

THE EFFECT OF HUMAN RESOURCE QUALITY, ENTREPRENEURIAL ORIENTATION, AND DIGITAL MARKETING STRATEGY ON MSMEs PERFORMANCE

Jemmy Regri Ferdianto

Faculty of Economics, Ganesha University of Education, Indonesia
(jemmy.ferdianto@undiksha.ac.id)

Rikky Rundu Padang

Faculty of Economics, Ganesha University of Education, Indonesia
(rikky.rundu@undiksha.ac.id)

Ni Putu Suciyawati

Faculty of Economics, Ganesha University of Education, Indonesia
(niputu.suciyawati@undiksha.ac.id)

ABSTRACT

This study aims to analyze the influence of human resource quality (HR), entrepreneurial orientation, and digital marketing strategies on Micro, Small, and Medium Enterprises (MSMEs) performance in the Kaliwates District, Jember Regency. The background of this study is based on the need for MSMEs to adapt to the dynamics of the digital economy, which demands strengthened HR competencies, entrepreneurial innovation, and the optimization of technology-based marketing. This study uses a quantitative associative approach with an explanatory research design. A sample of 72 micro-business owners was selected using the purposive sampling technique, based on the criteria of having been in operation for at least two years and being engaged in the trade and service sectors. Data were collected using a structured questionnaire and analyzed using multiple linear regression with the assistance of SPSS version 25. The research results show that, partially, human resource quality has a positive and significant effect on MSME performance, with a significance value of 0.015. Entrepreneurial orientation also has a positive and considerable influence, with a significance level of 0.012. Digital marketing strategies also positively contribute to the performance of MSMEs with a significance value of 0.009. Simultaneously, the three independent variables contribute 46.8% to MSME performance, while other factors outside the research model influence 53.2%. These findings strengthen the importance of synergy between human resource quality, entrepreneurial orientation, and the implementation of digital marketing in improving MSME competitiveness in the economic era based on technology. This research recommends continuous HR training, strengthening innovative orientation in entrepreneurship, and optimization of various channels of digital marketing as an important strategy to increase the performance of MSMEs. In addition, future research is expected to explore other external factors such as product innovation and access to capital in enriching the MSMEs development model.

Keywords: human resource quality, entrepreneurial orientation, digital marketing strategy, msme performance

INTRODUCTION

With the accelerating advancement of the digital economy, Micro Small and Medium Enterprises (MSMEs) are confronted with more multifaceted challenges and heightened levels of competition. Globalization, accelerating information technology, and changing consumer behavior require businesses to adapt with sustainable strategies. It is no longer enough to rely solely on product quality, MSMEs must also equip themselves with effective digital marketing strategies, competent human resources, and a high entrepreneurial spirit (Kotler, 2019). The synergy between these three aspects is believed to be able to strengthen business competitiveness and sustainability in a dynamic digital economic landscape. A dynamic business environment requires MSMEs to not only rely on internal strengths but also be adaptive to external changes. According to Ferdianto et al. (2025), opportunities, resource management, and sustainable adaptation are the keys to success in building a business in the midst of a growing global economy. Rapid adaptation to changes in technology and consumer preferences is a key requirement for maintaining a competitive advantage. A number of literature studies confirm the importance of digitalization in driving the growth of MSMEs. Technology-based entrepreneurship can open up new opportunities and accelerate economic growth. In Indonesia, many young entrepreneurs focus on technology-based innovations, such as the use of AI in business management, environmentally friendly product development, and digital marketing optimization (Ferdianto et al., 2024). Digital technology has driven a shift from traditional marketing to modern marketing, which prioritizes connection duration, use of social media, and database-driven performance measurement over sales volume. In addition, given the huge potential of MSMEs in employment absorption and improving community welfare, developing the quality of human resources is very important. This is not only related to technical skills, but also to managerial capabilities, innovation, and strategic planning. The implementation of effective human resource management, including training, career development, and management performance, plays a very important role in increasing the productivity of MSMEs (Sapik & Suparwati, 2013). Entrepreneurial orientation also plays an important role. Entrepreneurship in the modern context demands innovation, risk management, and identification of capability opportunities (Ahmatang & Sari, 2022).

