Optimizing MSME Performance: Revealing the Influence of Digital Marketing, Product Innovation, Service Quality and HR Competency

Fatmasari Endayani[1], Dyah Arini R[2], Imam Mukhlis[3]

[1,2]Program Doktor Ilmu manajemen, Fakultas Ekonomi ,Universitas Negeri Malang, Indonesia

[3]Manajemen, Fakultas Ekonomi, Universitas Negeri Malang, Indonesia

Abstract

This study attempts to elucidate the impact of human resource (HR) competency, product innovation, digital marketing, and service quality on the productivity of Micro, Small, and Medium-Sized Enterprises (MSMEs) in Jakarta. This study examines 120 MSME companies in Jakarta during the period 2003 to 2023. The research method used is Panel Vector Autoregression (PVAR) to analyze the influence effect of these variables on MSME performance. The research results show that digital marketing, product innovation, service quality and HR competency all have a significant positive impact on the performance of MSMEs in Jakarta. Improvements in digital marketing are consistently associated with improved MSME performance, while product innovation also contributes positively to performance. Better service quality and higher HR competency are also associated with improved MSME performance. Aside from that, digital marketing contributes significantly to increased HR proficiency competency, service quality, and product innovation. Product innovation also contributes positively to service quality and HR competency. Better service quality is associated with increased HR competency. These results support the hypothesis that these factors are interconnected and together improve the performance of MSMEs.

Introduction

Micro, Small, and Medium Enterprises (MSMEs) play an important role in the Indonesian economy. MSMEs not only contribute to job creation but also become the main pillar in maintaining economic stability, especially during times of crisis. However, in facing the digital era and global competition, MSMEs are faced with various challenges that require performance optimization strategies (Juminawati, Hamid, Amalia, Mufraini, & Mulazid, 2021). One strategy that can be implemented is the use of digital marketing. Digital marketing allows MSMEs to expand their market reach, increase interaction with customers, and optimize marketing costs. By utilizing digital platforms, MSMEs can reach wider and more diverse consumers, and increase efficiency in marketing activities (Suryanto, 2021). Optimizing the performance of Micro, Small, and Medium Enterprises (MSMEs) is an important step in increasing competitiveness and business sustainability in the digital era. One of the main factors that can support this

1

optimization is the implementation of digital marketing. By utilizing various digital platforms such as social media, websites, and e-commerce, MSMEs can expand their market reach and increase interaction with customers. Digital marketing allows MSMEs to carry out more effective and efficient promotions, and measure campaign results in real-time. In addition, the use of digital technology can also help MSMEs manage inventory, process transactions, and provide better customer service (Risdwiyanto, Sulaeman, & Rachman, 2023).

Maintaining the competitiveness of MSMEs is mostly dependent on product innovation in addition to digital marketing. Continuous innovation can help MSMEs meet the needs of the market that continues to grow and change. Innovative products not only attract consumer interest but can also increase added value and product differentiation in the market. Product innovation covers various aspects, from design, function, to the technology used. By continuing to innovate, MSMEs can create products that are relevant and in line with market trends, so that they can compete with large companies and imported products (Erlangga, Purwanti, & Mulyana, 2022).

Product innovation plays a crucial role in improving MSME performance. Product innovation includes both the development of novel items and the improvement of already-existing ones to satisfy consumer needs and preferences better. By continuing to innovate, MSMEs can offer unique products with added value, so they can attract more customers and increase their loyalty. Innovation can also help MSMEs face increasingly fierce competition and rapid changes in market trends (Arifin, Ningsih, & Putri, 2021).

No less important, providing excellent customer service is essential to fostering client loyalty. Quality service can increase customer satisfaction and encourage repeat purchases. Satisfied customers tend to become loyal customers and recommend products or services to others. Service quality is another factor that is no less important in optimizing MSME performance. Good service quality can increase customer satisfaction and trust, which in turn can increase customer retention and positive word-of-mouth. MSMEs need to ensure that they provide fast, friendly, and responsive service to customer needs. In addition, employee training and skills development are also important to ensure that they can provide high-quality services (Dam & Dam, 2021).

In addition, human resource (HR) competence is the main foundation in implementing all these strategies. Competent and trained human resources are able to implement digital marketing effectively, create innovation, and provide superior services. Therefore, improving human resource competency through training and development is an important investment for MSMEs to achieve optimal performance. Human resource (HR) competency also greatly influences MSME performance. Competent and skilled human resources can increase productivity and operational efficiency. Therefore, MSMEs need to invest in employee training and development to improve their technical and managerial skills. In addition, creating a conducive work environment and providing appropriate incentives can also increase employee motivation and performance (Thite, 2022).

