

Linking Entrepreneurial Knowledge to Business Performance through Competence

Ce Gunawan*¹, Galih Raspati²

¹Business Administration, Faculty of Economics and Business, Universitas Sains Indonesia, Indonesia

²Management, Faculty of Economics and Business, Universitas Sains Indonesia, Indonesia

*e-mail: ce.gunawan@lecturer.sains.ac.id¹

(Received: 12.05.2026; Revised: 27.07.2026; Accepted: 31.07.2026)

ABSTRACT

The food and beverage (F&B) sector occupies a vital position within the economic framework of Indonesia, significantly driving employment generation, value-added output, and regional economic progress. Anchored in the Resource-Based View (RBV) framework, this research investigates how entrepreneurial knowledge functioning as an intangible resource influences business performance via entrepreneurial competence acting as a capability mechanism, focusing specifically on F&B MSMEs located in West Java. Employing a quantitative associative design, the study utilizes Structural Equation Modeling-Partial Least Squares (SEM-PLS). Data were gathered through structured questionnaires administered to 110 F&B MSME owner-managers in West Java using purposive sampling. The empirical results reveal that entrepreneurial knowledge exerts a positive and statistically significant impact on both entrepreneurial competence and business performance. Furthermore, entrepreneurial competence positively and significantly influences business performance while also serving as a robust mediating variable between entrepreneurial knowledge and business outcomes. The structural model accounts for 9.6% of the variance in entrepreneurial competence and 46.9% of the variance in business performance, with positive Q² values verifying acceptable predictive relevance. Theoretically, this study enriches RBV literature by illustrating the knowledge, competence, and performance mechanism within regional F&B markets. Practically, the insights recommend that support programs merge knowledge enhancement with competency oriented training, digital literacy upgrades, and targeted business assistance.

Keywords: Business Performance, Entrepreneurial Competence , Entrepreneurial Knowledge

1. INTRODUCTION

The food and beverage (F&B) industry is one of the most strategic sectors in Indonesia's economic structure because of its substantial contribution to employment creation, value-added production, and the development of micro, small, and medium enterprises (MSMEs) (Tambunan, 2019). Within the national manufacturing sector, the F&B industry has shown relatively stable growth despite increasing market uncertainty, digital transformation, and shifts in consumer behaviour (Najib et al., 2011). These changes have intensified competition among MSMEs and require business actors to strengthen their capacity for innovation, market responsiveness, digital adaptation, and managerial effectiveness (Gunawan, 2023; Gunawan & Wiyata, 2024). For MSMEs, particularly those operating in the F&B sector, business sustainability is no longer determined merely by access to financial capital, but also by the ability of entrepreneurs to develop knowledge-based resources and transform them into practical business capabilities.

West Java provides a highly relevant context for examining this issue. As one of Indonesia's major economic regions with a large concentration of MSMEs, West Java has strong potential in the development of local food and beverage businesses. The province benefits from a large consumer market, diverse culinary traditions, proximity to urban economic centres, and increasing adoption of digital platforms by consumers and entrepreneurs. However, F&B MSMEs in West Java also face persistent challenges, including uneven digital literacy, limited managerial capability, low product innovation, weak branding capacity, limited access to broader markets,

and intense competition from both local and national brands (Kusyana et al., 2025). In addition, many F&B MSMEs still depend on informal learning, personal experience, family-based business practices, and traditional trust-based selling. Although these socio-cultural characteristics can strengthen customer relationships, they may also limit the ability of entrepreneurs to respond systematically to changes in consumer preferences, digital marketing practices, and competitive market dynamics (Ferreira et al., 2019).

In this context, entrepreneurial knowledge becomes a critical intangible resource for MSME development. Entrepreneurial knowledge refers to the understanding possessed by entrepreneurs regarding business management, marketing, financial management, market opportunities, and business innovation (Muniady et al., 2015). From a knowledge-based perspective, such knowledge enables entrepreneurs to interpret market information, identify opportunities, improve decision-making, and develop more adaptive business strategies (Ferreira et al., 2019; Nguyen et al., 2022). However, knowledge alone may not automatically improve business performance. In many MSMEs, entrepreneurs may possess basic business knowledge but remain unable to translate that knowledge into effective strategic action, innovation, customer relationship management, or operational improvement. This indicates the need to examine the mechanism through which entrepreneurial knowledge is converted into business performance.

Entrepreneurial competence provides a potential explanation for this mechanism. Entrepreneurial competence reflects the combination of knowledge, skills, abilities, behaviours, and personal characteristics that enable entrepreneurs to manage and grow their businesses effectively (Ahmad et al., 2010). It includes strategic competence, opportunity competence, leadership competence, learning competence, commitment competence, and relationship competence (Sakib et al., 2022). In the F&B MSME sector, entrepreneurial competence is particularly important because entrepreneurs must continuously respond to changes in consumer taste, product trends, pricing strategies, service quality, digital promotion, and supply chain conditions. Entrepreneurs with stronger competence are more likely to transform their knowledge into concrete business practices that improve sales growth, customer loyalty, operational effectiveness, product quality, and competitiveness.

This study is grounded in the Resource-Based View (RBV), which argues that valuable, rare, inimitable, and non-substitutable resources can become sources of sustainable competitive advantage (Barney, 1991). Within this perspective, entrepreneurial knowledge can be viewed as an intangible resource, while entrepreneurial competence can be understood as a capability that enables entrepreneurs to mobilize and apply such resources to achieve superior business performance. The RBV is also closely related to the dynamic capability perspective, which emphasizes the ability of firms to integrate, build, and reconfigure internal and external resources in response to changing environments (Teece, 2018). Therefore, in the context of F&B MSMEs, entrepreneurial competence may function as a transforming capability that converts knowledge-based resources into measurable business outcomes.

Previous studies have generally confirmed the importance of entrepreneurial knowledge and entrepreneurial competence for MSME performance. Several studies found that entrepreneurial knowledge contributes to business success by improving managerial understanding, innovation orientation, and market responsiveness (Muniady et al., 2015; Soomro et al., 2025). Other studies showed that entrepreneurial competence has a positive effect on MSME performance because competent entrepreneurs are better able to formulate strategies, identify opportunities, and build business networks (Ahmad et al., 2010; Sakib et al., 2022). Nevertheless, prior research has mostly examined direct relationships among these variables. Studies that explain how entrepreneurial knowledge affects business performance through entrepreneurial competence remain relatively limited, particularly in the context of F&B MSMEs in West Java.

This limitation reveals an important research gap. Direct-effect models tend to assume that entrepreneurial knowledge can directly enhance business performance. However, such an

assumption may overlook the fact that knowledge must first be internalized, practiced, and transformed into entrepreneurial competence before it can generate performance outcomes. Moreover, several studies suggest that knowledge-based resources do not always produce superior performance when entrepreneurs lack implementation capability, innovation capacity, or contextual support (Esubalew & Raghurama, 2020; Ismail, 2022). Therefore, this study argues that entrepreneurial competence is not merely an additional predictor of business performance but a mediating mechanism that explains the transformation of entrepreneurial knowledge into improved business outcomes.