Problem Formulation

Although the MSME sector in Indonesia, particularly in Jember Regency, has shown significant growth, it still faces various fundamental challenges. According to data from the Badan Pusat Statistik (BPS) in 2022, Jember's economic growth reached 4.53 percent, the highest in the region with substantial contributions from the MSME sector. Jember is home to approximately 647,000 MSMEs, making it the region with the largest number of MSMEs in East Java. One of the keys contributing sub-districts is Kaliwates. However, MSMEs in Kaliwates encounter several issues, including low human resource competency, limited adoption of digital technology, and weak entrepreneurial orientation. Preliminary interview data indicate that 6 out of 10 MSMEs fail to survive beyond one year, primarily due to inadequate managerial capabilities and poor digital marketing skills. Additional data from *beritajatim.com* (2021) show that 40 percent of MSMEs could only survive for two months after the COVID-19 pandemic began. These issues underscore the urgency of improving human resource quality, enhancing digital technology proficiency, and strengthening the entrepreneurial spirit.

Table 1. Economic Growth Rate of Jember Regency

Year	2019	2020	2021	2022
Economic growth	5.51	-2.98	4.00	4.53

Source: Official Statistics News Jember Regency

Research Objectives

The objectives of this research are: (1) To analyze the influence of human resource quality **on** the performance of MSMEs in Kaliwates District, Jember Regency. (2) To analyze the influence of entrepreneurial orientation **on** the performance of MSMEs in Kaliwates District, Jember Regency. (3) To analyze the influence of digital marketing strategies **on** the performance of MSMEs in Kaliwates District, Jember Regency.

LITERATURE REVIEW

This study is based on three main concepts: human resource quality (HR), Entrepreneurial Orientation, and digital marketing strategies, which are assumed to influence the Performance of Micro, Small, and Medium Enterprises (MSMEs). The following literature review identifies the theoretical framework and previous research findings while also highlighting the research gap that forms the basis of this study.

Human Resource Quality (HR) and MSME Performance

Human resources (HR) quality plays a crucial role in shaping the operational success and sustainable growth of micro, small, and medium enterprises (MSMEs). The Human Capital Theory, proposed by Becker (1993), emphasizes that investing in individual development through education, training, and skill enhancement directly impacts productivity and competitive power within organizations. Within the MSME sector, Sukmantari and Julianto (2022) found that human resource quality positively and significantly impacts MSME performance, especially among tuff stone artisans in the Sukawati region. However, their study also highlights that a low understanding of information technology and weak managerial skills pose significant constraints for many MSME actors. Similarly, research conducted by Kakilo et al. (2022) in Gorontalo City highlighted that human resource quality accounts for 51.2% of the improvement in MSME performance, whereas the remaining 48.8% is attributed to other factors, such as productivity and leadership, that have yet to be thoroughly investigated.

Based on these findings, we can conclude that while the influence of HR quality on MSME performance has been confirmed, there exists a gap in research, particularly in integrating factors such as entrepreneurial orientation and digital marketing strategies. Therefore, this study seeks to further examine the interrelationships among these three factors and evaluate their combined influence on the performance of MSMEs.

Entrepreneurial Orientation and MSMEs Performance

Entrepreneurial orientation serves as a driving force in enhancing MSME performance amid the challenges of an increasingly dynamic and competitive market environment. Lumpkin and Dess (1996) emphasise that innovation, courage, taking risks, and proactivity are essential pillars in forming successful entrepreneurship. In the context of MSMEs, research by Wirawan (2017) shows that entrepreneurial orientation positively and significantly influences the performance of batik UMKM marketing in the

Regency of Jombang. However, this research places more emphasis on the variables of entrepreneurial orientation in a general way without elaborating on the role-specific aspects of each dimension of innovation, proactivity, and risk-taking. Consistent with this, Ranto (2016), in a study of the culinary sector in Yogyakarta, found that innovativeness, risk-taking, and proactiveness positively affect MSME performance. However, the study primarily concentrates on the culinary industry and does not account for the varying characteristics of other business sectors that may moderate these relationships.

