

## Innovation technology mediates marketing strategy on the marketing performance of MSMEs

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### ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui strategi pemasaran yang tepat dalam meningkatkan kinerja UMKM yang didukung oleh teknologi inovasi dalam menjalankan strategi yang efisien dan efektif. Penelitian ini melibatkan 100 responden yang merupakan pelaku UMKM di Kota Medan yang telah menjalankan usaha selama lebih dari satu tahun, dengan teknik *purposive sampling*. Metode penelitian yang digunakan adalah metode kuantitatif dengan analisis data menggunakan analisis jalur melalui aplikasi PLS4. Hasil pengujian menunjukkan bahwa strategi pemasaran berpengaruh signifikan terhadap kinerja pemasaran, strategi pemasaran berpengaruh signifikan terhadap teknologi inovasi, serta teknologi inovasi berpengaruh signifikan terhadap kinerja pemasaran. Selain itu, teknologi inovasi berperan sebagai variabel mediasi dalam hubungan antara strategi pemasaran dan kinerja pemasaran UMKM di Kota Medan. Implikasi dari penelitian ini menunjukkan bahwa UMKM perlu meningkatkan daya saing produk maupun usaha yang dijalankan agar mampu meraih peluang pasar secara optimal.

**Kata Kunci:** B2B; produk inovasi; kinerja pemasaran; teknologi digital

### ABSTRACT

*The purpose of this study is to determine the appropriate marketing strategy to improve the performance of MSMEs supported by innovative technology in implementing efficient and effective strategies. This study involved 100 respondents who are MSME actors in Medan City who have been running their businesses for more than one year, using a purposive sampling technique. The research method used is a quantitative method with data analysis using path analysis through the PLS4 application. The test results show that marketing strategy has a significant effect on marketing performance, marketing strategy has a significant effect on innovative technology, and innovative technology has a significant effect on marketing performance. In addition, innovative technology plays a mediating variable in the relationship between marketing strategy and marketing performance of MSMEs in Medan City. The implications of this study indicate that MSMEs need to improve the competitiveness of their products and businesses to be able to optimally seize market opportunities.*

**Keyword:** B2B; product innovation; marketing performance; digital technology

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## 1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are currently in the midst of increasingly strict competition, especially in the digital era. To maintain their existence and growth, MSMEs need to implement various effective marketing strategies in order to improve marketing performance in a sustainable way. Indonesia has the largest number of MSMEs in ASEAN in 2021 (Santika, 2023). Indonesia is the country with the highest number of MSMEs in ASEAN, with 8,711,046 business actors (Ministry of Cooperatives and SMEs, 2023). However, when viewed in terms of percentage, MSMEs contribute only 3.8% to the global halal market. This export figure should continue to be improved so that increased export value can enhance the income of MSME actors. Therefore, government policies are needed to encourage the marketing performance

of MSMEs by increasing business output through the production of standardized products that are marketable both domestically and internationally, especially in the halal food sector.

Based on data from the Central Statistics Agency (BPS), MSMEs are the largest contributor to Indonesia's Gross Domestic Product (GDP), accounting for approximately 60%. In addition, MSMEs absorb around 90% of the national workforce. The following graph shows the contribution of MSMEs to Indonesia's GDP over a four-year period (Ministry of Cooperatives and SMEs, 2024).

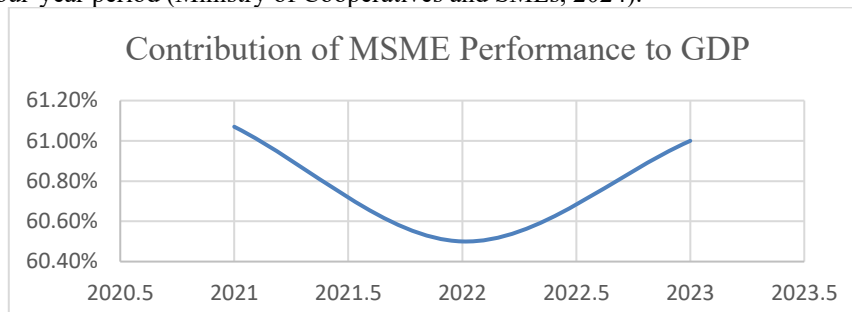


Figure 1. Contribution of MSME Performance to GDP

The figure above shows that the contribution of MSMEs experienced positive but fluctuating growth. In 2020, MSMEs contributed 60.5% to GDP, which increased to 61.07% in 2021, representing an increase of 0.57%. However, in 2022 the contribution declined to 60.50%, before rising again to 61% in 2023. Although an increase occurred in 2023, it remains relatively lower compared to 2021 during the COVID-19 period. These conditions need serious attention from the government and related institutions, including higher education institutions, to jointly provide solutions for improving MSME marketing performance as a driving force of the economy (Daulay, 2016). Improving MSME performance has a broad impact on economic growth, not only by increasing GDP and state revenue, but also by improving community income through employment absorption of more than 90% of the workforce.