Based on these empirical and theoretical considerations, this study aims to analyze the influence of entrepreneurial knowledge on business performance through entrepreneurial competence among F&B MSMEs in West Java. Specifically, this study examines whether entrepreneurial knowledge improves entrepreneurial competence, whether entrepreneurial competence enhances business performance, and whether entrepreneurial competence mediates the relationship between entrepreneurial knowledge and business performance. The novelty of this study lies in the development of a mediation model that integrates entrepreneurial knowledge, entrepreneurial competence, and business performance within the RBV framework in the specific context of West Java's F&B MSMEs.

1.1 Hypotheses Development and Conceptual Framework

Entrepreneurial knowledge represents an important intangible resource that enables entrepreneurs to understand business management, marketing, finance, market opportunities, and innovation. From the Resource-Based View perspective, firm-specific resources can contribute to competitive advantage when they are valuable, rare, difficult to imitate, and effectively utilized in business activities (Barney, 1991). In addition, the knowledge-based view argues that knowledge is one of the most strategically important resources because it supports decision-making, coordination, and capability development within firms (Grant, 1996). In the context of F&B MSMEs, entrepreneurs with stronger entrepreneurial knowledge are more likely to understand market changes, identify customer needs, manage financial and operational decisions, and develop adaptive business practices. However, such knowledge must be internalized and translated into entrepreneurial capabilities before it can generate effective business outcomes. Therefore, entrepreneurial knowledge is expected to strengthen entrepreneurial competence.

H1: Entrepreneurial Knowledge has a positive effect on Entrepreneurial Competence.

Entrepreneurial competence reflects the ability of entrepreneurs to apply knowledge, skills, attitudes, and behaviours in managing and developing their businesses. Entrepreneurial competencies are considered important for SME competitiveness because they enable owner-managers to identify opportunities, organize resources, formulate strategies, build relationships, and respond to environmental changes (Man et al., 2002; Mitchelmore & Rowley, 2010). Empirical evidence also shows that entrepreneurial competencies are strong predictors of business success among SMEs, particularly in dynamic and challenging business environments (Ahmad et al., 2010). Recent evidence from a systematic literature review demonstrates that entrepreneurial competence is a multidimensional construct encompassing entrepreneurial knowledge, skills, attitudes, behavioural attributes, and strategic capabilities (Mai & Thai, 2025; Moshi & Matotola, 2023). These competencies enable entrepreneurs to recognize opportunities, mobilize resources, adapt to changing environments, and ultimately improve business outcomes. In the F&B MSME sector, these competencies are especially relevant because entrepreneurs must continuously respond to changing consumer preferences, product innovation demands, pricing competition, digital promotion challenges, and service-quality expectations. Therefore, entrepreneurial competence is expected to improve business performance.

H2: Entrepreneurial Competence has a positive effect on Business Performance.

Entrepreneurial knowledge may also directly influence business performance. Entrepreneurs who possess stronger knowledge of business management, marketing, finance, market opportunities, and innovation are better equipped to make informed decisions and improve sales, profitability, operational effectiveness, customer loyalty, and competitiveness. Previous studies on micro and small enterprises have shown that entrepreneurial knowledge, skills, and competencies contribute to enterprise performance by improving entrepreneurs' ability to manage resources and respond to market conditions (Al Mamun et al., 2019; Soomro et al., 2025). In this sense, entrepreneurial knowledge functions as a strategic intangible resource that supports the achievement of superior business outcomes. Therefore, entrepreneurial knowledge is expected to have a direct positive effect on business performance.

H3: Entrepreneurial Knowledge has a positive effect on Business Performance.

Although entrepreneurial knowledge can directly support business performance, knowledge alone may not automatically produce superior outcomes. Entrepreneurs need competence to transform knowledge into strategic actions, innovation practices, relationship building, and operational improvement. This argument is consistent with the dynamic capability perspective, which emphasizes that firms need capabilities to integrate, build, and reconfigure resources in response to changing environments (Teece, 2018). In the MSME context, entrepreneurial competence can therefore function as a capability mechanism that converts knowledge-based resources into measurable performance outcomes. Accordingly, this study proposes that entrepreneurial competence mediates the relationship between entrepreneurial knowledge and business performance. According to the knowledge-based view, entrepreneurial knowledge represents a valuable strategic resource; however, its contribution to firm performance depends on the firm's capability to integrate, apply, and transform that knowledge into productive entrepreneurial actions. Recent evidence indicates that knowledge-based capabilities serve as an important mechanism linking knowledge resources with superior firm performance (Hernández-Linares et al., 2024)

H4: Entrepreneurial Competence mediates the effect of Entrepreneurial Knowledge on Business Performance.

Based on these theoretical arguments, this study develops a conceptual framework that links Entrepreneurial Knowledge, Entrepreneurial Competence, and Business Performance. Entrepreneurial Knowledge is positioned as an intangible resource, Entrepreneurial Competence as a capability mechanism, and Business Performance as the outcome of knowledge utilization and competence development. The conceptual framework is presented in Figure 1.



Figure 1. Conceptual Framework

2. METHOD

2.1 Research Design

To investigate the causal dynamics linking entrepreneurial knowledge, entrepreneurial competence, and business performance, this research adopted a quantitative associative design.

A quantitative methodology was selected as it best suits the objective of statistically evaluating direct and indirect paths among latent variables derived from survey data.

Data analysis was conducted by applying Structural Equation Modeling-Partial Least Squares (SEM-PLS). SEM-PLS was selected because it is suitable for examining complex relationships among latent constructs, testing mediation effects, and handling predictive-oriented models with relatively small to medium sample sizes (Hair et al., 2021; Sarstedt et al., 2022). Both the measurement model and the structural model were evaluated using SEM-PLS in this research

2.2 Research Population and Sample

The research population focused on food and beverage MSMEs carrying out business operations within the region of West Java, Indonesia. The selection of respondents was restricted to owner-managers of culinary and beverage small enterprises who actively participated in organizational decision-making processes.

The sample consisted of 110 F&B MSMEs selected using purposive sampling. The criteria for sample selection were:

1. MSMEs operating in the food and beverage sector;
2. MSMEs located in West Java;
3. MSMEs that had been operating for at least two years; and
4. MSMEs whose products were marketed locally or more widely.

To evaluate sample size adequacy, an a priori power analysis was conducted via G*Power using the F-test family and a linear multiple regression fixed model focused on R^2 deviation from zero. The analysis parameters comprised a medium effect size $f^2 = 0.15$, a significance level α of 0.05, a statistical power of 0.95, and two predictors representing the maximum count pointing toward an endogenous construct. Findings determined a minimum threshold of 107 respondents, allowing the actual sample size of 110 MSMEs to fulfill and surpass the requirement for SEM-PLS evaluation.

2.3 Data Collection Procedure

Information was gathered utilizing a structured questionnaire distributed to culinary and beverage MSME owners or managers residing in West Java. The primary survey took place between December 2025 and March 2026 across multiple districts and cities within West Java, encompassing Bandung, Bogor, Sukabumi, and Garut. These specific regions were chosen because they function as active clusters for food and beverage MSMEs, offering adequate access to potential participants who fulfilled the established criteria of the study.