Based on the findings, it can be concluded that although the influence of entrepreneurial orientation on MSME performance has been confirmed, there is still a research gap related to the simultaneous testing of its dimensions across various business sectors and its integration with other strategic factors such as product innovation and technological adaptation. Therefore, this study aims to examine these relationships more comprehensively across a broader range of MSME sectors.

Digital Marketing Strategy and MSMEs Performance

Digital marketing strategies represent a key approach for enhancing the performance of MSMEs. Marbun and Simanjuntak (2021) demonstrated that the use of digital tools, such as social media, e-commerce platforms, and instant messaging, significantly contributes to marketing performance, particularly within tourism-based MSMEs in Toba Regency. However, their study remains limited to the tourism sector and does not examine how digital marketing strategies may vary across different MSME industries. Supporting this, Sudirjo et al. (2023) found that in West Java, digital marketing not only has a significant effect on MSME marketing performance but also functions as a mediating variable between marketing capabilities and overall performance. Although research has focused more on adopting digital marketing strategies generally without differentiating in a way that specifically measures the effectiveness of each digital channel, such as content marketing, SEO, or influencer marketing, in support of MSMEs performance.

Based on the findings, it can be concluded that although the influence of digital marketing strategies on MSME performance has been confirmed, there remains a research gap, particularly in analysing the comparative effectiveness of various types of digital marketing strategies across different business sectors. Therefore, this study aims to further explore the integration of other digital marketing strategies and their simultaneous impact on MSME performance across multiple sectors.

METHOD, DATA, AND ANALYSIS

Research Design

This study employs a quantitative research design, utilizing an explanatory approach. The objective is to elucidate the causal relationships between the independent variable namely human resource quality, entrepreneurial orientation, and digital marketing strategies and the dependent variable, which is MSME performance. The study design uses a survey method by distributing structured questionnaires as the primary data collection tool. This research is cross-sectional, where data is collected at a specific point in time from predetermined respondents.

Population and Sample

The population in this study includes all micro business actors located in Kaliwates District, Jember Regency, who have been operating actively for at least two years in the trade and services sectors. The

sampling technique used in this study is purposive sampling, which involves selecting samples based on specific criteria. The criteria for sample selection are business owners who have been operating for at least two years and are engaged in the trade and service sectors. The total sample size for this study consists of 72 micro-business owners who meet these criteria.

Instruments Study

The instrument used in this study is a closed-ended questionnaire based on a 5-point Likert scale, which measures the following variables Human Resource Quality: competence, experience, and adaptability, Entrepreneurial Orientation: innovation, proactivity, and risk-taking, Digital Marketing Strategy: use of social media, digital platforms, and promotional activities MSME Performance: income growth, number of customers, and business sustainability

Validity and Reliability Test

Validity was tested using the Pearson Product-Moment correlation technique between each questionnaire item and the total score. Reliability was tested using Cronbach's Alpha, and the instrument is considered reliable if the α value is ≥ 0.70 .

Data Analysis Techniques

The data were analyzed using multiple linear regression to determine the extent of the influence of HR quality (X1), entrepreneurial orientation (X2), and digital marketing strategy (X3) on MSME performance (Y). The regression model used is:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Analysis was conducted using SPSS version 25. Before performing regression tests, classic assumption tests were conducted, including: normality test, multicollinearity test, heteroscedasticity test, multiple linear regression test.

