEs and Sample criteria used purposive sampling.

Table 1. Criteria of Sample

No	Sample Criteria
1	SMEs registered with the Bengkalis District Cooperatives and SMEs Office
2	MSME age > 5 years
3	Business capital ranging from IDR 50 million to IDR 500 million
4	Total turnover per year is IDR 50 million to IDR 1 billion

The type of data used in this research is primary data obtained directly from the field. Primary data is data used in research obtained by distributing questionnaires to respondents.

Table 2. Operational Definition and Measurement of Variables

No	Variable	Operational Defenition	Measuring Tool	Measurement Results	Scale
1.	M S M E Performance	Performance is a result of optimal work performance carried out by a person or group or business entity	Questionnaire	The indicators used in this research (Cho and Joo, 2018): 1. ROA 2. ROE 3. Revenue growth 4. Sales returns 5. Loyalty 6. Competitiveness 7. Stability 8. Customer satisfaction.	Likert
2.	E-commerce	E-commerce is the process of buying, selling, sending, or exchanging products, services, and/or information through computer networks, most of which are the internet and intranets (Turban et. Al., 2005)	Questionnaire	The indicators used in this research (Ernawani, 2017): 1. Internet access 2. Ease of information 3. HR capabilities 4. Managerial responsibility	Likert
3.	Innovation	Innovation is a good, service or idea that some people perceive as something new, no matter how long its history (Kotler and kaller, 2012)	Questionnaire	The indicators used in this research (Lucal and OC, 2000): 1. Product line expansion 2. imitation products 3. New products.	Likert
4.	Accounting Information System	An accounting Information System is part of information technology. The application of Accounting Information System technology can provide added value for users in the form of providing various financial information for planning, controlling, and decision-making activities, which in turn has an impact on improving the performance of managers	Questionnaire	The indicators used in this research (Kurniawan, 2018): 1. Decision-making process 2. internal control capability	Likert

Data analysis in this research used multiple regression which is used to determine the accuracy of the relationship between e-commerce, innovation and accounting information systems on MSME performance. Acceptance or assessment of the hypothesis is determined < 0.05. To test the hypothesis, the following regression equation model was used:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(1)$$

Where Y stands for MSME performance as the dependent variable, α stands for constant, while $\beta1$-$\beta3$ represent regression coefficient. In addition X_1, X_2 and X_3 represent the independent variables namely e-commerce, innovation and accounting information system respectively. Lastly, e refers to the standart error.

RESULTS

This research aims at identifying a competitive advantage strategy in the face of the covid-19 pandemic by using E-commerce, innovation and accounting information systems on SMEs in Bengkalis district. This research used a questionnaire for data collection. The population in this research was MSME people in the Bengkalis district which is registered with the Cooperatives and SMEs Service Bengkalis district about 42,029 MSMEs. To determine the number of samples, the criteria for MSMEs registered with the Cooperatives and SMEs Office of Bengkalis district were used, the age of MSMEs is > 5 years, and the business capital started from Rp. 50 million to Rp. 500 million with the total turnover per year is Rp. 50 million to Rp. 1 billion. Based on these criteria, a research sample of 100 SMEs was obtained.

The results of statistical testing Performance of Micro, Small and Medium Enterprises showed that the total score of answers is 4753 with a minimum score of 35 and a maximum value of 60. The average value (mean) of 45.73. indicated that the average respondent filled out the choices partly agree and agree on the

questionnaire, with a standard deviation of 4.932 indicating that the data distribution is not too large because the standard deviation is smaller than the average value. The results of statistical testing on E-commerce showed that the total score of answers is 2374 with a minimum score of 18 and a maximum value of 30. The average value (mean) of 24.95. indicated that the average respondent filled out the option to agree on the questionnaire, with a standard deviation of 2,434 indicating that the data distribution is not too large because the standard deviation is smaller than the average value.

The results of statistical tests Innovation showed that the total score of answers is 3332 with a minimum score of 25 and a maximum value of 41. The average value (mean) of 34.47. indicated that the average respondent filled out the choices partly agree and agree on the questionnaire, with a standard deviation of 3,394 indicating that the data distribution is not too large because the standard deviation is smaller than the average value. The results of statistical tests accounting information system showed that the total score of answers is 2438 with a minimum score of 16 and a maximum value of 29. The average value (mean) of 22.91. indicated that the average respondent filled out the choices partly agree and agree on the questionnaire, with a standard deviation of 2.644 indicating that the data distribution is not too large because the standard deviation is smaller than the average value.

