

DOI: <https://doi.org/10.38035/dijemss.v8i1><https://creativecommons.org/licenses/by/4.0/>

Received: 06 April 2026 | Revised: 18 September 2026 | Accepted: 23 September 2026

Determinants of MSME Success: The Role of Entrepreneurial University, Generation Z Mentoring, and Product Differentiation

Mintarti Indartini¹, Mohammad Sofyan², Ahmad Hidayat³, Tuswoyo⁴, Solikah Nurwati⁵¹Universitas Merdeka Madiun, East Java, Indonesia, mintarti@unmer-madiun.ac.id²Universitas Merdeka Madiun, East Java, Indonesia, msofyan@unmer-madiun.ac.id³Institut Ilmu Sosial dan Manajemen STIAMI, Jakarta, Indonesia, ahmad.hidayat@stiami.ac.id⁴Institut Ilmu Sosial dan Manajemen STIAMI, Jakarta, Indonesia, tuswoyo@stiami.ac.id⁵Universitas Palangka Raya, Central Kalimantan, Indonesia, solikah.nurwati@feb.upr.ac.idCorresponding Author: mintarti@unmer-madiun.ac.id¹

Abstract: This study aims to analyze the influence of Entrepreneur University, Generation Z Mentoring, and Product Differentiation on MSME Success through Managerial Competence, with Digital Capability as a moderating variable. This research employs a quantitative approach using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) with a sample of 270 MSME actors in Indonesia selected through purposive sampling. The results show that Entrepreneur University, Generation Z Mentoring, and Product Differentiation have a significant positive effect on Managerial Competence. Managerial Competence has a significant positive association with MSME Success. However, the mediation results indicate a significant indirect effect only for Product Differentiation, rather than for all three independent variables. Product Differentiation has the strongest effect on both managerial competence and MSME success, while Entrepreneur University also shows a significant direct effect. In contrast, Generation Z Mentoring does not have a significant direct effect on MSME Success. Digital Capability showed no statistically significant direct association with MSME Success and did not significantly moderate the relationships examined in the model. These findings do not establish whether digital technologies were effectively utilized by the participating MSMEs. These findings highlight that MSME success is primarily driven by managerial competence and product differentiation rather than digital readiness. This study contributes to the Resource-Based View by emphasizing the importance of internal capabilities in determining firm performance.

Keywords: Generation Z Mentoring, Product Differentiation, Managerial Competence, Digital Capability, MSME Success

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in economic development, particularly in emerging economies such as Indonesia. They contribute significantly to gross domestic product (GDP), employment, and income distribution. Despite their importance, MSMEs face persistent challenges, including limited managerial capability,

low innovation, and suboptimal digital adoption, which hinder their competitiveness and sustainability.

In the era of digital transformation, MSMEs are required not only to adopt technology but also to strengthen internal capabilities. Managerial competence becomes a critical factor in ensuring effective planning, decision-making, and resource management. From the perspective of the Resource-Based View (RBV), internal capabilities are key determinants of firm performance and sustainable competitive advantage (Barney, 1991). MSMEs with strong managerial competence are better able to adapt to environmental changes and implement effective business strategies.

To strengthen managerial competence, external support and strategic orientation are essential. Entrepreneurial universities play a strategic role in enhancing MSME capabilities through training, mentoring, and knowledge transfer (Etzkowitz, 2003; Guerrero et al., 2016). In addition, Generation Z mentoring provides new opportunities, as this generation possesses strong digital literacy and adaptability, enabling effective knowledge transfer and innovation (Chillakuri, 2020; Priporas et al., 2017). Furthermore, product differentiation represents a key strategic approach that allows MSMEs to create unique value and achieve competitive advantage (Porter, 2008).

These constructs are theoretically interconnected. External support, represented by Entrepreneur University and Generation Z Mentoring, together with strategic orientation in the form of Product Differentiation, are expected to enhance internal capabilities, particularly managerial competence, which ultimately leads to improved MSME success. In addition, digital capability is assumed to strengthen these relationships by enabling firms to effectively utilize digital technologies. However, previous studies report inconsistent findings regarding the role of digital capability, particularly as a moderating variable.

This study examines institutional support, Generation Z mentoring, and product differentiation within an integrated framework, with Managerial Competence specified as a mediator and Digital Capability as a moderator. The framework allows these relationships to be investigated simultaneously in the context of Indonesian MSMEs. This integrated approach provides a more comprehensive explanation of MSME performance, especially in developing countries' contexts.

Based on this framework, it is proposed that Entrepreneur University, Generation Z Mentoring, and Product Differentiation positively influence managerial competence. Furthermore, these variables are also expected to directly influence MSME success, while managerial competence is assumed to positively affect MSME performance. In addition, managerial competence is proposed to mediate the relationship between the independent variables and MSME success. Finally, digital capability is expected to influence MSME success and to moderate the relationship between independent variables and MSME success.