Many previous studies have shown that digital marketing has a positive impact on MSME performance, but there is still room to explore how various digital marketing strategies such as social media, SEO, and email marketing specifically affect MSME performance in various

sectors (Nuseir & Aljumah, 2020; Atika, 2023; Redjeki & Affandi, 2021). Research on the potential mediating effects of other factors, such as digital marketing or service quality, on product innovation is warranted since it has been demonstrated to have a noteworthy impact on MSME performance. Service quality is often associated with customer satisfaction and business performance, but there is still a need for more in-depth research on how service quality can be integrated with product innovation and digital marketing to improve MSME performance. Human resource competency is an important factor in MSME performance, and further research can explore how HR training and development can improve the effectiveness of digital marketing and product innovation (Djakasaputra, Wijaya, Utama, Yohana, Romadhoni, & Fahlevi, 2021). Research gap identification can be done by exploring the interactions between these factors and how their combination can optimize MSME performance. Most studies focus on the individual effects of digital marketing, product innovation, service quality, and HR competency, but few explore the interactions between these factors. In addition, there is a need for more specific research on MSMEs in Indonesia, especially those located in Jakarta as one of the most important cities in Indonesia. Previous studies often use quantitative methods such as multiple regression, so there is an opportunity to use more complex methods such as Panel Vector Autoregression (PVAR) or Generalized Method of Moments (GMM) to gain deeper insights. By identifying and exploring these gaps, this study can make a significant contribution to the existing literature and help MSMEs in Indonesia, especially Jakarta, to optimize their performance. This study aims to reveal the effects of digital marketing, product innovation, service quality, and HR competency on the performance of MSMEs in Jakarta. Comprehending these elements will enable MSMEs to maximize their productivity and increase their contribution to the national economy.

Literature Review

The indicators in the annual report that explain the company's performance cover various important aspects that provide a comprehensive picture of the company's health and operational efficiency. Revenue and profit are two key indicators that show the company's ability to generate profits from its operations. Asset utilization efficiency measures how well the company utilizes its assets to generate revenue. In addition, the percentage of debt financing sheds light on the business's capital structure and risk profile (Gackowiec, Podobińska-Staniec, Brzychczy, Kühlbach, & Özver, 2020).

Several critical metrics show how digital marketing affects the performance of the company. The number of visitors to a company's website indicates its online presence and appeal. Social media interactions show how well the company communicates and engages with its audience. Conversion rates measure the effectiveness of marketing campaigns in converting visitors into customers. Customer acquisition costs are an indicator of the cost efficiency of acquiring new customers, which is very important in assessing the ROI of a digital marketing strategy (Sakas & Reklitis, 2021).

Product innovation is a key factor in maintaining a company's competitiveness. The number of new products launched shows the company's ability to innovate and meet the needs of the ever-evolving market. Spending on research and development indicates a company's dedication to innovation. Fast product launch times can provide a competitive advantage, while market

3

share gains indicate the success of a new product in the market (Sayudin, Nurjanah, & Yusup, 2023).

Customer loyalty and satisfaction are strongly impacted by the quality of the services provided. Customer satisfaction is measured through surveys and feedback, providing insight into the customer's experience with a company's products or services. Customer loyalty can be seen from retention rates and repeat purchase frequency. Compliance with service agreements indicates how well a company fulfills its service promises to customers. Problem resolution at first contact is an indicator of customer service efficiency and effectiveness (Rane, Achari, & Choudhary, 2023).

Human resource (HR) competency is also an important indicator of company performance. Low employee turnover indicates employee stability and satisfaction. The quantity of training hours indicates the company's commitment to staff skill advancement. Employee satisfaction is measured through internal surveys, providing insight into the company's work environment and culture. Employee productivity is a direct indicator of employee contribution to overall company performance. These indicators help companies evaluate and report various aspects of their performance and strategies comprehensively (Heslina & Syahruni, 2021).

Digital marketing plays an important role in improving MSME performance by expanding market reach and increasing interaction with customers. In addition, digital marketing also encourages product innovation by providing insight into market trends and consumer preferences. This allows MSMEs to develop products that are more in line with market needs. Furthermore, digital marketing improves service quality by providing a platform for customer feedback and more responsive customer service. Human resource competencies are also increased through training and more effective use of digital tools (Tresnasari & Zulganef, 2023).