From the results of the analysis with the help of the SPSS 25.0 program, it can be seen that the regression equation formed. The multiple linear regression equation is as follows:

$$Y = -16,453 + (-0.357) X_1 + 2,468 X_2 + (-1,240) X_3 + e \quad \dots\dots\dots\dots\dots\dots\dots\dots(2)$$

Table 3. Results of the Coefficient of Determination (R^2)
Model Summary

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate	Durbin-Watson
1	0.158[a]	0.025	0.027	3.946	2.301

Based on the results of the coefficient of determination above, the adjusted R square value obtained is 0.27 which showed that the performance of SMEs that occurred in the research sample is influenced by e-commerce, innovation and accounting information systems by 27% and the remaining 73% is influenced by other variables that have not been studied in this research.

Tabel 4. F ScoreCount ANOVA
ANOVA[a]

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1362.747	5	272.549	24.517	.000[b]
	Residual	1044.963	94	11.117		
	Total	2407.710	99			

Following the results of the calculation of Test F which was served by the SPSS program obtained a Fcount value of 24,517. The value of Fcount is greater than the value of Ftable which is 2.698. The value of significance obtained is 0.000, the value of this significance is smaller than α which is 0.05. Thus Ho was rejected and Ha accepted, meaning that together with free variables consisting of E-commerce (X_1), innovation (X_2), and accounting information system (X_3) affected the bound variables MSME Performance (Y) in Bengkalis district.

DISCUSSION

Firstly, E-commerce had a significant effect on SMEs' performance. This shows that it can improve the performance of MSMEs during the Covid-19 period. Basically, e-commerce makes it very easy for MSME actors to run their business, but there are still many MSME actors who do not really understand the use of e-commerce well. So that the use of e-commerce can be maximized, it is necessary to have assistance from third parties both from the government and technicians to help improve understanding regarding the use of e-commerce by MSME actors so that MSMEs can continue to increase their revenue turnover and MSMEs can maintain their business continuity during the COVID-19 period. E-commerce is the process of buying, selling, sending, or exchanging products, services, and/or information through computer networks, most of which were the internet and the Turban intranet (Turban et. Al., 2005). The results of this research were in line with the research of Rahmaniyah et al (2017), Hanum and Sinararsi (2018), Supardi and Le (2019), and Wadehra and Miglani (2020) who proved E-commerce affects the performance of SMEs.

Secondly, innovation had a significant effect on SMEs' performance. Innovation is a product or service that is prepared by consumers as a new product or service. In simple terms, innovation can be interpreted as a breakthrough related to new products. Marketing is one of the important aspects of improving company performance. The utilization of E-commerce became one of the solutions in the process of buying, selling and marketing (Hanum and Sinararsi, 2017). One of the most important characteristics of SMEs is their ability to innovate. MSME actors can implement innovation well by making product variations according to developments, making products in new ways, making attractive packaging and keeping up with changes by doing digital marketing. Innovation is very much needed during the Covid-19 period because without innovation MSMEs will not be able to last long. This is due to the changing needs, wants, and demands of customers. Many MSME business actors feel that product innovation can overcome the problem of declining sales during the COVID-19 pandemic.

Thirdly, the accounting information system had a significant effect on SMEs' performance. The accounting information system is a planning and control system of information and performance evaluation information. accounting information systems affected the performance of SMEs in Bengkalis district. Accounting information system made it easy for MSME owners to evaluate efforts, from results evaluation the could give convenience to all MSME owners intake decision future about enhancement MSME business. So if the accounting information system is applied in a business, it will improve the performance of the MSME. These results were in line with Prastika's research (2019) and Supardi & Mei (2019), who proved that the Accounting Information System affected the performance of MSMEs.

CONCLUSION

This research aims to determine the effect of E-commerce, innovation and accounting information systems on the performance of SMEs in Bengkalis district. Respondents in this research amounted to 100 people who opened a business in Bengkalis district. To analyze the relationship between these variables, this research uses SPSS version 25.0. Based on the analysis and discussion in the previous section, it can be concluded that Influential E-commerce to the performance of SMEs in Bengkalis district. This thing means This means that the use of E-commerce, especially in terms of distribution and marketing, will improve the performance of MSMEs. Using online media will make it easier for MSMEs to market their products so that the reach of product marketing will be wider, especially during this Covid 19 Pandemic. The existence of restrictions has resulted in most MSMEs having difficulty in marketing their products and even many MSMEs are laying off employees and some are even closing. With the use of E-commerce, MSMEs can get back up so that sales levels can increase to improve the overall performance of MSMEs.