Various strategic efforts are needed to improve MSME marketing performance. The implementation of appropriate strategies is crucial in order to achieve marketing performance improvement. Entrepreneurial Marketing Strategy (EMS) has been shown to significantly improve the marketing performance of MSMEs (Koeswandi et al., 2023). The government has made various efforts to support MSME development, such as providing technology training, improving product innovation, digital training, and providing additional business capital to enhance MSME marketing performance (Siska et al., 2024). However, continuous efforts are still required to ensure sustainable growth and performance improvement.

One strategy that can be implemented by MSMEs is establishing cooperation or partnerships to expand market access (Khazim & Indrayani, 2025). Partnerships can be formed among MSMEs, as well as with companies, government institutions, and higher education institutions. Collaboration can occur when MSMEs are able to produce products that meet company requirements through a business-to-business (B2B) strategy, thereby opening new market opportunities that were previously difficult to access (Bagea et al., 2025).

However, collaboration alone is not always sufficient. In highly dynamic market conditions, MSMEs also need to adopt digital technological innovation. Digital technology does not only function as a marketing tool, but also as an innovative medium to convey information, create new customer experiences, and improve operational efficiency. Without proper technological utilization, MSMEs may be left behind by competitors that rapidly adopt digital transformation (Saputra et al., 2024).

The use of digital technological innovation enables MSMEs to reach a wider consumer base, provide more engaging content, and collect valuable market data. On the other hand, effective marketing strategies can strengthen the competitive position of MSMEs. Strategies that combine innovation, competitive advantage, and consumer orientation have been proven to positively influence marketing performance (Darmawi, 2022). Therefore, when digital technological innovation acts as a mediating variable between marketing strategy and marketing performance, the impact of the strategy on performance becomes stronger and more sustainable.

In practice, MSMEs often experience difficulties in increasing sales and expanding markets. Product quality is sometimes inconsistent, and there is a lack of capability in utilizing technological innovation to improve product quality and market reach. These challenges can hinder MSMEs from upgrading their business level as targeted by government policies (Daulay, 2017). Marketing performance describes the extent to which MSMEs are able to achieve marketing outcomes, including increased sales, market share, customer acquisition, and customer loyalty. Previous studies show that digital innovation in marketing strategies can increase the visibility of MSME products (Mulyanto et al., 2025), while marketing performance is influenced by internal and external factors, particularly the ability of MSMEs to implement digital marketing.

Marketing strategy refers to a series of planned actions carried out by MSMEs to market products and win competition. This strategy includes segmentation, targeting, positioning, digital marketing, branding, and business partnerships (B2B). Masrukhan and Isnaini (2025) explain that digital marketing strategies increase opportunities for MSMEs to acquire new customers and strengthen relationships with the market. Business collaboration is also an important strategy because it opens access to wider distribution networks and markets.

Digital technological innovation refers to the ability of MSMEs to adopt, develop, and utilize digital-based technologies to improve business and marketing processes. These technologies include social media, e-commerce, information systems, marketing automation, and data analytics. Research by Meilanisari et al. (2023) shows that digital innovation significantly influences the competitiveness of MSMEs. Meanwhile, Tanuwijaya and Sikomena (2024) explain that the implementation of digital technology helps MSMEs expand market reach and increase product visibility. The combination of marketing strategies with digital technological innovation represents an appropriate approach to improving current MSME marketing performance.

## 2. RESEARCH METHOD

This research is a survey study because it takes samples from one population. This study uses an explanatory research approach, which aims to explain cause-and-effect relationships between research variables and to test hypotheses (Nasution, Fahmi, Jufrizen, Muslih, & Prayogi, 2020). The research approach used in this study is an associative approach, which refers to research questions that examine the relationship between two or more variables (Prahiaawan & Simbolon, 2014). The number of respondents used in this study was 100 MSME business actors from various sectors in Medan City.