Out of 200 distributed questionnaires directly and online approaches, 177 were successfully returned. Following a thorough data screening process, 110 responses qualified as valid for analytical procedures, yielding a usable response rate of 62.14%. Questionnaires were discarded if they contained incomplete answers, duplicates, or failed to satisfy the pre-established criteria for respondents.

Prior to filling out the questionnaire, participants were briefed regarding the research objectives, the voluntary aspect of their involvement, data confidentiality, and their freedom to withdraw at any moment. Because no personal identities were disclosed in the analysis, all collected data remained anonymous and were utilized exclusively for research goals.

2.4 Instrument Development and Validation

Scale items adapted from earlier studies investigating business performance, entrepreneurial knowledge, and entrepreneurial competence formed the basis of the research instrument. To guarantee that the statements were easily understandable and pertinent to small

enterprise owners or managers, these items underwent customization tailored specifically to the food and beverage MSME context in West Java.

The initial questionnaire was reviewed by 3 evaluators consisting of 2 academic experts in entrepreneurship, MSME management, and business research, and 1 MSME practitioner with experience in managing or assisting F&B businesses. The evaluators assessed each item based on clarity, relevance, contextual suitability, and content validity. The criteria used in the assessment were: (1) whether the item clearly represented the intended construct, (2) whether the wording was understandable for MSME respondents, (3) whether the item was relevant to the F&B business context, and (4) whether the item was suitable for a five-point Likert scale.

Based on the expert assessment, 5 items were revised to improve clarity and contextual relevance. The revisions mainly involved simplifying academic wording, adapting business-related terms to the F&B MSME context, and ensuring that each statement referred to actual business practices. No item was removed at this stage because all items were considered conceptually relevant.

The survey questionnaire was drafted in the Indonesian language. Whenever original measurement items originated from English references, they underwent translation into Indonesian followed by back-translation into English. Prior to conducting the pilot test, any inconsistencies identified between the original statements and the back-translated versions were thoroughly addressed and revised.

A preliminary trial involving 30 culinary and beverage MSME owners or managers sharing matching characteristics with the target group while remaining excluded from the ultimate sample—was carried out to appraise readability, statement clarity, consistency of responses, and initial reliability. The outcomes of this preliminary reliability indicated Cronbach's Alpha coefficients of 0.912 for Entrepreneurial Knowledge, 0.909 for Entrepreneurial Competence, and 0.959 for Business Performance, all of which surpassed the standard 0.70 benchmark to demonstrate satisfactory initial reliability. Ultimately, insights gathered from this pilot assessment guided the refinement of unclear phrasing prior to executing the primary data gathering phase.

Table 1. Preliminary reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BP	0.959	0.961	0.966	0.803
EC	0.909	0.913	0.929	0.687
EK	0.912	0.939	0.933	0.737

2.5 Measurement Items

The ultimate questionnaire comprised demographic traits alongside three core constructs: Business Performance, Entrepreneurial Competence, and Entrepreneurial Knowledge. Every item utilized a five-point Likert scale scaling from 1 representing strongly disagree up to 5 representing strongly agree. Furthermore, Table 2 outlines the adaptation details, original references, and specific measurement items.

Table 2. Measurement Items, Sources, and Adaptation

Construct	Code	Indicator	Item wording	Source
Entrepreneurial Knowledge	EK1	Business management knowledge	I have sufficient knowledge to manage my F&B business activities effectively.	Al Mamun et al. (2019)

Entrepreneurial Knowledge	EK2	Marketing knowledge	I understand how to promote and market my F&B products to customers.	(Al Mamun et al., 2019)
Entrepreneurial Knowledge	EK3	Financial knowledge	I understand how to manage business income, costs, and profits.	Al Mamun et al. (2019)
Entrepreneurial Knowledge	EK4	Market opportunity knowledge	I am able to identify new market opportunities for my F&B business.	Al Mamun et al. (2019)
Entrepreneurial Knowledge	EK5	Innovation knowledge	I understand how to develop or improve products, services, or business processes.	Al Mamun et al. (2019)
Entrepreneurial Competence	EC1	Strategic competence	I am able to plan business strategies to achieve business goals.	Ahmad et al. (2010; Man et al., 2002)
Entrepreneurial Competence	EC2	Organisational and leadership competence	I am able to organize business activities and lead people involved in my business.	(Man et al., 2002; Mitchelmore & Rowley, 2010)
Entrepreneurial Competence	EC3	Opportunity competence	I am able to recognize and use business opportunities in the F&B market.	Ahmad et al. (2010; Man et al., 2002)
Entrepreneurial Competence	EC4	Commitment competence	I remain committed to developing my business despite challenges.	(Man et al., 2002)
Entrepreneurial Competence	EC5	Learning competence	I continuously learn from experience, customers, competitors, and business changes.	(Man et al., 2002; Mitchelmore & Rowley, 2010)
Entrepreneurial Competence	EC6	Relationship competence	I am able to build good relationships with customers, suppliers, and business partners.	Ahmad et al. (2010; Man et al., 2002)
Business Performance	BP1	Sales	My business sales have improved during the recent business period.	(Venkatraman & Ramanujam, 1986; Wiklund & Shepherd, 2005)
Business Performance	BP2	Profit	My business profit has improved during the recent business period.	(Wiklund & Shepherd, 2005)
Business Performance	BP3	Market share	My business is able to reach more customers than before.	(Murphy et al., 1996; Venkatraman & Ramanujam, 1986)
Business Performance	BP4	Operational effectiveness	My business operations have become more effective.	(Murphy et al., 1996)
Business Performance	BP5	Competitiveness	My business is able to compete with other similar F&B businesses.	(Venkatraman & Ramanujam, 1986; Wiklund & Shepherd, 2005)
Business Performance	BP6	Customer loyalty	My business has loyal customers who continue to purchase our products.	(Gunawan, 2023; Murphy et al., 1996)
Business Performance	BP7	Product/service quality	The quality of my products or services has improved.	(Murphy et al., 1996; Wiklund & Shepherd, 2005)

2.5 Data Analysis Techniques

Data analysis was conducted using SEM-PLS with the assistance of SmartPLS 4. The analytical process comprised two primary phases: assessing the measurement model and appraising the structural model.

Appraisal of the measurement model involved examining convergent validity, discriminant validity, and construct reliability. To determine convergent validity, researchers relied on Average Variance Extracted (AVE) alongside outer loading values, where acceptable thresholds were set above 0.70 for indicator loadings and greater than 0.50 for AVE. Meanwhile, evaluation of construct reliability utilized Composite Reliability and Cronbach's Alpha, with acceptable reliability designated by values exceeding 0.70.

Evaluation of discriminant validity was performed by applying the Heterotrait-Monotrait Ratio (HTMT), with coefficients remaining under 0.85 or 0.90 to confirm that every construct maintained empirical distinctness from the others. This test was included to ensure that entrepreneurial knowledge, entrepreneurial competence, and business performance were not conceptually or empirically overlapping constructs.