METHOD

This study employs a quantitative approach using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) to analyze the relationships among variables. The population consists of MSME actors in Indonesia, with a sample of 270 respondents selected using purposive sampling. Purposive sampling was chosen to ensure that respondents have relevant experience in managing MSMEs, are actively involved in business operations, and have sufficient understanding of managerial and digital practices, thereby providing more accurate and reliable data.

Data were collected through a structured questionnaire using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement indicators were adapted from previous studies to ensure validity and reliability.

To ensure clarity and consistency in measurement, each variable is operationalized into measurable indicators as presented in Table 1.

Table 1. Operational Definition of Variables

Variable	Operational Definition	Indicators
Entrepreneur University (ξ_1)	The role of universities in supporting MSME development through education, mentoring, and knowledge transfer. (Aimah, 2024; Gibb, 2002; Rohmatiah et al., 2025)	X ₁ . University involvement in MSME mentoring X ₂ . Entrepreneurship training X ₃ . Student MSME collaboration X ₄ . Academic support for innovation
Generation Z Mentoring (ξ_2)	The involvement of Generation Z students in assisting MSMEs, especially in digital and business management aspects. (Csobanka, 2016; Kusumawardani et al., 2022; Rohmatiah et al., 2025)	X ₅ . Digital marketing assistance X ₆ . Social media mentoring X ₇ . Technology transfer X ₈ . Interaction intensity
Product Differentiation (ξ_3)	MSMEs' efforts to create unique products to gain competitive advantage. (Herman & Suyono, 2024; Kotler & Keller, 2016; Widiastini et al., 2023)	X ₉ . Product design uniqueness X ₁₀ . Product quality X ₁₁ . Innovation X ₁₂ . Packaging uniqueness X ₁₃ . Product characteristics
Managerial Competence (η_1)	The ability to manage business operations effectively. (Pahlevi, 2025; Rahayu & Zia'ul Huda, 2025)	Y ₁ . Planning ability Y ₂ . Decision-making Y ₃ . Leadership Y ₄ . Resource management Y ₅ . Performance evaluation
MSME Success (η_2)	The level of business achievement reflected in growth and sustainability. (Hasibuan et al., 2025; Pahlevi, 2025; Sudirjo et al., 2025)	Y ₆ . Revenue growth Y ₇ . Customer growth Y ₈ . Business sustainability Y ₉ . Business expansion Y ₁₀ . Performance satisfaction
Digital Capability (M)	The ability to utilize digital technology in business operations. (Gyamerah et al., 2025; Kim & Jin, 2024; Van Hoang et al., 2025)	M ₁ . Digital media usage M ₂ . Social media utilization M ₃ . Technology use in marketing M ₄ . Adaptation to new technology

Source: Developed by the author based on previous studies (2025).

Data were analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS. The analysis comprised two stages: measurement model assessment and structural model evaluation (Sarstedt et al., 2019). The measurement model was assessed using convergent validity (outer loading > 0.70; AVE > 0.50), discriminant validity (Fornell-Larcker criterion), and reliability (Cronbach's alpha and composite reliability > 0.70).

The structural equations developed in this study are as follows:

Model 1 (Mediation Model):

$$\text{Managerial Competence} = \beta_1 \text{Entrepreneur University} + \beta_2 \text{Generation Z Mentoring} + \beta_3 \text{Product Differentiation} + \varepsilon$$

Model 2 (Direct Effect Model):

$$\text{MSME Success} = \beta_4 \text{Entrepreneur University} + \beta_5 \text{Generation Z Mentoring} + \beta_6 \text{Product Differentiation} + \beta_7 \text{Managerial Competence} + \varepsilon$$

Model 3 (Moderation Model):

$$\begin{aligned} \text{MSME Success} = & \beta_8 \text{Entrepreneur University} + \beta_9 \text{Generation Z Mentoring} + \beta_{10} \text{Product Differentiation} + \beta_{11} \text{Managerial Competence} + \beta_{12} \text{Digital Capability} \\ & + \beta_{13} (\text{Entrepreneur University} \times \text{Digital Capability}) + \beta_{14} (\text{Generation Z Mentoring} \times \text{Digital Capability}) \\ & + \beta_{15} (\text{Product Differentiation} \times \text{Digital Capability}) + \beta_{16} (\text{Managerial Competence} \times \text{Digital Capability}) + \varepsilon \end{aligned}$$

The structural model was evaluated using the coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2). Hypothesis testing was conducted using bootstrapping, where relationships are considered significant if t-statistics exceed 1.96 and p-values are below 0.05.

