

Business Environment, Entrepreneurial Competence, and Innovativeness: Evidence from Bandung's Embroidery SMEs

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Keywords:

Business Environment;
Entrepreneurial Competence;
Entrepreneurial Innovativeness;
Embroidery Industry; SMEs

Abstract

In a dynamic and competitive business environment, understanding the factors that drive entrepreneurial innovation is important. This study examines the relationship between entrepreneurial competence and innovation in the context of the embroidery industry in Bandung. Structural Equation Modeling was employed to evaluate the proposed relationships with 90 embroidery entrepreneurs in Bandung. Empirical results show that a conducive business environment is associated with higher levels of innovation among embroidery entrepreneurs in Bandung. In addition, these environmental conditions also strengthen entrepreneurial competence, which in turn drives innovation, with entrepreneurial competence acting as a partial intermediary mechanism in this relationship. This study contributes to the literature on entrepreneurship and innovation by providing empirical evidence confirming the importance of entrepreneurial competence as a mechanism linking environmental conditions and innovation outcomes in small-scale creative industries. Furthermore, the findings emphasize the importance of improving the business environment to encourage entrepreneurial creativity, suggesting that policymakers and local stakeholders need to strengthen their support through access to resources, market information, and institutions. The research has several limitations. First, focuses on entrepreneurs in the embroidery industry in Bandung. This contextual focus suggests that the findings are most relevant to the embroidery sector in Bandung and may not fully reflect conditions in other settings. Second, the study relies on primary data collected through questionnaires, which may be subject to respondents' perceptions and interpretations.

INTRODUCTION

A supportive business environment plays a vital role in enhancing economic competitiveness and driving innovation, as it offers institutional safeguards and influences the effective allocation of entrepreneurial resources, thereby contributing to sustained economic growth and development (Li & Zhang; 2022). In the context of Indonesia, the analysis is situated within Bandung's embroidery sector, one of the economic growth centers with a highly diversified business sector. The embroidery crafts have now developed into a creative economy that can boost the community's economy without losing the distinctive characteristics of its production from indigenous communities. Although still dominated by small and medium-sized enterprises (SMEs), the embroidery industry has great potential to grow and compete if supported by improved entrepreneurial skills, access to technology, and a supportive business environment. However,

challenges such as economic policy uncertainty and regional disparities need to be addressed to maximize the positive impact on innovation.

Recent studies have highlighted the significant impact of the business environment on entrepreneurial activity. For instance, Yu and Huang (2023) indicate that comprehensive improvements in business conditions can open up broader employment opportunities and increase the efficiency of labor structures, which contribute to the growth of entrepreneurial activity and innovative results. Similarly, Sun et al. (2025) show that improving business conditions through fiscal incentives can encourage increased innovation and entrepreneurship. Wang et al. (2023) further note that a conducive and dynamic business environment, reflected in supportive policies and strong institutional roles, improves companies' ability to adapt and generate innovation. Additionally, entrepreneurial competence is crucial for business performance in turbulent environments. Studies show that competencies such as opportunity recognition and strategic planning are closely associated with innovation outcomes. A foundational study by Man et al. (2002) conceptualized entrepreneurial competence as a multidimensional construct determining entrepreneurial effectiveness.

Despite these findings, there is a gap in the current literature regarding the specific mechanisms linking these factors in the creative industry. Most studies focus on general SMEs or manufacturing sectors. Studies that specifically link the influence of the business environment on entrepreneurial innovation by considering entrepreneurial competence as a mediator are still limited, especially in the context of creative MSMEs such as the embroidery industry. While it is known that the business environment influences innovation, the internal process of how external conditions are translated into innovative outputs through entrepreneurial capabilities requires further empirical exploration.

Therefore, this research is relevant and important as an effort to understand the dynamics of innovation in the local creative industry and to provide practical recommendations for developing the competitiveness of MSMEs. This study focuses on the influence of the business environment on entrepreneurial innovativeness through entrepreneurial competence. The novelty of this research lies in its focus on the embroidery industry in Bandung as a culture-based creative economy and the examination of entrepreneurial competence as a mediating variable, offering new insights into how external support can be effectively leveraged through internal capabilities to drive innovation.

METHODS

This study employs a quantitative approach with descriptive and verificatory methods to examine the relationship between the business environment, entrepreneurial competence, and entrepreneurial innovativeness. The descriptive method is used to explain the characteristics of the variables, while the verificatory method aims to test the research hypotheses. The population in this study consisted of embroidery businesses in Bandung City, totaling 154 businesses. The sample size was determined using the Slovin formula, resulting in a target sample of 111 respondents. However, the final data successfully collected and processed for analysis were obtained from 90 respondents.

Data collection was conducted using a questionnaire instrument distributed to the respondents. The variables in this study are operationalized into specific dimensions: the business environment variable is measured through environmental munificence, environmental dynamism, and environmental complexity. Entrepreneurial competence is measured through five dimensions,

namely opportunity competency, organizing competency, strategy competency, relationship competency, and commitment competency. Meanwhile, entrepreneurial innovativeness is measured through technology, behavior, and product dimensions.