This study uses the Structural Equation Modeling (SEM) data analysis technique assisted by the SmartPLS 4 program. SEM is a statistical technique that can analyze relationship patterns between latent construct variables and their indicators, relationships among latent constructs, as well as measurement errors directly. Structural Equation Modeling aims to perform path analysis and structural equation analysis based on variance simultaneously, allowing the testing of the measurement model and the structural model at the same time. The measurement model is used to test validity and reliability, while the structural model is used to test hypotheses using a predictive model (causality test) (Hair et al., 2017).

## 3. RESULTS AND DISCUSSION

Based on the results of data processing, the majority of respondents were aged 21–30 years, totaling 54 people. Respondents aged 31–40 years numbered 25 people, followed by those aged over 40 years with 17 people, and respondents aged under 21 years totaling 4 people. The majority of respondents in this study were male, with 55 people, while female respondents numbered 45 people. In terms of education level, the majority of respondents held a bachelor's degree, totaling 63 people, followed by 15 respondents with a master's degree, 21 respondents with a high school education, and 1 respondent with other educational backgrounds.

Table 1. Outer Loading

Marketing strategy		Marketing Performance		Technology Innovation	
x2.1	0.812	y.1	0.601	x1.1	0.832
x2.2	0.858	y.2	0.659	x1.10	0.857
x2.3	0.745	y.3	0.688	x1.2	0.748
x2.4	0.803	y.4	0.745	x1.3	0.901
x2.5	0.897	y.5	0.731	x1.4	0.876
x2.6	0.894	y.6	0.812	x1.5	0.898
x2.7	0.868			x1.6	0.831
x2.8	0.850			x1.7	0.771
				x1.9	0.913

Convergent validity testing is a measurement of the correlation between constructs and latent variables, which is assessed by examining factor loading values greater than 0.6. If the loading value exceeds 0.6, the instrument is considered valid (Ghozali & Latan, 2015). Table 1 shows the results of the convergent validity test, indicating that all outer loading values for all variables are greater than 0.6. Therefore, all indicators used in this study are declared valid, and all construct variables meet the criteria for convergent validity.

Table 2. Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE)

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Technology innovation	0.947	0.956	0.731
Marketing Performance	0.957	0.965	0.777
Marketing strategy	0.961	0.966	0.760

Table 2 shows the results of Cronbach's alpha and composite reliability testing, where all values are greater than 0.7. This indicates that all variables are reliable. In addition, the Average Variance Extracted (AVE) values are greater than 0.5, which means that the measurement instruments are valid.

Furthermore, structural model analysis (inner model) aims to test the research hypotheses. The aspects analyzed in the structural model include collinearity testing, hypothesis testing, and the coefficient of determination (R-square). Collinearity testing is conducted to determine whether there is a strong correlation among latent variables or constructs. A strong correlation indicates a methodological problem that may affect the estimation of statistical significance, which is referred to as collinearity. Collinearity is assessed using the Variance Inflation Factor (VIF). If the VIF value is greater than 5.00, collinearity problems are present; conversely, if the VIF value is less than 5.00, no collinearity problem exists.

**Table 3. Collinearity (Inner VIF)**

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Inner VIF	Technology Innovation	Marketing Performance	Marketing strategy
Technology innovation		4,376	
Marketing performance			
Marketing strategy	4.128	4.128	

Based on Table 3, the results can be explained as follows:

- the VIF value for the relationship between marketing strategy and marketing performance is 4.128, which is less than 5.00, indicating no collinearity problem;
- the VIF value for the relationship between marketing strategy and technology innovation is 4.128, which is also less than 5.00, indicating no collinearity problem; and
- the VIF value for the relationship between technology innovation and marketing performance is 4.376, which is less than 5.00, indicating no collinearity problem.

Thus, based on these results, the structural model in this study does not experience collinearity problems.

Next, a two-stage hypothesis testing was conducted, consisting of direct effect hypothesis testing and indirect effect hypothesis testing. The path coefficient results of the hypothesis testing are presented in the figure below.