To examine the moderating effect, an interaction term between Digital Capability and the independent variables was included in the model. This interaction term is used to determine whether digital capability strengthens or weakens the relationship between the independent variables and MSME success.

RESULTS AND DISCUSSION

The evaluation of the measurement model (outer model) in this study aims to assess the validity and reliability of the constructs, including Entrepreneur University, Generation Z Mentoring, Product Differentiation, Managerial Competence, Digital Capability, and MSME Success. The assessment focuses on convergent validity, indicator reliability, and internal consistency.

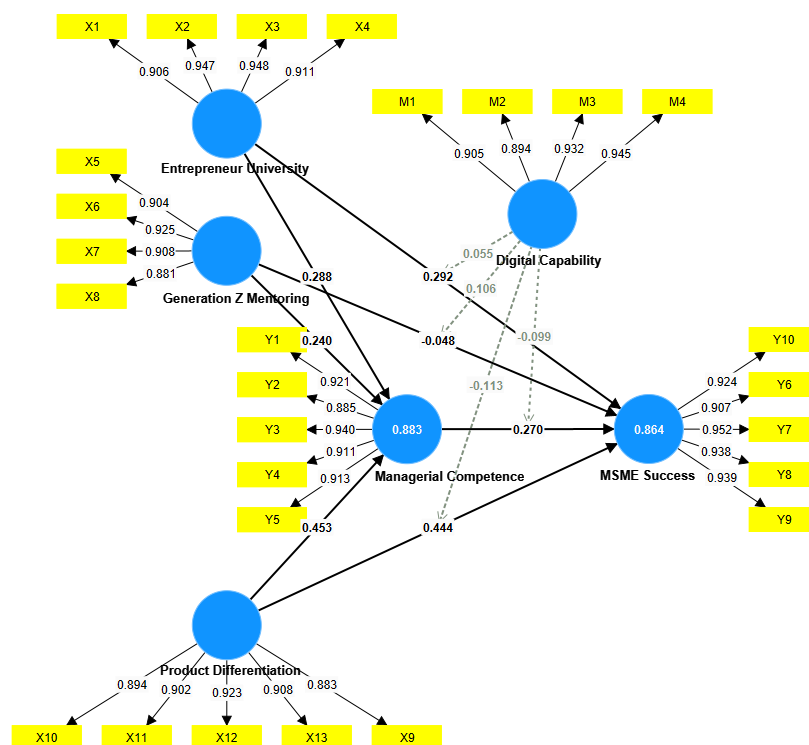


Figure 1. Outer Model

Convergent validity is evaluated based on the outer loading values, where a loading factor greater than 0.70 indicates that the indicator adequately represents its latent construct (Sarstedt et al., 2019). The results show that all indicators have outer loading values exceeding the recommended threshold, indicating that all measurement items are valid and strongly associated with their respective constructs.

Table 2. Outer Loading Values

Variable	Indicator	Outer Loading	Description
Digital Capability (M)	M1	0.905	Valid
	M2	0.894	Valid
	M3	0.932	Valid
	M4	0.945	Valid
Entrepreneur University (ξ_1)	X1	0.906	Valid
	X2	0.947	Valid
	X3	0.948	Valid

Generation Z Mentoring (ξ_2)	X4	0.911	Valid
	X5	0.904	Valid
	X6	0.925	Valid
	X7	0.908	Valid
	X8	0.881	Valid
Product Differentiation (ξ_3)	X9	0.883	Valid
	X10	0.894	Valid
	X11	0.902	Valid
	X12	0.923	Valid
	X13	0.908	Valid
Managerial Competence (η_1)	Y1	0.921	Valid
	Y2	0.885	Valid
	Y3	0.940	Valid
	Y4	0.911	Valid
	Y5	0.913	Valid
MSME Success (η_2)	Y6	0.907	Valid
	Y7	0.952	Valid
	Y8	0.938	Valid
	Y9	0.939	Valid
	Y10	0.924	Valid

Source: Processed data using SmartPLS 4.0 (2025)

As presented in Table 2, the outer loading values for Digital Capability range from 0.894 to 0.945, while Entrepreneur University ranges from 0.906 to 0.948. Generation Z Mentoring shows loading values between 0.881 and 0.925, and Product Differentiation ranges from 0.883 to 0.923. Furthermore, Managerial Competence exhibits loading values between 0.885 and 0.940, while MSME Success ranges from 0.907 to 0.952.

All reported outer loadings exceeded 0.70, providing evidence of indicator reliability and supporting convergent validity. Nevertheless, the overall adequacy of the measurement model also depends on its specification, internal consistency, and discriminant validity.

The outer weight values are used to evaluate the relative contribution of each indicator in forming its respective latent construct, particularly in formative measurement models.