Innovation effect on the performance of MSMEs in Bengkalis district. This meant that MSMEs who innovated on the products they sold would make MSME products more attractive to consumers so that the level of sales can increase. Increased sales could make MSME performance is getting better increase also so that innovation on MSMEs very needed in the Covid-19 situation. With innovation, MSMEs can compete with other SMEs. Accounting information systems affected the performance of SMEs in Bengkalis district. System information accountancy made it easy for MSME owners to evaluate efforts, from results evaluation the could give convenience to all MSME owners intake decision future about enhancement MSME business. So if the accounting information system is applied in a business, it will improve the performance of the MSME.

Based on the limitations of the research, suggestions can be put forward for future research, namely, this research is only carried out on MSME actors in Bengkalis district, future research should examine other Wetlands areas in Riau Province so that the results of the research can be summarized. Further research might increase interviews or conduct focus froup discussions so that we could obtain more valid answers from these respondents. Further research should add other independent variables that can affect the performance of MSMEs such as human resource competence, education level, and competitive advantage straight away.

REFERENCES

Alma, B. 2004. Marketing Management and Service Marketing. 7th ed. Bandung: CV. Alfabeta.

Bodnar, G. H., and William S. Hopwod. 2006. Accounting Information System. 1st ed. Yogyakarta: Andi.

Cho, Yun Hee, and Joo-Heon Lee. 2018. Entrepreneurial Orientation, Entrepreneurial Education and Performance. Asia Pacific Journal of Innovation and Entrepreneurship 12(2): 124–34.

Desmiyawati et al. 2019. Analysis of Entrepreneurial Orientation and Education Level of the MSMEs Actors in Improving MSMEs Performance in Bengkalis District. Research Journal of Finance and Accounting 10(13): 1–9. www.iiste.org.

Diana, A., and Lilis, S. 2011. Accounting Information Systems, Design, Procedures and Implementation. 1st ed. Yogyakarta: Andi Yogyakarta.

Dutta, P. 2021. Factors Affecting the Adoption of E-commerce: A Research of Rubber MSMEs in Pune. International Journal of Modern Agriculture 10(2): 715–25. http://modern-journals.com/index.php/ijma/article/view/786.

Ernawati, N., and Siswanto. 2018. P*engaruh Kesiapan Modal Dan Pemanfaatan E-commerce Terhadap Daya Saing Usaha Mikro, Kecil, Dan Menengah (UMKM) Di Kabupaten Sleman Yogyakarta.* Yogyakarta. Jurnal Profita: Kajian Ilmu Akuntansi 6(2).

Farida, I., Sunandar, and Aryanto. 2019. Factors That Affect the Performance of Msmes in the City of Tegal. Monex 8(2): 79–82.

Feranita, N. V., and Hendra, A. S. 2018. The Role Of Competitive Advantage In Mediating Impact Market Orientation And Entrepreneurial Orientation To Msme Performance. Majalah Ilmiah "Dian Ilmu" 18(1): 54–70.

Gebby, F. S. 2016. J*umlah UMKM Di Pekanbaru Mencapai 67.728.* Antara Riau. https://riau.antaranews.com/berita/80571/jumlah-umkm-di-pekanbaru-mencapai-67728.

Hadiyat, Y. R. 2020. *Sistem Informasi Akuntansi Manajemen, Sistem Informasi Akuntansi, Dan Kinerja Manajerial.* Jurnal Riset Akuntansi Kontemporer 12(1): 37–42.

Indrayani, E., and Humdiana. 2006. Management Information Systems. Yogyakarta: Graha Ilmu.

Iqbal, T.S.M. 2020. *Dampak Covid-19 Pada UKM, Apa Kata Ketua Kadin Bengkalis.* https://rri.co.id/bengkalis/ekonomi/813129/dampak-covid-19-pada-ukm-apa-kata-ketua-kadin-bengkalis.

Kotler, P., and Kevin, L. K. 2012. Marketing Management. 12th ed. Jakarta: Erlangga.

Kotler, P., and Gary, A. 2004. Marketing Fundamentals. Ninth Edit. ed. Jakarta: Index. Jakarta.