#### A. Direct Effect Test Results

**Table 4. Direct Effect Hypothesis Testing**

	Original sample	T Statistics	P Values	Decision
Marketing Strategy -> Marketing Performance	0.424	2,602	0.009	Accepted
Marketing Strategy -> Technology Innovation	0.822	15,355	0.000	Accepted
Technology Innovation -> Marketing Performance	0.322	2,014	0.044	Accepted

Based on Table 4, the direct effect of variable X1 (marketing strategy) on variable Y (marketing performance) has a path coefficient of 0.424 (positive). This indicates that an increase in marketing strategy will be followed by an increase in marketing performance. The effect of marketing strategy on marketing performance has a P-value of 0.009, which is less than 0.05, indicating that the effect is statistically significant.

The direct effect of variable X1 (marketing strategy) on variable Z (technology innovation) has a path coefficient of 0.822 (positive). This means that an improvement in marketing strategy will be followed by an increase in technology innovation. The P-value for this relationship is 0.000, which is less than 0.05, indicating that the effect of marketing strategy on technology innovation is significant.

Furthermore, the direct effect of variable Z (technology innovation) on variable Y (marketing performance) has a path coefficient of 0.322 (positive). This indicates that an increase in technology innovation will be followed by an increase in marketing performance. The P-value for this relationship is 0.044, which is less than 0.05, indicating that the effect of technology innovation on marketing performance is significant.

#### B. Indirect Effect Hypothesis Testing

Indirect effect hypothesis testing aims to examine whether a variable influences another variable indirectly through a mediating variable. If the indirect effect coefficient is greater than the direct effect coefficient, the intervening variable acts as a mediator. Conversely, if the indirect effect coefficient is smaller than the direct effect coefficient, the intervening variable does not mediate the relationship between variables.

**Table 5. Indirect Effect Hypothesis Testing**

	Original sample	P Values	Decision
Marketing strategy -> Technology Innovation -> Marketing Performance	0.264	0.037	Accepted

Based on Table 5, the P-value of the indirect effect of variable X1 on variable Y is 0.037, which is less than 0.05. Therefore, it can be stated that technology innovation acts as a mediating variable in the relationship between marketing strategy and marketing performance. However, the mediating effect is not dominant compared to the direct effect.

### C. Coefficient of Determination (*R Square*)

The coefficient of determination (*R Square*) aims to evaluate the predictive accuracy of a variable. In other words, it measures how much variation in the dependent variable is explained by variations in the independent variables in the path model. An *R Square* value of 0.75 indicates a strong PLS model, a value of 0.50 indicates a moderate PLS model, and a value of 0.25 indicates a weak PLS model (MI Nasution et al., 2020).

Table 6. Coefficient of Determination Test

	<i>R Square</i>	<i>Adjusted R Square</i>
Y	0.864	0.862

Based on Table 6, the influence of marketing strategy and technology innovation on marketing performance is 0.864, which means that 86.4% of the variation in marketing performance can be explained by marketing strategy and technology innovation. This indicates that the PLS model is strong. The results show that marketing strategy provides a strong influence on marketing performance through technology innovation.

### D. Discussion

Every business seeks to increase sales so that the marketing performance of the business can improve continuously. Therefore, continuous efforts to implement the most effective marketing strategies must be carried out in order to achieve targeted performance consistently and sustainably. One effective strategy is establishing partnerships with fellow MSMEs and companies, which is an appropriate choice in an era of increasingly competitive competition. The direct effect of variable X (marketing strategy) on variable Y (marketing performance) has a path coefficient of 0.424 (positive) with a P-value of  $0.009 < 0.05$ . This indicates that an improvement in effective marketing strategies will be followed by an improvement in marketing performance. This finding is in line with previous studies conducted by Tirtayasa et al. (2021), Made et al. (2023), Rahmadana and Za (2023), and Yogananta et al. (2023), which show that marketing strategy significantly affects MSME marketing performance.

Marketing strategy is often considered an important part of business success. However, in the current digital era, businesses are required not only to implement effective strategies but also to be able to apply technological innovation in executing these strategies. The utilization of technological innovation is essential to provide added value and improve competitive quality. The direct effect of marketing strategy on technological innovation has a path coefficient of 0.822 with a P-value of  $0.000 < 0.05$ , indicating that the influence of marketing strategy on technological innovation is significant. This result is consistent with studies conducted by Dewi et al. (2020), Meilanisari et al. (2023), and Nuriza et al. (2024), which show that technological innovation has a significant influence on marketing performance. In addition, Daulay et al. (2023) state that digital marketing technology is able to increase business capacity.