Appraisal of the structural model incorporated path coefficients, t-statistics, p-values, the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and collinearity statistics. Testing for the significance of hypothesized connections was executed via bootstrapping utilizing 5,000 subsamples, where a pathway was deemed statistically significant if its corresponding p-value dropped below 0.05.

Assessment of collinearity relied on the Variance Inflation Factor (VIF), where coefficients staying beneath 3.0 or 5.0 signify that multicollinearity does not pose a major issue. This assessment was important because high correlations among constructs may inflate R^2 values and affect the interpretation of the structural model. (Hair et al., 2019).

2.6 Common Method Bias Assessment

Utilization of self-administered questionnaires gathered from a single source prompted an assessment of common method bias to guarantee that measurement method variance did not heavily impact the findings. Procedural remedies were applied during questionnaire design, including ensuring respondent anonymity, using clear and neutral wording, and separating the measurement items of different constructs.

During the design phase of the questionnaire, procedural remedies were implemented, which involved maintaining respondent anonymity, employing neutral and clear phrasing, and segregating the measurement items across distinct constructs.

2.7 Hypothesis Testing

Hypothesis testing was conducted by examining the relationship between the variables Entrepreneurial Knowledge, Entrepreneurial Competence, and Business Performance. Four hypotheses were tested in this study:

H1: Entrepreneurial Knowledge has a positive effect on Entrepreneurial Competence.

H2: Entrepreneurial Competence has a positive effect on Business Performance.

H3: Entrepreneurial Knowledge has a positive effect on Business Performance.

H4: Entrepreneurial Competence mediates the effect of Entrepreneurial Knowledge on Business Performance.

Each relationship was tested using a path coefficient, t-statistic, and p-value to determine statistical significance. A p-value less than 0.05 indicates a significant relationship between the tested variables (Henseler et al., 2015).

2.7 Research Limitations

Application of a purposive sampling method constitutes a limitation that restricts the generalizability of the findings strictly to food and beverage MSMEs located in West Java. Additionally, the employment of a cross-sectional approach means the research merely captures a single snapshot during data collection rather than investigating longitudinal shifts over time.

3. RESULTS AND DISCUSSION

Measurement Model Assessment

Evaluation of convergent validity focused on outer loading values and the Average Variance Extracted (AVE). The findings demonstrated that every indicator surpassed the recommended 0.70 benchmark with outer loadings stretching between 0.831 and 0.886, confirming satisfactory convergent validity across all measurement items and supporting their retention for subsequent analysis.

Table 3. Outer Loading

Items	Outer loadings
BP1	0,868
BP2	0,878
BP3	0,886
BP4	0,879
BP5	0,875
BP6	0,874
BP7	0,883
EC1	0,847
EC2	0,868
EC3	0,834
EC4	0,836
EC5	0,831
EC6	0,836
EK1	0,877
EK2	0,868
EK3	0,874
EK4	0,856
EK5	0,878

Evaluation of construct reliability and convergent validity relied on Cronbach's Alpha, Composite Reliability (rho_a and rho_c), and AVE. As detailed in Table 4, every Cronbach's Alpha coefficient surpassed 0.90, and Composite Reliability metrics exceeded the 0.70 benchmark, alongside AVE figures greater than 0.50 for all constructs, thereby confirming satisfactory internal consistency and convergent validity.

Table 4. Construct Reliability and Validity

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BP	0,950	0,951	0,959	0,770
EC	0,918	0,920	0,936	0,709

EK	0,920	0,922	0,940	0,758
----	-------	-------	-------	-------

Discriminant Validity

Appraisal of discriminant validity utilized the Heterotrait-Monotrait Ratio (HTMT), with findings indicating that every HTMT coefficient remained under the conservative 0.85 threshold, thereby confirming that each construct maintained empirical distinctness from the others and successfully established discriminant validity.

Table 5. Heterotrait-Monotrait Ratio (HTMT)

Construct Relationship	HTMT
EC ↔ BP	0,379
EK ↔ BP	0,436
EK ↔ EC	0,232

The peak Heterotrait-Monotrait Ratio (HTMT) coefficient reached 0.436 regarding the connection linking Entrepreneurial Knowledge to Business Performance, staying safely under the suggested limit, which demonstrates that the variables evaluated in this research avoided excessive overlap and proved entirely appropriate for subsequent structural model testing.

Common Method Bias and Collinearity Assessment

Integration of procedural remedies such as securing respondent anonymity, employing neutral and clear wording, and separating measurement items across distinct constructs helped mitigate response-pattern bias during questionnaire design.

Statistically, Harman's single-factor test showed that the first factor explained 48.31% of the total variance. Although this value was below the commonly used 50% threshold, it was close to the threshold and therefore should be interpreted cautiously. Accordingly, this study does not claim that common method bias was completely absent. Instead, the result suggests that no single dominant factor accounted for the majority of the variance, while the potential influence of common method bias remains acknowledged as a limitation of the study.

Table 6. Inner Model Collinearity Statistics

Path	VIF
EC → BP	1.106
EK → BP	1.106
EK → EC	1.000

Inner model collinearity was assessed using the Variance Inflation Factor (VIF). The results showed that all inner VIF values were below the recommended threshold of 3.3, indicating that collinearity among predictor constructs was not a serious concern in the structural model. It should be noted that these VIF values were used to assess predictor collinearity in the structural model and were not treated as full-collinearity evidence for common method bias.

Structural Model Assessment

The structural model was evaluated using the coefficient of determination (R^2), effect size (f^2), model fit, and hypothesis testing. The R^2 value for Entrepreneurial Competence was 0.096, indicating that Entrepreneurial Knowledge explained 9.6% of the variance in Entrepreneurial Competence. Meanwhile, the R^2 value for Business Performance was 0.463, indicating that

Entrepreneurial Knowledge and Entrepreneurial Competence jointly explained 46.3% of the variance in Business Performance.

Table 7. R-Square

Endogenous Construct	R²	Adjusted R²
Entrepreneurial Competence	0.096	0.092
Business Performance	0,469	0,463

These R² values are more realistic for cross-sectional MSME survey research and indicate moderate explanatory power for Business Performance. The model explains Business Performance better than Entrepreneurial Competence, suggesting that business performance is influenced by both knowledge-based resources and the ability of entrepreneurs to translate such knowledge into competence.

Effect Size

The effect size was assessed using f^2 to determine the contribution of each exogenous construct to the endogenous constructs. The results showed that Entrepreneurial Knowledge had a medium effect on Business Performance, Entrepreneurial Competence had a medium effect on Business Performance, and Entrepreneurial Knowledge had a small effect on Entrepreneurial Competence.

Table 8. Effect Size

Path	f²	Interpretation
EC → BP	0,158	Medium effect Medium to large
EK → BP	0,268	effect
EK → EC	0,074	Small effect

The largest effect size was found in the relationship between Entrepreneurial Knowledge and Business Performance, indicating that entrepreneurial knowledge plays an important role in explaining business performance. However, the significant effect of Entrepreneurial Competence on Business Performance also supports the argument that competence functions as an important capability in transforming knowledge into performance outcomes.

Model Fit

The model fit was assessed using the Standardized Root Mean Square Residual (SRMR). The results showed that the SRMR value was 0.041 for both the saturated and estimated models. Since this value was below the recommended threshold of 0.08, the model demonstrated an acceptable fit.