Table 3. Outer Weight Values

Variable	Indicator	Outer Weight
Digital Capability (M)	M1	0.302
	M2	0.098
	M3	0.329
	M4	0.352
Entrepreneur University (ξ_1)	X1	0.252
	X2	0.277
	X3	0.278
	X4	0.269
Generation Z Mentoring (ξ_2)	X5	0.272
	X6	0.292
	X7	0.271
	X8	0.270
Product Differentiation (ξ_3)	X9	0.210
	X10	0.228
	X11	0.209
	X12	0.226
	X13	0.236
Managerial Competence (η_1)	Y1	0.223
	Y2	0.209
	Y3	0.232
	Y4	0.218

MSME Success (η_2)	Y5	0.211
	Y6	0.210
	Y7	0.215
	Y8	0.217
	Y9	0.217
	Y10	0.214

Source: Processed data using Smart-PLS 4.0 (2025)

As presented in Table 3, the outer weight values range from 0.098 to 0.352, indicating varying levels of contribution among indicators. For the Digital Capability construct, M4 shows the highest contribution (0.352), followed by M3 (0.329) and M1 (0.302), suggesting that these indicators play a dominant role in shaping the construct. In contrast, M2 exhibits a relatively low weight (0.098), indicating a weaker contribution.

For Entrepreneur University and Generation Z Mentoring, the outer weight values are relatively balanced, indicating that all indicators contribute proportionally to their respective constructs. Similarly, Product Differentiation, Managerial Competence, and MSME Success show consistent outer weight values across indicators, suggesting that no single indicator dominates the construct formation.

Overall, although some indicators have lower outer weight values, they are retained in the model due to their theoretical relevance. In formative measurement models, indicators with lower weights may still be acceptable as long as they contribute conceptually to the construct and do not introduce multicollinearity issues.

The reliability and convergent validity of the constructs were assessed using Cronbach's alpha, composite reliability (ρ_a and ρ_c), and average variance extracted (AVE), following the recommended criteria in PLS-SEM (Sarstedt et al., 2019).

Table 4. Reliability and Convergent Validity

Variable	Cronbach's Alpha	Composite Reliability (ρ_a)	Composite Reliability (ρ_c)	AVE
Digital Capability	0.941	0.981	0.956	0.845
Entrepreneur University	0.946	0.948	0.961	0.862
Generation Z Mentoring	0.926	0.927	0.947	0.818
MSME Success	0.962	0.962	0.971	0.869
Managerial Competence	0.951	0.952	0.962	0.836
Product Differentiation	0.943	0.944	0.956	0.814

Source: Processed data using Smart-PLS 4.0 (2025)

As presented in Table 4, all constructs demonstrate strong internal consistency and reliability. Cronbach's alpha values range from 0.926 to 0.962, while composite reliability (ρ_c) values range from 0.947 to 0.971. These values exceed the recommended threshold of 0.70, indicating that all constructs are highly reliable.

Furthermore, the AVE values for all constructs range from 0.814 to 0.869, exceeding the minimum requirement of 0.50. This indicates that each construct explains a substantial proportion of variance in its indicators, confirming adequate convergent validity.

Overall, these results confirm that all constructs meet the criteria for reliability and convergent validity, and therefore, the measurement model is suitable for further structural model analysis.

Discriminant validity in this study is assessed using the Fornell-Larcker criterion, which requires that the square root of the Average Variance Extracted (AVE) for each construct exceeds its correlations with other constructs.

Table 5. Discriminant Validity (Fornell-Larcker Criterion)

Variable	Digital Capability	Entrepreneur University	Generation Z Mentoring	MSME Success	Managerial Competence	Product Differentiation
Digital Capability	0.919					
Entrepreneur University	0.095	0.928				
Generation Z Mentoring	0.079	0.916	0.905			
MSME Success	0.086	0.865	0.862	0.932		
Managerial Competence	0.057	0.886	0.906	0.894	0.914	
Product Differentiation	0.027	0.835	0.888	0.892	0.906	0.902

Source: Processed data using SmartPLS 4.0 (2025)

As shown in Table 5, all diagonal values representing the square root of AVE are higher than the corresponding inter-construct correlations. For instance, Digital Capability (0.919), Entrepreneur University (0.928), Generation Z Mentoring (0.905), MSME Success (0.932), Managerial Competence (0.914), and Product Differentiation (0.902) each demonstrate higher values compared to their correlations with other variables.

Although some constructs show relatively high correlations such as between Managerial Competence and Product Differentiation, and between Generation Z Mentoring and Entrepreneur University the diagonal values remain higher, indicating that each construct is empirically distinct.