RESULT AND DISCUSSION

Validity Test

A validity test was conducted to assess the validity of the data obtained from the questionnaire. The validity criterion was based on a significance level (p-value) of < 0.05 . According to the SPSS 25 output, all items from the variables Human Resource Quality, Entrepreneurial Orientation, Digital Marketing Strategy, and MSME Performance showed a p-value of < 0.05 . Therefore, all items in the questionnaire were declared valid.

Reliability Test

A reliability test was performed to assess the consistency of respondents' responses. The instrument is deemed reliable if the Cronbach's Alpha value exceeds 0.60. According to the SPSS output, the Cronbach's Alpha values for all variables were above 0.60, indicating that the instrument is reliable and suitable for further analysis.

Normality Test

A normality test was conducted using the Kolmogorov-Smirnov method. The normality criterion is that the significance value should be > 0.05 . The results of the normality test show an Asymp. Sig value

of 0.200, indicating that the data is usually distributed. The standard P-P plot also shows the points aligning with the diagonal line, supporting the normality assumption.

Multicollinearity Test

Multicollinearity test aiming for see existence correlation tall between variable free. Based on the SPSS output, the tolerance value of all variables > 0.10 and VIF value < 10 , namely:

Human Resources Quality: Tolerance 0.965 | VIF 1.036

Entrepreneurial Orientation: Tolerance 0.940 | VIF 1.064 –

Digital Marketing Strategy: Tolerance 0.921 | VIF 1.086 Can concluded that no there is multicollinearity in regression models.

Heteroscedasticity Test

This test was conducted to determine whether there is unequal residual variance (heteroscedasticity). Based on the scatterplot, the dots are randomly spread and do not form a specific pattern. Additionally, the Glejser test shows that the significance values for all independent variables are > 0.05 . Therefore, it can be concluded that this regression model is free from heteroscedasticity.

Multiple Linear Regression Test

A multiple linear regression analysis was conducted to determine the influence of the variables Human Resource Quality (X1), Entrepreneurial orientation (X2), and Digital Marketing Strategy (X3) on MSME Performance (Y). The results are presented in the following table:

Table 2. Analysis Regression

Parameter	Mark	P-Value	Alpha (α)	Decision
$R_{yx1x2x3}$	0.684	0,000	0.05	Reject H0
$R^2_{yx1x2x3}$	0.468	-	-	Significant Model
ϵ	0.532	-	-	-
P_{yx1} (HR)	0.342	0.015	0.05	Reject H0
P^2_{yx1}	0.117	-	-	-
P_{yx2} (KWU)	0.368	0.012	0.05	Reject H0
P^2_{yx2}	0.135	-	-	-
P_{yx3} (SPD)	0.391	0.009	0.05	Reject H0
P^2_{yx3}	0.153	-	-	-

Source: Data Processing Results (2025)

The table results show that, simultaneously, HR Quality (X1), Entrepreneurial orientation (X2), and Digital Marketing Strategy (X3) influence MSME Performance (Y), with a coefficient of determination (R^2) of 0.468 (46.8%). Other variables outside the model influence the remaining 53.2%. In general, each of the three independent variables also has a significant partial influence: Human resource quality (X1) \rightarrow coefficient = 0.342; sig. = 0.015, Entrepreneurial orientation(X2) \rightarrow coefficient = 0.368; sig. = 0.012, Marketing Strategy (X3) \rightarrow coefficient = 0.391; sig. = 0.009

Discussion

Influence of Quality Human Resources on MSMEs Performance

The regression analysis results show that human resource quality (HR) positively and significantly influences the performance of MSMEs in the Kaliwates District. These findings strengthen Human Capital Theory (Becker, 1993), which emphasises that improving human resources' competence, adaptability, and experience encourages increased productivity. A regression coefficient of 0.342 and a significance value of 0.015 indicate that improving human resource quality can significantly enhance the performance of MSMEs in general. This aligns with the findings of Sukmantari and Julianto (2022), who highlighted the importance of managerial skills and technological understanding in supporting the growth of MSMEs.