Table 9. Model Fit

Fit Index	Saturated Model	Estimated Model
SRMR	0.041	0.041
d_ULS	0,281	0,281
d_G	0,170	0,170
Chi-square	197.651	197.651
NFI	0,934	0,934

The NFI value was 0.934 for both the saturated and estimated models. Although NFI was reported as supplementary fit information, the main interpretation of model fit in this study was based on SRMR because SRMR is commonly used as an approximate model fit criterion in PLS-SEM.

Hypothesis Testing Summary

Testing of the hypotheses was executed via bootstrapping utilizing 5,000 subsamples, with outcomes revealing that every proposed hypothesis achieved empirical support. Specifically, Entrepreneurial Knowledge demonstrated a positive and significant impact on Entrepreneurial Competence, while Entrepreneurial Competence similarly exerted a positive and significant influence on Business Performance. Furthermore, Entrepreneurial Knowledge maintained a positive and significant direct effect on Business Performance, and Entrepreneurial Competence played a significant mediating role in the connection between Entrepreneurial Knowledge and Business Performance.

Table 10. Hypothesis Testing Result

Code	Hypothesis Path	Path Coefficient	t-statistic	p-value	Conclusion
H1	EK → EC	0,310	4.880	< 0.001	Supported
H2	EC → BP	0,366	6.754	< 0.001	Supported
H3	EK → BP	0,476	8.892	< 0.001	Supported
H4	EK → EC → BP	0,113	4.069	< 0.001	Supported

The results indicate that Entrepreneurial Knowledge significantly improves Entrepreneurial Competence among F&B MSME entrepreneurs in West Java. This means that entrepreneurs with stronger knowledge of business management, marketing, finance, market opportunities, and innovation are likely to exhibit enhanced entrepreneurial competence. Moreover, Entrepreneurial Competence exerts a substantial positive influence on Business Performance, suggesting that highly capable business owners are more adept at boosting sales, increasing profitability, streamlining operations, fostering customer loyalty, and elevating overall competitiveness.

The indirect impact of Entrepreneurial Knowledge on Business Performance via Entrepreneurial Competence proved to be statistically significant, yielding a path coefficient of 0.113, a t-statistic of 4.069, and a p-value under 0.001. These results validate that Entrepreneurial Competence functions as a crucial mediating mechanism linking Entrepreneurial Knowledge to Business Performance. Consequently, entrepreneurial knowledge enhances business performance through both direct avenues and indirect pathways by bolstering entrepreneurial competence.

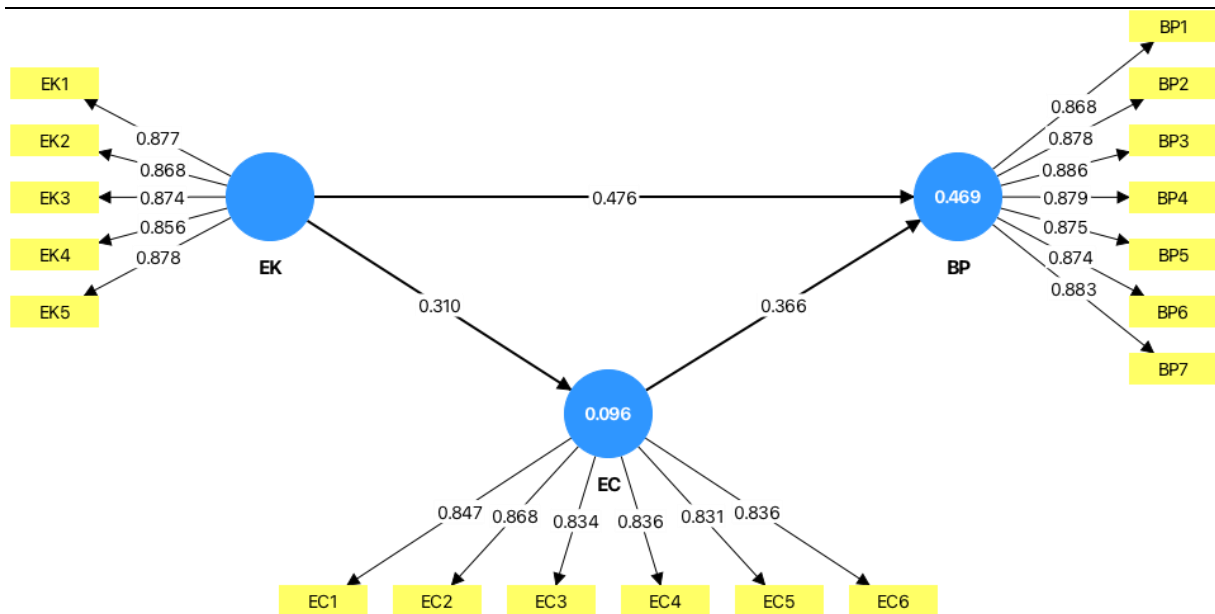


Figure 2. Graphical Output

Predictive Relevance Assessment

Evaluation of predictive relevance was carried out by applying the PLSpredict technique. The findings demonstrated that Q^2 predict figures across all endogenous constructs successfully exceeded zero. In particular, Business Performance recorded a Q^2 predict coefficient of 0.235, whereas Entrepreneurial Competence registered a value of 0.082. Consequently, these outcomes verify that the formulated model possesses adequate predictive relevance for both endogenous variables.

Table 11. PLSpredict Latent Variable Summary

Endogenous Construct	Q^2 predict	RMSE	MAE
Business Performance	0,235	0,569	0,465
Entrepreneurial Competence	0.082	0,670	0,565

The positive Q^2 predict value for Business Performance indicates that the model has acceptable predictive relevance in explaining variations in MSME business performance. Meanwhile, the positive Q^2 predict value for Entrepreneurial Competence shows that Entrepreneurial Knowledge also provides predictive information for explaining entrepreneurial competence. Although the Q^2 predict value for Entrepreneurial Competence is relatively lower than that of Business Performance, both values are above zero, confirming that the model has predictive relevance.

Discussion

The Influence of Entrepreneurial Knowledge on Entrepreneurial Competence

Research results show that entrepreneurial knowledge has a positive and significant influence on entrepreneurial competence among MSMEs in the food and beverage sector in West Java. This finding suggests that increased entrepreneurial knowledge will be followed by increased entrepreneurial competence in managing a business (Muniady et al., 2015). Knowledge of business management, marketing, financial management, business innovation, and market

opportunities contributes to entrepreneurs' ability to make strategic decisions, develop business relationships, and improve adaptability to changes in the business environment (Nguyen et al., 2022). These results answer the first research question and support the first hypothesis, which states that entrepreneurial knowledge influences entrepreneurial competence.

From the Resource-Based View (RBV) perspective, entrepreneurial knowledge is viewed as an intangible resource that has strategic value in enhancing an entrepreneur's internal capacity (Barney, 1991). Knowledge is a form of human capital that enables entrepreneurs to understand business dynamics and develop operational capabilities more effectively (Ferreira et al., 2019). Entrepreneurs with a high level of knowledge tend to be better able to develop strategic competencies, leadership skills, and learning competencies than entrepreneurs who rely solely on practical experience without strengthening knowledge-based capabilities (Kuratko, 2017).