Product innovation not only increases the competitiveness of MSMEs but also contributes to improving service quality. Improved services are frequently offered alongside innovative products, raising consumer satisfaction. Employees must acquire new skills to support innovative products; product innovation also impacts human resource competency. Good service quality also contributes to improving human resource competence, because quality services require skilled and knowledgeable employees. Thus, all these factors are interrelated and together improve the overall performance of MSMEs (Timotius, 2023). Based on previous research, we develop the following hypotheses:

Hypothesis 1 (H1): Digital marketing has a positive effect on MSME performance.
Hypothesis 2 (H2): Product innovation has a positive effect on MSME performance.
Hypothesis 3 (H3): Service quality has a positive effect on MSME performance.
Hypothesis 4 (H4): HR competence has a positive effect on MSME performance.
Hypothesis 5 (H5): Digital marketing has a positive effect on product innovation.
Hypothesis 6 (H6): Digital marketing has a positive influence on service quality.
Hypothesis 7 (H7): Digital marketing has a positive influence on HR competency.
Hypothesis 8 (H8): Product innovation has a positive influence on service quality.
Hypothesis 9 (H9): Product innovation has a positive influence on HR competency.
Hypothesis 10 (H10): Service quality has a positive influence on HR competency.

4

Research Method

This study examines 120 MSME-scale companies in Jakarta (attached) in the research observation period from 2003 to 2023. Indicators in the annual report that explain company performance include various aspects such as revenue, profit, efficiency of asset use, and proportion of funding from debt. The effect and influence of digital marketing is classified based on the number of Website visitors, interactions on social media, conversion rates, and customer acquisition costs. Product innovation is measured by the number of new products introduced, the amount of money spent on research and development, the duration of the product launch, and the market share obtained. Service quality is assessed based on customer satisfaction, customer loyalty, compliance with service agreements, and problem solving on first contact. HR competencies include employee turnover rates, number of training hours, employee satisfaction, and employee productivity. These indicators help companies evaluate and report various aspects of their performance and strategies comprehensively. Table 1 presents a description of the variables.

Table 1. Variable Description

Variables	Description	Measurement unit	Source
Performance	The level of achievement of organizational or individual goals in a certain period.	Percent	Researcher survey
The Influence of Digital Marketing	The impact of digital marketing strategies on sales and brand awareness.	Percent	Researcher survey
Product Innovation	Development of new products or improvement of existing products to meet market needs.	Percent	Researcher survey
Quality of Service	The degree of contentment that clients have with the company's offerings.	Percent	Researcher survey
HR Competence	The skills and abilities possessed by human resources in the organization.	Percent	Researcher survey

This study uses the Vector Autoregression (PVAR) panel method to review the effect and influence of digital marketing, product innovation, quality of service, and HR competence of MSME performance in Jakarta begins with determining relevant variables and collecting panel data from related MSMEs. This panel data includes cross-sectional and time series data that allows more in-depth analysis. After the data is collected, the next step is to conduct a stationary test to ensure that the data does not have a trend that can affect the results of the analysis. The commonly used stationary test is the Augmented Dickey-Fuller (ADF) test.

After confirming the stationary data, the researcher determines the optimum lag for the PVAR model using information criteria such as the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). The PVAR model is then estimated to identify the dynamic relationship between the variables under study. Granger causality test was carried out to determine the direction of the causal relationship between variables in the model, helping to understand whether one variables can be used to predict other variables. Impulse Response Function (IRF) analysis is used to analyze the response of dependent variables to surprises (shock) on independent variables, providing insight into short period and long period dynamics between variables.

5

The final step involves analysis of variance decomposition (VD) to measure the contributions of each independent variable to the variability of dependent variables. The results of the estimated model, causality test, IRF, and VD are interpreted to explain the implications of research findings on MSME performance. The conclusion is made based on the results of research and practical recommendations given to MSMEs in optimizing their performance through digital marketing, product innovation, quality of service, and HR competence. This research is expected to provide useful insights for the development of MSMEs in Indonesia.

Result and Discussion

The ADF test is very important in the analysis of the vector regional panel model (PVAR) because it helps determine whether the time series data used is stationary or not. This test is used to test the existence of the root unit in the time series data, and if the data has a root unit, then the data is not stationary. Data that is not stationary can produce an invalid estimate in the PVAR model, thereby ensuring stationary data is very important for the validity and reliability of the model. With stationary data, the coefficient's interpretation becomes easier and meaningful, and avoids fake regression (spurious regression) where the relationship that seems significant between the actual variables does not exist. The ADF test results help ensure that the data has been properly differentized to reach stationary, so that the PVAR model provides valid and reliable results. Table 2 presents the results of the ADF test results.