Technological innovation is an important component for businesses to implement. The presence of technological innovation helps improve the efficiency and effectiveness of marketing strategies by increasing access to information regarding markets, customers, and competitors, thereby making it easier for MSMEs to make appropriate decisions. The direct effect of technological innovation on marketing performance has a path coefficient of 0.322 with a P-value of  $0.044 < 0.05$ , indicating that technological innovation has a significant influence on marketing performance. This finding is in line with research by Meilanisari et al. (2023), which shows that digital innovation significantly affects competitiveness and marketing performance of wood craft SMEs in Sukabumi.

Marketing strategies must be implemented optimally by adapting to digital era conditions, which require the ability to follow digital developments and integrate technological capabilities as supporting factors in improving marketing performance. Appropriate strategies that emphasize business alignment through partnerships can create synergy among MSMEs and companies, thereby increasing potential market opportunities and sales growth. The indirect effect of marketing strategy on marketing performance through technological innovation has a path coefficient of 0.264 (positive) with a P-value of  $0.037 < 0.05$ . This indicates that technological innovation significantly mediates the relationship between marketing strategy and marketing performance. This result is consistent with previous studies conducted by Adhi and Kamalia (2024), Jung and Shegai (2023), Merin-Rodríguez and Alegre (2024), and Sharabati et al. (2024), which show that marketing strategy affects marketing performance through digital technology mediation.

## 4. CONCLUSION

The right and properly implemented marketing strategy will have an influence on improving MSME performance. Business actors must continuously enhance their technological innovation capabilities and the competitiveness of their products so that they can implement mutually beneficial and profitable business-to-business strategies. Technological innovation becomes an important part of operating a business in the current digital era. The appropriate use of technological innovation will produce efficient and effective results.

Marketing strategy and technological innovation must support each other in order to achieve competitive advantage and attain maximum marketing performance in a sustainable manner.