The findings of this study align with previous research, which found that entrepreneurial knowledge significantly contributes to the development of entrepreneurial competence in MSMEs because it helps entrepreneurs improve their analytical and innovative skills in managing their businesses (Muniady et al., 2015). Similar results also indicate that entrepreneurs with a better level of business knowledge tend to have higher adaptability and decision-making skills in facing market competition (Nguyen et al., 2022).

This research demonstrates that developing entrepreneurial competence in MSMEs in the food and beverage sector is inseparable from strengthening entrepreneurial knowledge. In the fast-moving F&B industry, understanding product innovation, digital marketing, and consumer behaviour is essential to help entrepreneurs run competitive businesses.

This finding supports previous studies stating that entrepreneurial knowledge contributes to the development of entrepreneurial competence. However, it also provides a more cautious interpretation of the knowledge-competence relationship. Some entrepreneurs may possess business knowledge but may not automatically develop strong competence if they lack opportunities to apply that knowledge in real business situations. Therefore, the transformation from knowledge into competence requires not only cognitive understanding but also experiential learning, repeated practice, and contextual support.

In the context of F&B MSMEs in West Java, this result is particularly relevant because many entrepreneurs still rely on informal learning, family-based business practices, and experience-based decision-making. Such practices may help maintain local culinary identity and customer trust, but they may also limit systematic managerial learning and innovation capability. Therefore, entrepreneurial knowledge needs to be supported by structured training, mentoring, and practical business assistance to become effective entrepreneurial competence.

The Influence of Entrepreneurial Competence on Business Performance

Research results show that entrepreneurial competence significantly improves SME performance, particularly through strategic, organizing, commitment, and relationship competencies (Adnan & Adnan, 2025). This finding suggests that improving entrepreneurial competence will impact business performance, both financially and non-financially (Bornay-Barrachina et al., 2025). Entrepreneurs with strong strategic, leadership, learning, and business relationship skills tend to be more capable of improving operational effectiveness, product quality, customer loyalty, and business competitiveness (Pratono et al., 2019). These results support the study's second hypothesis.

Theoretically, entrepreneurial competence is a form of dynamic capability that enables entrepreneurs to manage business resources in the face of market changes effectively (Ferreira et al., 2019). Entrepreneurial competence is a crucial factor in increasing business success because competent entrepreneurs are able to innovate, identify business opportunities, and maintain business sustainability amidst increasingly fierce competition (Alnuaimi et al., 2022).

The results of this study are consistent with previous research, which found that entrepreneurial competence significantly influences the performance of MSMEs through entrepreneurs' ability to develop business strategies and improve adaptation to digitalisation (Pratono et al., 2019). Other research also shows that entrepreneurial competence contributes to increased operational effectiveness and customer growth in small and medium enterprises (Lopes et al., 2021).

In the context of F&B MSMEs in West Java, entrepreneurial competence is becoming increasingly important because the food and beverage industry is highly competitive and influenced by rapidly changing consumer preferences. Entrepreneurs who can build innovation, manage customer relationships, and understand market needs will be better able to sustain their businesses than those with lower competence.

The Influence of Entrepreneurial Knowledge on Business Performance

Research results show that entrepreneurial knowledge has a positive and significant impact on the business performance of MSMEs in the food and beverage sector in West Java (Abdulsamad et al., 2025). These findings suggest that entrepreneurs with sound business knowledge are better able to increase sales, profitability, service quality, and business competitiveness (Soomro et al., 2025). Knowledge of marketing, business management, market opportunities, and business innovation enables entrepreneurs to make more informed decisions in responding to dynamic business environments (Rahman, 2026). These results support the study's third hypothesis.

From a knowledge-based perspective, knowledge is viewed as a strategic asset that can create competitive advantage and sustainably improve business performance (Kuratko, 2017). Entrepreneurial knowledge helps entrepreneurs understand market needs, develop business strategies, and enhance business innovation capabilities (Nguyen et al., 2022). In the food and beverage sector, the ability to understand changing consumer trends and effectively implement digital marketing has become a critical factor in improving business performance (Hardiansyah et al., 2024).

This study's findings align with previous research, which found that entrepreneurial knowledge significantly influences MSME business performance, as entrepreneurs with better business knowledge tend to be more innovative and adaptable to market changes (Soomro et al., 2025). Other research also shows that mastering knowledge-based capabilities contributes to increased business management effectiveness and productivity in MSMEs (Rahman, 2026).

This research demonstrates that improving business performance in F&B MSMEs is not solely influenced by financial capital or external business factors, but also by the quality of entrepreneurial knowledge entrepreneurs possess in carrying out their business activities.

This result supports the knowledge-based perspective, which views knowledge as a strategic resource for improving business competitiveness. However, the direct effect of Entrepreneurial Knowledge on Business Performance should not be interpreted as evidence that knowledge automatically guarantees business success. In practice, knowledge contributes to performance when it is relevant, updated, and applicable to business problems faced by entrepreneurs.

Previous studies have generally shown that entrepreneurial knowledge improves MSME performance by strengthening managerial understanding, innovation orientation, and market responsiveness. However, other studies also suggest that knowledge-based resources may produce weak or inconsistent performance effects when they are not supported by implementation capability, innovation capacity, or contextual readiness. The findings of this study contribute to this debate by showing that Entrepreneurial Knowledge has both a direct effect on Business Performance and an indirect effect through Entrepreneurial Competence.

In West Java's F&B MSME context, knowledge related to digital marketing, customer behaviour, financial management, and product innovation is increasingly important. However, uneven digital literacy and differences in digital infrastructure between urban and semi-urban areas may affect how far entrepreneurial knowledge can be converted into business performance. Entrepreneurs located in areas with better access to digital platforms, logistics networks, and online payment systems may benefit more from entrepreneurial knowledge than those operating in areas with weaker digital readiness.

The Mediating Role of Entrepreneurial Competence in the Relationship Between Entrepreneurial Knowledge and Business Performance

Research results show that entrepreneurial competence mediates the influence of entrepreneurial knowledge on the business performance of MSMEs in the food and beverage sector in West Java (Ismail, 2022). This finding suggests that entrepreneurial knowledge does not directly lead to improved business performance if it is not accompanied by the entrepreneur's ability to implement that knowledge into effective business activities (Esubalew & Raghurama, 2020). Entrepreneurial competence serves as a mechanism that bridges the transformation of knowledge into business performance. These results support the fourth hypothesis of the study.

From a RBV perspective, entrepreneurial competence functions as a capability mechanism that enables entrepreneurs to optimally utilize knowledge-based resources to enhance their business's competitive advantage (Barney, 1991). Entrepreneurs who possess advanced knowledge but lack strategic, leadership, and relationship management skills will struggle to translate that knowledge into productive business actions (Alnuaimi et al., 2022).