The reported Fornell–Larcker results provide preliminary evidence of discriminant validity. However, several inter-construct correlations are high, warranting further assessment using the heterotrait–monotrait ratio (HTMT). Multicollinearity should be evaluated separately using variance inflation factors (VIF).

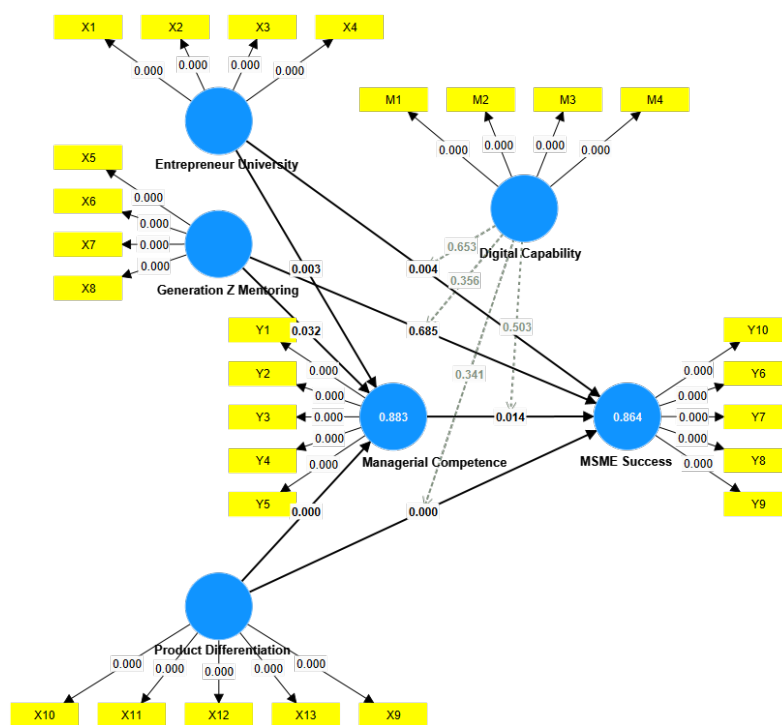


Figure 2. Inner Model

The structural model evaluation aims to examine the relationships among latent variables and to test the proposed hypotheses using path coefficients and t-statistics obtained through bootstrapping. A relationship is considered statistically significant when the t-value exceeds 1.96 at a 5% significance level (Sarstedt et al., 2019).

Table 6. Direct Effect, Indirect Effect, and Total Effect

		Direct Effect	Indirect Effect	Total Effect
Entrepreneur University → Managerial Competence	Path Coefficient	0,288		0,288
	t-value	2,976		2,976
Generation Z Mentoring → Managerial Competence	Path Coefficient	0,240		0,240
	t-value	2,158		2,158
Product Differentiation → Managerial Competence	Path Coefficient	0,453		0,453
	t-value	5,812		5,812
Entrepreneur University → Managerial Competence → MSME Success	Path Coefficient	0,292	0,078	0,370
	t-value	2,920	1,838	4,113
Generation Z Mentoring → Managerial Competence → MSME Success	Path Coefficient	-0,048	0,065	0,017
	t-value	0,406	1,640	0,144
Product Differentiation → Managerial Competence → MSME Success	Path Coefficient	0,444	0,122	0,566
	t-value	4,486	2,230	7,310
Managerial Competence → MSME Success	Path Coefficient	0,270		0,270
	t-value	2,467		2,467
Digital Capability → MSME Success	Path Coefficient	0,056		0,056
	t-value	0,037		0,037
Digital Capability x Entrepreneur University → MSME Success	Path Coefficient	0,055		0,055
	t-value	0,450		0,450
Digital Capability x Generation Z Mentoring → MSME Success	Path Coefficient	0,106		0,106
	t-value	0,924		0,924
Digital Capability x Product Differentiation → MSME Success	Path Coefficient	-0,113		-0,113
	t-value	0,953		0,953
Digital Capability x Managerial Competence → MSME Success	Path Coefficient	-0,099		-0,099
	t-value	0,670		0,670

Source: Processed data using Smart-PLS 4.0 (2025)

The results show that Entrepreneur University ($\beta = 0.288$; $t = 2.976$) and Generation Z Mentoring ($\beta = 0.240$; $t = 2.158$) have a positive and significant effect on Managerial Competence, indicating that institutional support and mentoring activities enhance managerial capabilities of MSME actors. Product Differentiation has the strongest effect ($\beta = 0.453$; $t = 5.812$), suggesting that innovation and product uniqueness require and strengthen managerial skills (Guerrero et al., 2016; Porter, 2008).