Influence of Entrepreneurial orientation on MSMEs Performance

Entrepreneurial orientation has been shown to significantly influence MSME performance, with a regression coefficient of 0.368 and a significance value of 0.012. This supports Lumpkin and Dess's (1996) concept, which asserts that innovation, risk-taking, and proactivity are crucial foundations for enhancing performance efforts. These results align with the findings of Wirawan (2017) and Pril Ranto (2016), who revealed that when managed effectively, entrepreneurial orientation can strengthen the competitiveness of MSMEs in facing market dynamics.

The Influence of Digital Marketing Strategy on MSMEs Performance

The results indicate that digital marketing strategies have a positive and significant effect on MSME performance, with a regression coefficient of 0.391 and a significance level of 0.009. These findings further support the conclusions of Marbun and Simanjuntak (2021) and Sudirjo et al. (2023), who assert that digital marketing can broaden market reach, enhance customer engagement, and strengthen the branding of MSME products. This evidence underscores the importance of optimizing various digital platforms, such as social media, e-commerce, and instant messaging, to improve business performance.

Interpretation of Models in General Simultaneal

The multiple linear regression analysis shows that HR quality, entrepreneurial orientation, and digital marketing strategies simultaneously influence MSME performance, with an R^2 value of 0.468. This means the three variables collectively explain 46.8% of the variation in MSME performance. In contrast, 53.2% is influenced by other factors not covered in this study, such as government policy support, access to financing, and product innovation. These findings confirm the importance of a multidimensional approach in enhancing MSMEs' competitiveness in the digital economy era.

CONCLUSION

The objective of this study is to examine the impact of human resource quality (HR), entrepreneurial orientation, and digital marketing strategies on the performance of MSMEs in the Kaliwates District, Jember Regency. Several important conclusions were drawn based on the data analysis results. First, human resource quality positively and significantly influences MSME performance. This indicates that higher levels of competence, adaptability, and experience among business actors improve productivity and business sustainability. Second, entrepreneurial orientation also positively and significantly influences MSME performance. Innovative attitudes, risk-taking, and proactivity in facing market dynamics are key drivers in strengthening the competitiveness of MSMEs in the digital economy era. Third, digital marketing strategies positively and significantly influence MSME performance. Social media, e-commerce, and

instant messaging marketing have helped expand market reach, increase interaction with consumers, and accelerate business growth. Simultaneously, the three variables contribute 46.8% to the variation in MSME performance. In contrast, the remaining 53.2% is influenced by other factors outside the research model, such as government policy support, product innovation, and access to business financing.

Based on the results, several suggestions are offered. For MSME actors, it is essential to continue improving their competencies through managerial training, mastery of digital technology, and fostering an entrepreneurial spirit based on innovation. Additionally, business actors are encouraged to be more adaptive to changes in consumer preferences and developments in marketing technology. For regional governments and related agencies, it is essential to strengthen training and mentoring programs that focus on HR development and the implementation of digital marketing strategies for MSMEs, as well as provide facilities and supportive policies for the digital transformation of the small business sector. For future researchers, it is recommended to expand the study by adding other variables, such as product innovation, customer satisfaction, and access to capital, as well as studying other MSME sectors to obtain a more comprehensive picture of the factors influencing MSME performance. With the synergy between HR quality, entrepreneurial orientation, and effective digital marketing strategies, MSMEs in the Kaliwates District and other regions will be able to improve their performance and competitiveness in the face of ongoing changes in the global economy. .