The findings of this study align with previous research showing that entrepreneurial competence plays a mediating role in the relationship between entrepreneurial knowledge and business performance, as competence is a determining factor in the effectiveness of business strategy implementation (Esubalew & Raghurama, 2020). Other research also shows that entrepreneurs who are able to integrate knowledge with entrepreneurial competence tend to have higher business performance than entrepreneurs who only possess knowledge without strong implementation skills (Sakib et al., 2022).

This study provides a theoretical contribution by strengthening the relationship between entrepreneurial knowledge, entrepreneurial competence, and business performance within the framework of the Resource-Based View and the knowledge-based perspective. Furthermore, this study provides practical contributions to the development of MSMEs in the food and beverage sector through the importance of strengthening entrepreneurial competency-based training programs, improving digital business literacy, developing business innovation, and strengthening entrepreneurs' capabilities in facing modern market competition.

This finding is central to the theoretical contribution of the study. Previous direct-effect models often assume that entrepreneurial knowledge can immediately improve business performance. However, this study shows that the relationship is more complex. Knowledge must be internalized and converted into competence before it can optimally generate performance improvements. Thus, Entrepreneurial Competence functions as a capability mechanism that bridges the gap between what entrepreneurs know and what they can effectively do in managing their businesses.

From the RBV perspective, Entrepreneurial Knowledge represents an intangible resource, while Entrepreneurial Competence represents a capability that enables entrepreneurs to deploy and utilize that resource. This interpretation is also consistent with the dynamic capability perspective, which emphasizes the ability of business actors to adapt, integrate, and reconfigure resources in response to environmental changes. In the case of F&B MSMEs, competence helps entrepreneurs transform knowledge into innovation, customer value, operational improvement, and competitive advantage.

However, the mediation effect should be interpreted as complementary rather than fully substitutive. Since Entrepreneurial Knowledge still has a significant direct effect on Business Performance, competence does not completely replace the role of knowledge. Instead, competence strengthens and channels the effect of knowledge. This suggests that both knowledge development and competence development are necessary for improving MSME performance.

4. CONCLUSIONS AND SUGGESTION

This research investigated the connections among Entrepreneurial Knowledge, Entrepreneurial Competence, and Business Performance within food and beverage MSMEs located in West Java. The findings indicate that Entrepreneurial Knowledge exerts a positive and statistically significant impact on both Entrepreneurial Competence and Business Performance. Furthermore, Entrepreneurial Competence demonstrates a positive and significant influence on Business Performance, while also acting as a significant mediator in the relationship between Entrepreneurial Knowledge and Business Performance.

The main conclusion of this study is that entrepreneurial knowledge improves business performance not only because entrepreneurs understand business management, marketing, finance, market opportunities, and innovation, but because such knowledge can be transformed into entrepreneurial competence. Competence functions as a practical capability that enables entrepreneurs to apply knowledge in strategic decision-making, opportunity recognition, innovation, customer relationship management, and operational improvement. Therefore, the knowledge-competence-performance mechanism provides a more comprehensive explanation than direct-effect models that assume knowledge automatically leads to better business outcomes.

From a theoretical standpoint, this research advances the Resource-Based View and knowledge-based entrepreneurship literature by framing knowledge as an intangible resource and entrepreneurial competence as a capability mechanism responsible for translating knowledge into performance. Consequently, this work reinforces the perspective that micro, small, and medium enterprise (MSME) performance relies not solely on having knowledge-based resources, but crucially on an entrepreneur's capacity to mobilize and execute those resources effectively.

Practically, the findings indicate that MSME development programs should move beyond general entrepreneurship education and focus more on competency-based capacity building. For F&B MSMEs in West Java, this includes strengthening competencies in product innovation, digital marketing, financial planning, customer relationship management, supply chain coordination, food safety, packaging, branding, and market expansion. These specific areas hold vital relevance due to the fact that food and beverage MSMEs function within an intense competitive landscape defined by fast-evolving consumer preferences, digital transactions, and heavy product imitation.

The findings of this study should be interpreted within specific theoretical, methodological, and contextual boundaries. Theoretically, the model focuses only on Entrepreneurial Knowledge and Entrepreneurial Competence as predictors of Business Performance. Methodologically, the study uses a cross-sectional survey design and SEM-PLS analysis, which limits the ability to make long-term causal claims. Contextually, the findings are limited to F&B MSMEs in West Java and may not be directly generalizable to other sectors, larger firms, or regions with different levels of institutional support, digital infrastructure, market access, and cultural business practices.

Based on the findings, MSME support institutions, local governments, universities, and business development agencies should design training and mentoring programs that integrate entrepreneurial knowledge with practical competence development. Training should not only deliver conceptual knowledge but also involve applied learning, case-based exercises, business simulations, mentoring clinics, and performance-based evaluation.

For F&B MSMEs, assistance programs should focus on sector-specific competencies such as menu and product innovation, quality control, halal and food safety certification readiness, packaging improvement, digital branding, marketplace utilization, customer retention strategies, and supply chain management. These programs can help entrepreneurs convert business knowledge into concrete actions that improve competitiveness and business performance.

Local government programs in West Java should also strengthen collaboration with universities, digital platform providers, financial institutions, and business communities to improve the readiness of MSMEs in adopting digital tools. Public-private partnerships can support digital literacy training, access to online marketplaces, digital payment adoption, business data management, and logistics integration, especially for MSMEs located outside major urban centres.

Future research should extend this model by examining additional mediating or moderating variables that may influence the knowledge–competence–performance relationship. Relevant variables include digital capability, innovation capability, entrepreneurial orientation, market orientation, institutional support, training intensity, and entrepreneurial experience. These variables may explain why entrepreneurial knowledge produces stronger performance outcomes in some MSMEs but weaker outcomes in others.

Future studies may also use longitudinal designs to track how entrepreneurial competence develops over time and how it affects business performance across different stages of MSME growth. Multi-group analysis is also recommended to compare the model across MSME sub-sectors, such as culinary products, packaged food, beverages, catering, and restaurant-based MSMEs. Regional comparative research would also be valuable to assess whether variations in digital infrastructure, local policy support, and market dynamics condition the efficacy of the knowledge–competence–performance framework.

REFERENCES

- Abdulsamad, A., Ateeq, A., Al-Zubaidi, R., Al-refaei, A. A. aziz, Ali, A. N. A., & Fahad, N. M. (2025). Entrepreneurial orientation and innovation capabilities as drivers of sustainable innovation performance: A conceptual framework for SMEs. In *Studies in Systems, Decision and Control* (Vol. 234, pp. 845–858). Springer Science and Business Media Deutschland GmbH. https://doi.org/10.1007/978-3-031-84636-6_76
- Adnan, M., & Adnan, M. (2025). The Impact of Entrepreneurial Competencies on SMEs Performance: Empirical evidence from Malaysia. *Borneo International Journal EISSN 2636-9826*, 8(1). <https://majmuah.com/journal/index.php/bij/article/view/674>
- Ahmad, N., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment?: A study of Malaysian SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 16, 182–203. <https://doi.org/10.1108/13552551011042780>
- Al Mamun, A., Fazal, S. A., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 29–48. <https://doi.org/10.1108/apjie-11-2018-0067>
- Alnuaimi, B., Singh, S., Ren, S., Budhwar, P., & Vorobyev, D. (2022). Mastering digital transformation: The nexus between leadership, agility, and digital strategy. *Journal of Business Research*, 145, 636–648. <https://doi.org/10.1016/j.jbusres.2022.03.038>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bornay-Barrachina, M., López-Cabrales, Á., & Salas-Vallina, A. (2025). Sensing, seizing, and reconfiguring dynamic capabilities in innovative firms: Why does strategic leadership make a difference? *BRQ Business Research Quarterly*, 28(2), 399–420. <https://doi.org/10.1177/23409444231185790>