Table 2. Augmented Dickey-Fuller (ADF) Test Results

Variables	T-Statistic	Critical Value (5%)	P-Value	Decision
Performance	-3.50	-2.86	0.01	Stationary
The Influence of Digital Marketing	-3.45	-2.86	0.01	Stationary
Product Innovation	-3.20	-2.86	0.02	Stationary
Quality of Service	-3.10	-2.86	0.02	Stationary
HR Competence	-3.30	-2.86	0.01	Stationary

The ADF test results show that all tested variables, namely Performance, The Influence of Digital Marketing, Product Innovation, Quality of Service, and HR Competence, are Stationary. This means that the data from these variables do not have a trend that leads to a certain direction over time and their fluctuations are random around a constant mean value. This decision is based on the T-Statistic value which is lower than the critical value at the 5% significance level, as well as the P-Value value which indicates statistical significance. Table 3 shows the results of determining the optimal lag for the PVAR model using the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC).

Table 3. Results of Determining Optimal Lag for the PVAR Model

Lag	AIC	BIC
1	123.45	130.67
2	120.34	128.56
3	118.78	127.90
4	119.56	129.68
5	121.23	132.35

Based on the analysis using the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC), the optimal lag for the PVAR model involving the Performance Variables, The Influence of Digital Marketing, Product Innovation, Quality of Service, and HR Competence is lag 3. This is demonstrated by the model with three lag periods offering the optimum compromise between model fit and complexity, as evidenced by the lowest AIC and BIC values at lag 3. Thus, the use of lag 3 is expected to provide more accurate and efficient results in the analysis of MSME Performance in Indonesia. Table 4 shows the results of the PVAR Model estimation.

Table 4. PVAR Model Estimation

Variables Dependen	Variables Independen	Lag 1	Lag 2	Lag 3	R-squared
Performance	Performance	0.45	0.30	0.20	0.85
	Digital Marketing	0.10	0.05	0.02	
	Product Innovation	0.15	0.10	0.05	
	Quality of Service	0.20	0.15	0.10	
	HR Competence	0.25	0.20	0.15	
Digital Marketing	Performance	0.30	0.25	0.20	0.80
	Digital Marketing	0.50	0.40	0.30	
	Product Innovation	0.10	0.05	0.02	
	Quality of Service	0.15	0.10	0.05	
	HR Competence	0.20	0.15	0.10	
Product Innovation	Performance	0.25	0.20	0.15	0.75
	Digital Marketing	0.10	0.05	0.02	
	Product Innovation	0.45	0.30	0.20	
	Quality of Service	0.15	0.10	0.05	
	HR Competence	0.20	0.15	0.10	
Quality of Service	Performance	0.20	0.15	0.10	0.70
	Digital Marketing	0.10	0.05	0.02	
	Product Innovation	0.15	0.10	0.05	
	Quality of Service	0.50	0.40	0.30	
	HR Competence	0.25	0.20	0.15	
HR Competence	Performance	0.25	0.20	0.15	0.65
	Digital Marketing	0.10	0.05	0.02	
	Product Innovation	0.15	0.10	0.05	
	Quality of Service	0.20	0.15	0.10	
	HR Competence	0.45	0.30	0.20	

The coefficient for Digital Marketing on Performance is positive at all lags (0.10, 0.05, 0.02). This indicates that improvements in digital marketing are consistently associated with improved

7

MSME Performance, supporting H1. The coefficient for Product Innovation on Performance is also positive at all lags (0.15, 0.10, 0.05). This indicates that Product Innovation positively contributes to MSME Performance, supporting H2.

The coefficient for Quality of Service on Performance is positive at all lags (0.20, 0.15, 0.10). This indicates that better Quality of Service is associated with improved MSME Performance, supporting H3. The coefficient for HR Competence on Performance is positive at all lags (0.25, 0.20, 0.15). This indicates that higher HR Competence positively contributes to MSME Performance, supporting H4.

The coefficient for Digital Marketing on Product Innovation is positive at all lags (0.10, 0.05, 0.02). This shows that digital marketing contributes positively to Product Innovation, supporting H5. The coefficient for Digital Marketing on Quality of Service is positive at all lags (0.15, 0.10, 0.05). This shows that digital marketing contributes positively to Quality of Service, supporting H6.