REFERENCES

- Ahmatang, A & Sari, N. (2022). Pengaruh orientasi kewirausahaan dan orientasi pasar terhadap kinerja usaha dimediasi keunggulan bersaing pada UMKM di Pulau Sebatik. *JURNAL INOVASI*, 18(3), 492-500.
- Badan Pusat Statistik. (2022). *Kabupaten Djember dalam angka pada tahun 2022*. Padang: BPS Kabupaten Jember. Retrieved from <https://jemberkab.bps.go.id/id/publication/2022/02/25/aaa3aa445ab9ee0471f2399f/kabupaten-jember-dalam-angka-2022.html>
- Becker, G. S (1993). *Human capital: A theoretical and empirical analysis, withh special reference to education* (on 3rd ed.). Chicago: University of Chicago Press.
- Beritajatim.com. (2021). 47 Persen UMKM yang ada di Jember tak tahu berapa lama kuat bayar utang. Retrieved from. <https://beritajatim.com/47-persen-umkm-di-jember-tak-tahu-berapa-lama-kuat-bayar-utang>
- Ferdianto, J. R., Nafiati, D. A., Mahmuddin, Aurelia, P. N., Adur, V. R. G. B., Prihatiningrum, R. Y., Rismawati, Faisol, & Claudia, M. (2025). *Buku Ajar Pengantar bisnis*. Padang: Aikomedia Press.
- Ferdianto, J. R., Sevtiyuni, P. E., Putra, P., Prihatiningrum, R. Y., Kamal, M. A., Masitoh, G., & Syahputra, A. (2024). *Buku Referensi Kewirausahaan UMKM*. Padang: Aikomedia Press.
- Kakilo, R., Hinel, R., & Podungge, R. (2022). Pengaruh kualitas sumber daya manusia terhadap peningkatan kinerja UMKM pada Kota Gorontalo. *YUME: Journal of Management*, 5(3), 358–366. doi: 10.37531/yume.vxix.347

- Kotler, P., Kartajaya, H., & Setiawan, I. (2019). *Marketing 4. 0...: Moving from traditional to digital*. New Jersey: John Wiley & Sons.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance msme. *Academy of Management Review*, 21(1), 135–172. doi:10.5465/amr.1996.9602161568.
- Marbun, D. S. N., & Simanjuntak, M. (2021). Pengaruh digital marketing terhadap peningkatan kinerja pemasaran UMKM pariwisata di Kabupaten Toba Indonesia. *Book Prosiding Seminar Nasional Ekonomi-Bisnis*, 130-142.
- Ranto, D. W. (2016). Pengaruh orientasi kewirausahaan terhadap kinerja UMKM bidang kuliner di Yogyakarta. *Jurnal JBMA. (Jurnal Bisnis Manajemen dan Akuntansi)*, 3(2), 1-11.
- Sapik, A., & Suparwati, Y. K. (2013). Pengaruh SDM, kualitas informasi keuangan dan locus of control terhadap kinerja UMKM: Studi pada UMKM binaan Dinas Koperasi yang ada di Kecamatan Kertek, Kabupaten Wonosobo. *PRESTASI*, 11(1).
- Sevilla, C. G., Ochave, J. A., Punsalan, T. G., Regala, B. P., & Uriarte, G. G. (1960). *Research methods*. Manila: Rex Printing. Company.
- Sudirjo, F., Rukmana, A. Y., Wandan, H., & Hakim, M. L. (2023). Pengaruh pemasaran, digital marketing dalam meningkatkan kinerja pemasaran UMKM di Jawa Barat. *Jurnal Bisnisan: Riset Bisnis dan Manajemen*, 5(1), 55-69.
- Sukmantari, N. K. Y., & Julianto, I. P. (2022). Pengaruh penerapan sistem informasi akuntansi, kualitas SDM, dan pemanfaatan e-commerce terhadap kinerja UMKM pengrajin batu padas di Kecamatan Sukawati. *Jurnal Akuntansi Profesi*, 13(3), 777-786. doi:10.23887/jippg. v3i2
- Wirawan, Y. R. (2017). Pengaruh orientasi pasar dan orientasi kewirausahaan terhadap kinerja pemasaran UMKM batik yang ada di Kabupaten Jombang. *Jurnal Equilibrium: Jurnal Ekonomi-Manajemen-Akuntansi*, 5(1), 55-69.