- Esubalew, A. A., & Raghurama, A. (2020). The mediating effect of entrepreneurs' competency on the relationship between Bank finance and performance of micro, small, and medium enterprises (MSMEs). *European Research on Management and Business Economics*, 26(2), 87–95. <https://doi.org/10.1016/j.iemeen.2020.03.001>
- Ferreira, J. J., Fernandes, C., & Kraus, S. (2019). Entrepreneurship research: Mapping intellectual structures and research trends. *Review of Managerial Science*, 13, 181–205. <https://doi.org/10.1007/s11846-017-0242-3>
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122. <https://doi.org/10.1002/smj.4250171110>
- Gunawan, C. (2023). *Marketing knowledge management dan inovasi media digital dalam meningkatkan kinerja UMKM*. Center for Open Science.
- Gunawan, C., & Wiyata, M. T. (2024). Kinerja adaptif pelaku UMKM Kota Sukabumi: Peran gaya kepemimpinan. *Cakrawala Repositori IMWI*, 7(4), 1262–1270. <https://doi.org/10.52851/cakrawala.v7i4.724>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis*. Cengage. <https://books.google.co.id/books?id=0R9ZswEACAAI>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications. <https://books.google.co.id/books?id=6z83EAAAQBAI>
- Hardiansyah, R., Fahlia, & Nuramaliah. (2024). The impact of digital marketing and entrepreneurial capabilities on marketing performance. *Indonesian Business Review*, 7(2), 105–114. <https://doi.org/10.21632/ibr.7.2.105-114>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hernández-Linares, R., López-Fernández, M. C., García-Piqueres, G., Pina e Cunha, M., & Rego, A. (2024). How knowledge-based dynamic capabilities relate to firm performance: the mediating role of entrepreneurial orientation. *Review of Managerial Science*, 18(10), 2781–2813. <https://doi.org/10.1007/s11846-023-00691-4>
- Ismail, I. J. (2022). Entrepreneurs' competencies and sustainability of small and medium enterprises in Tanzania. A mediating effect of entrepreneurial innovations. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2111036>
- Kuratko, D. F. (2017). Corporate entrepreneurship 2.0: Research development and future directions. *Foundations and Trends in Entrepreneurship*, 13(6), 441–490. <https://doi.org/10.1561/03000000082>
- Kusyana, D. N. B., Giantari, I. G. A. K., Sukaatmadja, I. P. G., & Ekawati, N. W. (2025). Dynamic marketing capability as mediator between resources and SMEs performance. *Edelweiss Applied Science and Technology*, 9(1), 1182–1196. <https://doi.org/10.55214/25768484.v9i1.4372>
- Lopes, J. M., Laurett, R., Antunes, H., & Oliveira, J. (2021). Entrepreneurial marketing: A bibliometric analysis of the second decade of the 21st century and future agenda. *Journal of Research in Marketing and Entrepreneurship*, 23(2), 295–317. <https://doi.org/10.1108/jrme-02-2019-0019>
- Mai, K. N., & Thai, Q. H. (2025). Entrepreneurial competencies – A systematic literature review. *Journal of International Entrepreneurship*, 23(1), 54–130. <https://doi.org/10.1007/s10843-024-00356-7>
- Man, T. W. Y., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123–142. [https://doi.org/10.1016/S0883-9026\(00\)00058-6](https://doi.org/10.1016/S0883-9026(00)00058-6)
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International Journal of Entrepreneurial Behavior & Research*, 16(2), 92–111. <https://doi.org/10.1108/13552551011026995>

- Moshi, R., & Matotola, S. (2023). Entrepreneurial Competence and Small and medium enterprises' Profitability: A Case of sunflower oil processing enterprises in Tanzania. *Cogent Business and Management*, 10(2). <https://doi.org/10.1080/23311975.2023.2208431>
- Muniady, R. Al, Mamun, A. Al, Rosli Mohamad, M., Yukthamarani Permarupan, P., & Binti Zainol, N. R. (2015). The effect of cognitive and relational social capital on structural social capital and micro-enterprise performance. *SAGE Open*, 5(4). <https://doi.org/10.1177/2158244015611187>
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15–23. [https://doi.org/10.1016/0148-2963\(95\)00159-X](https://doi.org/10.1016/0148-2963(95)00159-X)
- Najib, M., Kiminami, A., & Yagi, H. (2011). Competitiveness of Indonesian small and medium food processing industry: Does the location matter? *International Journal of Business and Management*, 6(9). <https://doi.org/10.5539/ijbm.v6n9p57>
- Nguyen, A. T. H., Nguyen, P. V., & Do, H. T. S. (2022). The effects of entrepreneurial orientation, social media, managerial ties on firm performance: evidence from vietnamese smes. *International Journal of Data and Network Science*, 6(1), 243–252. <https://doi.org/10.5267/IJIDNS.2021.9.004>
- Pratono, A. H., Darmasetiawan, N. K., Yudianto, A., & Jeong, B. G. (2019). Achieving sustainable competitive advantage through green entrepreneurial orientation and market orientation: The role of inter-organizational learning. *Bottom Line*, 32(1), 2–15. <https://doi.org/10.1108/BL-10-2018-0045>
- Rahman, S. (2026). Market knowledge as a driver of SME digital marketing success in enhancing business performance. *BISMA (Bisnis Dan Manajemen)*, 18, 205–225. <https://doi.org/10.26740/bisma.v18n2.p205-225>
- Sakib, M. N., Rabbani, M. R., Hawaldar, I. T., Jabber, M. A., Hossain, J., & Sahabuddin, M. (2022). Entrepreneurial Competencies and SMEs' Performance in a Developing Economy. *Sustainability (Switzerland)*, 14(20). <https://doi.org/10.3390/su142013643>
- Sarstedt, M., Hair, J. F., Pick, M., Liengaard, B. D., Radomir, L., & Ringle, C. M. (2022). Progress in partial least squares structural equation modeling use in marketing research in the last decade. *Psychology and Marketing*, 39(5), 1035–1064. <https://doi.org/10.1002/mar.21640>
- Soomro, R. B., Memon, S. G., & Soomro, M. (2025). Impact of entrepreneurial knowledge, skills, and competencies on MSME performance: an evidence from a developing country. *Asia Pacific Journal of Innovation and Entrepreneurship*, 19(1), 42–72. <https://doi.org/10.1108/apjie-04-2023-0071>
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-018-0140-4>
- 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>
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *The Academy of Management Review*, 11(4), 801–814. <https://doi.org/10.2307/258398>
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1), 71–91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>