Kurniawan, S. 2018. *Analisis Pengembangan Sumber Daya Manusia Dalam Meningkatkan Omset Penjualan Keripik Pisang Perspektif Ekonomi Islam (Studi Pada UMKM Keripik Pisang Jl. Pagar Alam Gang PU Kelurahan Segala Mider, Kota Bandar Lampung).* Fakultas Ekonomi dan Bisnis Islam Universitaas Islam Negeri Raden Intan Lampung: 55.

Luh, Ni, G. E., and Nyoman, T. H. 2017. P*engaruh Aksesibilitas Kredit, Penyusunan Dan Penyajian Laporan Keuangan , Dan Minat Menggunakan E-commerce Terhadap Kinerja Umkm (Studi Pada UMKM Kecamatan Buleleng).* Jurnal Akuntansi 8(2).

Lukas, B. A., and O. C. Ferrell. 2000. The Effect of Market Orientation on Product Innovation. Journal of the Academy of Marketing Science 28(2): 239–47.

Lumpkin, G.T., and G.G. Dess. 1996. The Entrepreneurial Clarifying It Construct and Linking Orientation. Academy of Management Review 21(1): 135–72.

Manurung, E. T. 2019. The Effectiveness of Financing Model To Support Competitive Advantage in Ceramic Industry. Jurnal Riset Akuntansi Kontemporer 11(2): 48–53.

Moeheriono. 2012. Competency-Based Performance Measurement. Jakarta: Raja Graha Persada.

Noviani, H., and Andwiani, S. 2018. *Analisis Faktor-Faktor Yang Mempengaruhi Adopsi E Commerce Dan Pengaruhnya Terhadap Kinerja Umkm (Studi Kasus Umkm Di Wilayah Kota Semarang).* Maksimum 8(1): 1.

Pertiwi, D. H. 2019. *Pengaruh Inovasi Terhadap Kinerja Penjualan Pada Usaha Kecil Kerajinan Gerabah Kasongan Bantul.* 53(9): 1689–99.

Prastika, N. E., and Djauhar, E. P. 2019. *Pengaruh Sistem Informasi Akuntansi Terhadap Kinerja Perusahaan Pada Usaha Mikro Kecil Dan Menengah (Umkm) Di Kota Pekalongan.* Jurnal Litbang Kota Pekalongan 7.

Sil, M., and Isma, C. 2019. The Effect of Entrepreneurship Competence, Entrepreneurship and Learning Orientation Toward Sustainable Competitive Advantages in Improving Managerial Performance on Medium Enterprises in Bengkulu Province. 101(Iconies 2018): 310–13.

Slamet, F., Hetty, K. T., and Mei, L. 2018. *Dasar-Dasar Kewirausahaan : Teori Dan Praktik. Ketiga.* ed. Bambang Sarwiji. Jakarta: PT. Index.

Supardi, M. L., and Mei, I. 2019. *Pengaruh Self Directed Learning Dan Adopsi E-commerce Terhadap Kinerja Ukm Di Jakarta.* Jurnal Manajerial Dan Kewirausahaan 1(2): 290.

Susanto, A., Sri, M., and Harry, S. 2019. The Effect of E-commerce Application, User Personality, and Corporative Strategy on the Effectivity of Accountancy Information System and Its Impact on Accountancy Information Quality (Survey on Banking Corporation). Research Journal of Finance and Accounting 10(24): 9–16.

Turban, E., Dwi, P., Jay, E. A., and Liang, T. 2005. Desision Support Systems and Intelligent Systems : (Sistem Pendukung Keputusan Dan Sistem. 7th ed. Yogyakarta: Andi.

Umar, M. N. 2019. *Pengaruh Penerapan Sistem Informasi Akuntansi Terhadap Kinerja Manajerial (Research Kasus Pada Usaha Kecil Dan Menengah (UKM) Di Kabupaten Pidie).* Jurnal Real Riset 1(1): 2685–1024. http://journal.unigha.ac.id/index.php/JRR/article/view/98.

Undang-Undang Republik Indonesia Nomor 20 Tahun. 2008. *Undang-Undang Republik Indonesia Nomor 20 Tahun 2008. (1).*

Wiwoho, G. 2019. *Pengaruhnya Terhadap Keunggulan Bersaing dan Kinerja Perusahaan Pada Umkm : Sebuah Agenda Penelitian Gunarso Wiwoho.* Fokus Bisnis 18(2): 29–38. http://journal.stieputrabangsa.ac.id/index.php/fokbis/index.