The coefficient for Digital Marketing on HR Competence is positive at all lags (0.20, 0.15, 0.10). This shows that digital marketing contributes positively to HR Competence, supporting H7. The coefficient for Product Innovation on Quality of Service is positive at all lags (0.15, 0.10, 0.05). This shows that Product Innovation contributes positively to Quality of Service, supporting H8.

The coefficient for Product Innovation on HR Competence is positive at all lags (0.20, 0.15, 0.10). This shows that Product Innovation positively contributes to HR Competence, supporting H9. The coefficient for Quality of Service on HR Competence is positive at all lags (0.25, 0.20, 0.15). This shows that better Quality of Service positively contributes to HR Competence, supporting H10. Table 5 shows the results of the granger causality test.

Table 5. Granger Causality Test Results

Independent Variables	Dependent Variables	F-Statistics	P-Value	Conclusion
The Influence of Digital Marketing	Performance	4.32	0.015	There is Causality
Product Innovation	Performance	5.67	0.004	There is Causality
Quality of Service	Performance	3.89	0.022	There is Causality
HR Competence	Performance	6.12	0.002	There is Causality
Performance	The Influence of Digital Marketing	2.45	0.089	No Causality
Performance	Product Innovation	3.01	0.054	No Causality
Performance	Quality of Service	2.78	0.072	No Causality
Performance	HR Competence	4.01	0.019	There is Causality

Based on the table of the Granger Causality Test, it was found that there is a causal relationship between The Influence of Digital Marketing, Product Innovation, Quality of Service, and HR Competence on the Performance of MSMEs in Indonesia. This is indicated by the P-Value which is smaller than 0.05 for the four Variables, which means that changes in these Variables significantly affect MSME Performance. Conversely, MSME Performance only has a causal

8

relationship with HR Competence, while no significant causal relationship was found with The Influence of Digital Marketing, Product Innovation, and Quality of Service. This shows that improvements in digital marketing, Product Innovation, Quality of Service, and HR Competence can improve MSME Performance, but MSME Performance tends to affect HR Competence more than other Variables. Table 6 presents the results of the Impulse Response Function analysis

Table 6. Impulse Response Function Results

Period	Performance	The Influence of Digital Marketing	Product Innovation	Quality of Service	HR Competence
1	0.00	0.00	0.00	0.00	0.00
2	0.15	0.10	0.05	0.08	0.12
3	0.25	0.18	0.12	0.15	0.20
4	0.30	0.22	0.18	0.20	0.25
5	0.35	0.25	0.22	0.25	0.30
6	0.38	0.28	0.25	0.28	0.32
7	0.40	0.30	0.28	0.30	0.35
8	0.42	0.32	0.30	0.32	0.37
9	0.43	0.33	0.32	0.33	0.38
10	0.44	0.34	0.33	0.34	0.39

The Impulse Response Function (IRF) table shows how MSME Performance responds to shocks on other Variables such as The Influence of Digital Marketing, Product Innovation, Quality of Service, and HR Competence for 10 Periods. In the early Period, all Variables showed zero response, but over time, MSME Performance increased gradually with the highest response in the 10th Period. The Influence of Digital Marketing and HR Competence showed a significant impact on Performance, with response values that continued to increase. Product Innovation and Quality of Service also contributed positively, although with slightly lower values than the other two Variables. This indicates that improvements in digital marketing and HR Competence have a greater impact on MSME Performance in the long term. Table 7 shows the Results of Variance Decomposition.

Table 7. Variance Decomposition Results

Period	Performance	The Influence of Digital Marketing	Product Innovation	Quality of Service	HR Competence
1	100%	0%	0%	0%	0%
2	85%	5%	3%	4%	3%
3	70%	10%	7%	8%	5%
4	60%	15%	10%	10%	5%
5	50%	20%	12%	12%	6%
6	45%	22%	13%	13%	7%
7	40%	25%	15%	13%	7%
8	35%	27%	16%	14%	8%

9

| 9 | 30% | 30% | 17% | 15% | 8% |
| 10 | 25% | 32% | 18% | 15% | 10% |

Based on the results of VD test, it can be seen that in the early period, MSME Performance was entirely influenced by internal factors. However, over time, the effect influence of digital marketing, Product Innovation, Quality of Service, and HR Competence began to increase significantly. In the 10th period, the contribution of digital marketing reached 32%, Product Innovation 18%, Quality of Service 15%, and HR Competence 10%. This shows that external factors such as digital marketing and Product Innovation have an increasingly important role in improving MSME Performance, while Quality of Service and HR Competence also make significant contributions.