## REFERENCES

- Ahdiat, A. (2022). Indonesia has the most MSMEs in ASEAN: How competitive is it? *Databoks*. <https://databoks.katadata.co.id/en/technology-telecommunications/statistics/2c7a123af18312b/indonesia-has-the-most-msmes-in-asean-but-how-competitive-are-they>
- Bagea, A., Sutirno, A. S., Wonua, A. R., Hajar, K. I., Maimuna, Y., & Ruslan, R. (2025). Strategi pengembangan jaringan bisnis/kemitraan bagi pelaku umkm di Kabupaten Konawe Selatan. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 6(4), 5319–5325. <https://doi.org/10.31004/cdj.v6i4.49403>
- Daulay, R. (2016). Pengembangan usaha mikro untuk pemberdayaan ekonomi umat Islam di Kota Medan. *Jurnal Miqot*, 40(1), 44–65. <https://doi.org/10.30821/miqot.v40i1.220>
- Daulay, R. (2017). The analysis of micro business in facing the business competition in Medan City. *E-Jurnal Spirit Pro Patria*, 3(2), 143–156. <https://doi.org/10.29138/spirit.v3i2.420>
- Daulay, R., Handayani, S., & Ningsih, I. P. (2021). The influence of product quality, price, store atmosphere, and sales promotion on impulse buying of department store consumers in Medan City. In *Proceedings of the National Conference on Management Economics and Accounting (KNEMA)* (Vol. 1, pp. 1–14).
- Dewi, M., Hubeis, M., & Riani, E. (2020). Strategi pemasaran umkm dalam meningkatkan daya saing di pasar ritel modern carrefour (kasus PT Madanifood, Jakarta). *MANAJEMEN IKM: Jurnal Manajemen Pengembangan Industri Kecil Menengah*, 15(1), 77–83. <https://doi.org/10.29244/mikm.15.1.77-83>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Jung, S. U., & Shegai, V. (2023). The impact of digital marketing innovation on firm performance: Mediation by marketing capability and moderation by firm size. *Sustainability*, 15(7), 5711. <https://doi.org/10.3390/su15075711>
- Kasmir. (2018). *Bank dan lembaga keuangan lainnya*. Rajawali Pers.
- Koeswandi, T., Gaffar, V., Wibowo, L. A., & Primaskara, E. A. (2023). Do entrepreneurial marketing strategies lead to better marketing performance on SMEs? *IMAGE: Jurnal Riset Manajemen*, 12(1), 82–90. <https://doi.org/10.17509/image.2024.007>
- Masrukhan, M., & Isnaini, R. K. (2025). Optimalisasi teknologi dan strategi pemasaran digital dalam meningkatkan daya saing UMKM Bakpia Wong Yogyakarta. *Jurnal Nuansa: Publikasi Ilmu Manajemen Dan Ekonomi Syariah*, 3(1), 282–300. <https://doi.org/10.61132/nuansa.v3i1.1630>
- Meilanisari, W., Danial, R., & Komariah, K. (2023). Analisis strategi inovasi dan teknologi digital terhadap kinerja umkm kerajinan kayu di Kecamatan Cicantayan, Kabupaten Sukabumi. *Management Studies and Entrepreneurship Journal*, 4(6), 9666–9670. <https://doi.org/10.37385/msej.v4i6.2259>
- Merino-Rodríguez, J., & Alegre, J. (2024). Digital transformation and firm performance in innovative SMEs: The mediating role of business model innovation. *Technovation*, 134, 103027. <https://doi.org/10.1016/j.technovation.2024.103027>
- Muis, I., Adhi, T. M., & Kamalia, R. F. (2024). The impact of digital marketing and innovation on marketing performance is influenced through the development of a competitive advantage. *Revista de Gestão Social e Ambiental*, 18(8), 1–17. <https://doi.org/10.24857/rgsa.v18n8-081>
- Mulyanto, D., & Budi, A. P. (2025). Penerapan pemasaran digital dan kinerja umkm: dukungan faktor lingkungan internal dan eksternal. *Jurnal Bisnis dan Kewirausahaan*, 14(2), 301–313. <https://doi.org/10.37476/jbk.v14i2.5173>
- Nasution, M. I., Fahmi, M., Jufrizen, Muslih, & Prayogi, M. A. (2020). The quality of small and medium enterprises performance using SEM-PLS. *Journal of Physics: Conference Series*, 1477(5), 052052. <https://doi.org/10.1088/1742-6596/1477/5/052052>
- Nuriza, A., Zulva, T. Z., & Hakim, N. N. (2024). Kolaborasi digital marketing dalam meningkatkan kinerja umkm. *Jurnal Ilmu Manajemen Retail Universitas Muhammadiyah Sukabumi*, 5(1), 23–29. <https://doi.org/10.37150/jimat.v5i1.2923>
- Prahiawan, W., & Simbolon, N. (2014). Pengaruh motivasi intrinsik dan lingkungan kerja terhadap kinerja karyawan pada PT Intimas Lestari Nusantara. *Jurnal Ekonomi*, 5(1), 35–41. <https://doi.org/10.47007/jeko.v5i1.1045>
- Rahmadana, S. N., & ZA, S. Z. (2023). Strategi pengembangan usaha terhadap kinerja pemasaran usaha home lavacakery pada covid-19. *MAMEN: Jurnal Manajemen*, 2(3), 335–350. <https://doi.org/10.55123/mamen.v2i3.1989>
- Saputra, P. Y., Syaifudin, Y. W., Mundzir, H., & Fatmawati, T. (2024). Implementasi platform match making sebagai strategi pemberdayaan umkm ekonomi kreatif Kota Malang. *Jurnal Teknologi dan Manajemen Informatika*, 10(2), 187–198. <https://doi.org/10.26905/jtmi.v10i2.14769>
- Sulastini, S., Darmawi, A. (2022). MSMEs' marketing performance measures: Examining the role of innovativeness and competitive strategy. *Manajemen Bisnis*, 12(2), 122–128. <https://doi.org/10.22219/mb.v12i02.22231>
- Tirtayasa, S., Nadra, I., & Khair, H. (2021). Strategi pemasaran terhadap peningkatan kinerja umkm dimoderasi teknologi pada masa pandemi covid-19. *Jurnal Ilmiah Manajemen Dan Bisnis*, 22(2), 244–259. <https://doi.org/10.30596/jimb.v22i2.7395>
- Yogananta, R., Widayanti, S., & Wijayati, P. D. (2023). Pengaruh strategi pemasaran terhadap kinerja pemasaran minyak kayu putih di cv. Ruci gemilang. *Jurnal agroplasma*, 10(1), 368–381. <https://doi.org/10.36987/agroplasma.v10i1.4284>