Regarding MSME Success, Entrepreneur University has a significant total effect ($\beta = 0.370$; $t = 4.113$), although its indirect effect through Managerial Competence is not significant, indicating a more direct influence. In contrast, Generation Z Mentoring does not significantly affect MSME Success ($\beta = 0.017$; $t = 0.144$), suggesting that knowledge transfer does not automatically translate into performance outcomes.

Product Differentiation shows the strongest impact on MSME Success ($\beta = 0.566$; $t = 7.310$), with a significant indirect effect ($\beta = 0.122$; $t = 2.230$), indicating partial mediation through Managerial Competence. Additionally, Managerial Competence significantly affects

MSME Success ($\beta = 0.270$; $t = 2.467$), supporting the Resource-Based View (Barney, 1991; Teece, 2018).

Digital Capability did not demonstrate a statistically significant direct relationship with MSME Success, and none of the tested interaction effects was statistically significant. These findings indicate that the proposed relationships were not supported in the estimated model. Further investigation is needed to determine whether differences in digital adoption, implementation quality, or organizational context explain these results (Warner & Wäger, 2019).

Overall, MSME success is primarily driven by managerial competence and product differentiation, while digital capability plays a limited role in this context.

In addition to hypothesis testing, the structural model was further evaluated using effect size (f^2), predictive relevance (Q^2), and adjusted coefficient of determination (Adjusted R^2). These measures provide deeper insights into the explanatory and predictive power of the model (Sarstedt et al., 2019).

Table 7. F-Square, Q-Square, and Adjusted R-Square

	f-square		Q-Square	Adj R-Square	
	Managerial Competence	MSME Success		Managerial Competence	MSME Success
Entrepreneur University	0,113	0,088	0,000		
Generation Z Mentoring	0,054	0,002	0,000		
Product Differentiation	0,364	0,210	0,000		
Managerial Competence		0,061	0,728		
Digital Capability		0,020	0,000		
MSME Success			0,735		
Digital Capability x Generation Z Mentoring		0,007		0,881	0,859
Digital Capability x Entrepreneur University		0,002			
Digital Capability x Product Differentiation		0,010			
Digital Capability x Managerial Competence		0,005			

Source: Processed data using SmartPLS 4.0 (2025)

The effect size (f^2) is used to assess the contribution of each exogenous variable to endogenous variables. Based on Cohen (1988), the results show that Product Differentiation has a large effect on Managerial Competence ($f^2 = 0.364$), making it the most influential factor. In contrast, Entrepreneur University ($f^2 = 0.113$) and Generation Z Mentoring ($f^2 = 0.054$) have small to moderate effects.

For MSME Success, Product Differentiation also shows the strongest effect ($f^2 = 0.210$), followed by Entrepreneur University ($f^2 = 0.088$) and Managerial Competence ($f^2 = 0.061$), while Generation Z Mentoring ($f^2 = 0.002$) and Digital Capability ($f^2 = 0.020$) exhibit negligible effects. Similarly, all moderating effects of Digital Capability are negligible ($f^2 = 0.002$ – 0.010), confirming its limited role.

Predictive relevance (Q^2) results show values of 0.728 for Managerial Competence and 0.735 for MSME Success, indicating strong predictive capability (Hair et al., 2019). In addition, the adjusted R^2 values are 0.881 for Managerial Competence and 0.859 for MSME Success, reflecting substantial explanatory power. Overall, the model demonstrates strong predictive and explanatory capability. However, Product Differentiation emerges as the most dominant factor, while Digital Capability shows a minimal role, indicating that strategic differentiation and managerial competence are more critical in driving MSME performance.

This study evaluates the structural relationships through three analytical frameworks, namely the direct effect model, the mediation model, and the moderation model, to provide a comprehensive understanding of MSME success.

The Effect of Entrepreneur University, Generation Z Mentoring, and Product Differentiation on Managerial Competence

The findings indicate that Entrepreneur University, Generation Z Mentoring, and Product Differentiation have positive and significant effects on managerial competence. This demonstrates that both external support and strategic orientation play a crucial role in enhancing the managerial capabilities of MSME actors.

Entrepreneur University contributes through training, mentoring, and knowledge transfer, supporting the concept of entrepreneurial universities (Etzkowitz, 2003; Guerrero et al., 2016). Similarly, Generation Z Mentoring enhances managerial competence through digital knowledge transfer and adaptive practices, consistent with prior studies (Chillakuri, 2020; Priporas et al., 2017). Among these variables, Product Differentiation shows the strongest effect, indicating that efforts to create unique and innovative products require strong managerial capabilities, as emphasized by (Porter, 2008).

The Effect of Entrepreneur University, Generation Z Mentoring, and Product Differentiation on MSME Success

The results show that Product Differentiation and Entrepreneur University have significant positive effects on MSME success, while Generation Z Mentoring does not have a significant direct effect. Product Differentiation emerges as the most dominant factor, highlighting the importance of innovation and uniqueness in achieving competitive advantage.