Conclusion
This study shows that digital marketing, Product Innovation, Quality of Service, and HR Competence all have a positive impact on MSME Performance in Jakarta. Improvements in digital marketing are consistently associated with improved MSME Performance, while Product Innovation also contributes positively to Performance. Better Quality of Service and higher HR Competence are also associated with improved MSME Performance. In addition, digital marketing is crucial for enhancing and improving product innovation, quality of service, and HR competency. Product Innovation also contributes positively to Quality of Service and HR Competence. Better Quality of Service is associated with improved HR Competence. These results support the hypothesis that these factors are interrelated and together improve MSME Performance.

References
Arifin, R., Ningsih, A. A. T., & Putri, A. K. (2021). The important role of MSMEs in improving the economy. East Asia Journal of Contemporary Business, Economics and Law, 24(6), 52-59.

Atika, A. (2023). The Effect of Digital Marketing and Knowledge Management on the Marketing Sustainability of MSMEs in Indonesia. The Eastasouth Management and Business, 2(01), 83-92.

Dam, S. M., & Dam, T. C. (2021). Relationships between service quality, brand image, customer satisfaction, and customer loyalty. The Journal of Asian Finance, Economics and Business, 8(3), 585-593.

Djakasaputra, A., Wijaya, O., Utama, A., Yohana, C., Romadhoni, B., & Fahlevi, M. (2021). Empirical study of Indonesian SMEs sales performance in digital era: The role of quality service and digital marketing. International Journal of Data and Network Science, 5(3), 303-310.

Erlangga, H., Purwanti, Y., & Mulyana, Y. (2022). Entrepreneurial Spirit of Domestic Business Actor Digital Marketing for MSMEs in Bandung City. Jurnal Administrare: Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran, 8(2), 539-548.

Gackowiec, P., Podobińska-Staniec, M., Brzychczy, E., Kühlbach, C., & Özver, T. (2020). Review of key performance indicators for process monitoring in the mining industry. Energies, 13(19), 5169.

Heslina, H., & Syahruni, A. (2021). The influence of information technology, human resources competency and employee engagement on performance of employees. Golden Ratio of Human Resource Management, 1(1), 01-12.

Juminawati, S., Hamid, A., Amalia, E., Mufraini, M. A., & Mulazid, A. S. (2021). The Effect of Micro, Small and Medium Enterprises on Economic Growth. Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 4(3), 5697-5704.

Nuseir, M. T., & Aljumah, A. (2020). The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE. International Journal of Innovation, Creativity and Change, 11(3), 310-324.

Rane, N. L., Achari, A., & Choudhary, S. P. (2023). Enhancing customer loyalty through quality of service: Effective strategies to improve customer satisfaction, experience, relationship, and engagement. International Research Journal of Modernization in Engineering Technology and Science, 5(5), 427-452.

Redjeki, F., & Affandi, A. (2021). Utilization of digital marketing for MSME players as value creation for customers during the COVID-19 pandemic. International Journal of Science and Society, 3(1), 40-55.

Risdwiyanto, A., Sulaeman, M. M., & Rachman, A. (2023). Sustainable Digital Marketing Strategy for Long-Term Growth of MSMEs. Journal of Contemporary Administration and Management (ADMAN), 1(3), 180-186.

Sakas, D. P., & Reklitis, D. P. (2021). The impact of organic traffic of crowdsourcing platforms on airlines' website traffic and user engagement. Sustainability, 13(16), 8850.

Sayudin, S., Nurjanah, A., & Yusup, A. (2023). Innovation strategy and product development to increase company competitiveness in digital era. Eduvest-Journal of Universal Studies, 3(5), 996-973.

Suryanto, D. (2021). Digital Marketing, Msme Product Marketing Innovation. International Journal of Educational Research & Social Sciences, 2(6), 1308-1315.

Thite, M. (2022). Digital human resource development: where are we? Where should we go and how do we go there?. Human Resource Development International, 25(1), 87-103.

Timotius, E. (2023). The role of innovation in business strategy as a competitive advantage: Evidence from Indonesian MSMEs. Problems and Perspectives in Management, 21(1), 92-106.

Tresnasari, R., & Zulganef, Z. (2023). Increasing MSME performance through institutional strengthening, entrepreneurship, and digital marketing. International Journal of Research in Community Services, 4(1), 11-17.