Entrepreneur University also directly influences MSME success, suggesting that institutional support can produce immediate performance outcomes. In contrast, the non-significant effect of Generation Z Mentoring indicates that knowledge transfer alone is insufficient without effective implementation in business operations.

The Effect of Managerial Competence on MSME Success

Managerial competence has a positive and significant effect on MSME success, confirming its role as a key internal capability. This finding supports the Resource-Based View (RBV), which emphasizes that internal capabilities are critical determinants of firm performance (Barney, 1991; Teece, 2018). MSMEs with strong managerial competence are better able to allocate resources, make strategic decisions, and adapt to market changes.

The Role of Managerial Competence as a Mediating Variable

Beyond the direct effects, managerial competence plays a mediating role in the relationship between the independent variables and MSME success. The results show that managerial competence significantly mediates the relationship between Product Differentiation and MSME success, indicating that differentiation strategies require strong managerial capability to be effectively translated into performance outcomes.

However, managerial competence does not significantly mediate the effects of Entrepreneur University and Generation Z Mentoring on MSME success. The indirect effects of Entrepreneur University and Generation Z Mentoring through Managerial Competence were not statistically significant. Therefore, the findings do not provide sufficient evidence that Managerial Competence mediates these relationships in the estimated model.

The Role of Digital Capability in MSME Success

The findings reveal that Digital Capability does not have a significant direct effect on MSME success and does not moderate the relationship between the independent variables and

MSME success. This indicates that digital capability has not yet been effectively utilized by MSMEs and remains at a basic level of adoption.

This result contrasts with prior studies that emphasize the importance of digital capability in enhancing firm performance (Teece, 2018; Warner & Wäger, 2019). One possible explanation is that MSMEs are still in the early stages of digital transformation, where digital tools are primarily used for operational purposes rather than strategic integration.

From the perspective of the Resource-Based View (RBV), digital capability can be considered a complementary resource rather than a primary driver of performance. Without strong managerial competence, digital capability cannot be effectively leveraged to create value. Therefore, digital capability alone is insufficient to improve MSME performance.

Overall, these findings highlight that MSME success is primarily driven by internal capabilities, particularly managerial competence, and strategic orientation through product differentiation, while digital capability plays a limited role in this context.

CONCLUSION

This study examines the influence of Entrepreneur University, Generation Z Mentoring, and Product Differentiation on MSME Success through Managerial Competence, with Digital Capability as a moderating variable. The findings reveal that Entrepreneur University, Generation Z Mentoring, and Product Differentiation significantly enhance managerial competence. Furthermore, managerial competence has a positive and significant effect on MSME success, confirming its role as a key mechanism in translating external support and strategic initiatives into improved business performance. Among the independent variables, Product Differentiation emerges as the most dominant factor influencing both managerial competence and MSME success.

However, Digital Capability does not have a significant direct effect on MSME success and does not moderate the relationship between managerial competence and MSME success. This indicates that digital capability has not yet been effectively utilized by MSMEs and remains at a basic level of adoption, limiting its contribution to business performance.

This study contributes to the development of the Resource-Based View (RBV) by emphasizing the central role of internal capabilities, particularly managerial competence, in determining MSME performance. It also provides empirical evidence that digital capability does not automatically enhance performance, highlighting its role as a complementary rather than a primary strategic resource in the MSME context.

The findings suggest that MSME practitioners should prioritize strengthening managerial competence through training in planning, decision-making, and resource management. Universities and policymakers should focus on developing structured mentoring programs and fostering collaboration to enhance MSME capabilities. In addition, MSMEs should not rely solely on digital adoption but must integrate digital tools with strong managerial practices to achieve optimal performance. Efforts to improve product differentiation through innovation and value creation should also be prioritized to enhance competitiveness.

REFERENCE

- Aimah, S. (2024). Entrepreneur University: Challenges and Opportunities. *International Conference on Humanity Education and Sosial*, 3(1), 1–10. <https://proceedingsiches.com/index.php/ojs/article/view/135>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Chillakuri, B. (2020). Understanding Generation Z expectations for effective onboarding. *Journal of Organizational Change Management*, 33(7), 1277–1296. <https://doi.org/10.1108/JOCM-02-2020-0058>

- Csobanka, Z. E. (2016). The Z Generation. *Acta Technologica Dubnicae*, 6(2), 63–76. <https://doi.org/10.1515/atd-2016-0012>
- Etzkowitz, H. (2003). Research groups as ‘quasi-firms’: the invention of the entrepreneurial university. *Research Policy*, 32(1), 109–121. [https://doi.org/10.1016/S0048-7333\(02\)00009-4](https://doi.org/10.1016/S0048-7333(02)00009-4)
- Gibb, A. (2002). Creating Conducive Environments for Learning and Entrepreneurship. *Industry and Higher Education*, 16(3), 135–148. <https://doi.org/10.5367/000000002101296234>
- Guerrero, M., Urbano, D., Fayolle, A., Klofsten, M., & Mian, S. (2016). Entrepreneurial universities: emerging models in the new social and economic landscape. *Small Business Economics*, 47(3), 551–563. <https://doi.org/10.1007/s11187-016-9755-4>
- Gyamerah, S., Afshari, L., & Asante, D. (2025). Digital transformation in the SME context: The nexus between leadership, digital capabilities and digital strategy. *International Small Business Journal: Researching Entrepreneurship*, 43(3), 303–328. <https://doi.org/10.1177/02662426251314108>
- Hasibuan, M. Z., Ramon, H., Samio, S., Nurjannah, N., & Rijal, R. (2025). The influence of Sharia implementation, financing access, and managerial capacity on MSME performance in Medan City, Indonesia. *Journal of Islamic Economics Lariba*, 12(1), 73–104. <https://doi.org/10.20885/jielariba.vol12.iss1.art3>
- Herman, H., & Suyono, S. (2024). The Role of Managerial Ability And Product Differentiation on The Performance of MSMEs in Batam City. *Jurnal Apresiasi Ekonomi*, 12(3), 532–538. <https://doi.org/10.31846/jae.v12i3.840>
- Kim, J., & Jin, W. (2024). Impact of Digital Capabilities on Entrepreneurial Performance in SMEs. *Journal of Innovation and Knowledge*, 9(4), 1. <https://doi.org/10.1016/j.jik.2024.100609>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson India Education Services.
- Kusumawardani, N., Sukmasari, D., Habsary, D., & Sarumpaet, S. (2022). Pendampingan Kemitraan UMKM Go Digital Bagi New Entrepreneur Make-Up Artist Di Desa Way Hui. *Journal of Social Sciences and Technology for Community Service (JSSTCS)*, 3(2), 311. <https://doi.org/10.33365/jsstcs.v3i2.2236>
- Pahlevi, R. (2025). The Influence of Managerial Competence on the Success of Micro, Small, and Medium Enterprises (MSMEs). *American Journal of Economic and Management Business (AJEMB)*, 4(1), 7–13. <https://doi.org/10.58631/ajemb.v4i1.157>
- Porter, M. E. (2008). Competitive Advantage: Creating and Sustaining Superior Performance. In *The Free* (Number 1). Simon and Schuster.
- Priporas, C.-V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers’ expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374–381. <https://doi.org/10.1016/j.chb.2017.01.058>
- Rahayu, R. A., & Sudarmiatin. (2025). Competitive Advantage of SMEs through Differentiation and Digitalization. *International Journal of Economics and Management Sciences*, 2(2), 185–188. <https://doi.org/10.61132/ijems.v2i2.710>
- Rohmatiah, A., Mutmainah, M., & Wildaniyati, A. (2025). Peran Entrepreneur University dalam Mendongkrak UMKM Kabupaten Magetan melalui Generasi Z. *Jurnal Samudra Ekonomi Dan Bisnis*, 16(1), 95–105. <https://doi.org/10.33059/jseb.v16i1.10803>
- Sarstedt, M., Hair, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to Specify, Estimate, and Validate Higher-Order Constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>

- Sudirjo, F., Zaini, Moh., Rahmanto, B. T., & Juminawati, S. (2025). The Influence of Managerial Competence, Innovation, and Market Orientation on the Performance of Micro, Small and Medium Enterprises (MSMEs). *West Science Journal Economic and Entrepreneurship*, 3(02), 268–278. <https://doi.org/10.58812/wsjee.v3i02.1898>
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. <https://doi.org/10.1016/j.lrp.2017.06.007>
- Van Hoang, D., Thi Hien, N., Van Thang, H., Nguyen Truc Phuong, P., & Thi-Thuy Duong, T. (2025). Digital Capabilities and Sustainable Competitive Advantages: The Case of Emerging Market Manufacturing SMEs. *Sage Open*, 15(2). <https://doi.org/10.1177/21582440251329967>
- Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349. <https://doi.org/10.1016/j.lrp.2018.12.001>
- Widiastini, N. M. A., Arsa, I. K. S., Syah, A. M., & Hajarrahmah, D. (2023). How do Micro, Small, and Medium Enterprises (MSMES) in Bali Survive the Pandemic? a Qualitative Study in Buleleng, Tabanan, Gianyar, and Denpasar. *International Journal of Professional Business Review*, 8(3), e0829. <https://doi.org/10.26668/businessreview/2023.v8i3.829>