The data analysis technique employed in this study is variance-based Structural Equation Modeling (SEM) using the Partial Least Squares (PLS) approach with SmartPLS software. The analysis procedure includes evaluating the measurement model (outer model) to assess the validity and reliability of the constructs, as well as the structural model (inner model) to test the direct and indirect relationships between variables. Hypothesis testing was performed using the bootstrapping procedure with a significance level of 5% ($p\text{-value} < 0.05$) to determine the effect of the business environment on entrepreneurial innovativeness mediated by entrepreneurial competence.

RESULTS AND DISCUSSION

Respondent Characteristics

The respondents of this study were 90 embroidery business owners in Bandung.

Table 1 Respondent Characteristic

Respondent Characteristic (n=90)	Frequency	Percent
Gender		
Man	76	84%
Woman	14	16%
Highest level of education		
Junior High School	15	17%
Senior High School	55	61%
Diploma	7	8%
Bachelor	13	14%
Daily income (IDR)		
≤ 1.000.000	52	58%
1.000.000 – 1.500.000	24	27%
1.500.000 – 2.000.000	12	13%
≥ 2.000.000	2	2%
Number of employees		
1-5 employee	55	61%
6-10 employee	19	21%
≥ 11	16	18%

Based on the demographic data, the embroidery business in Bandung is dominated by male entrepreneurs (84%), while females account for 16%. In terms of educational attainment, the majority of respondents have a Senior High School education (61%), followed by Junior High School (17%), Bachelor's degree (14%), and Diploma (8%). Regarding daily income, most businesses earn ≤ IDR 1,000,000 (58%), indicating that most act as small-scale enterprises. This is further confirmed by the workforce size, where 61% of respondents employ 1–5 employees. These characteristics suggest that the embroidery sector in Bandung relies on skill-based and manual labor business patterns, where owners are often directly involved in production management. Overall, the characteristics of these respondents illustrate that the embroidery business in Bandung is an MSME sector that is still dominated by male entrepreneurs with a secondary education, small scale, and relatively limited income. This condition is an important context in understanding how the business environment and entrepreneurial competencies play a role in driving entrepreneurial innovation, because limited resources and business scale require entrepreneurs to be more adaptive, creative, and innovative in order to survive and grow.

Descriptive Analysis Business Environment

This section presents a descriptive analysis of respondents' responses to the variables of business environment, entrepreneurial competency, and entrepreneurial innovativeness. The results of the descriptive analysis of the business environment, entrepreneurial competence, and entrepreneurial innovativeness of embroidery SMEs in West Java provide a comprehensive picture of the internal and external conditions that affect business continuity. The interpretation of these categories is based on the position of the average value on a continuum designed to measure the level of perception of external factors that affect business continuity. After categorizing the level of perception of the business environment variable, the analysis continued by calculating the average score for each dimension that forms the variable. This calculation aims to determine the relative contribution of each dimension so as to provide a more detailed picture of the aspects of business environment that most influence the activities of embroidery SMEs in Bandung City. This variable is measured through three main dimensions, namely *environmental munificence*, *environmental dynamism*, and *environmental complexity*, with a total of 11 statement indicators presented in the form of a questionnaire. The following is a recapitulation of the dimensions of the business environment variable.

Table 2. Summary of Dimensions Business Environment

No	Dimension	Ideal Score	Total Score	%
1	<i>Environmental Munificence</i>	1.890	1.416	74.92
2	<i>Environmental Dynamism</i>	1.890	1.392	73.65
3	<i>Environmental Complexity</i>	3.150	2.372	75.30
Total		6.930	5.180	74.75

These results indicate that embroidery business actors in Bandung City consider their business environment to be quite conducive. The results of the average scores that fall into the high category on the continuum are as follows:

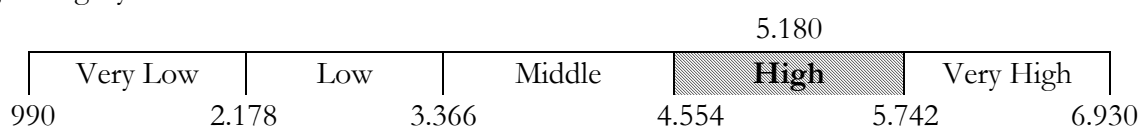


Figure 2. Continuum Line Business Environment Variable

The results of descriptive analysis, the variable *business environment* obtained a total score of 5,180 from an ideal score of 6,930 with a percentage of 74.75%, which is included in the high category. Based on the score interval, the value of the *business environment* variable is between the lower limit of 4.554 (high category) and the upper limit of 5.742 (very high category), indicating that the business environment conditions perceived by embroidery business actors in Bandung City are good and supportive of business activities. This indicates that external factors, such as government support, availability of resources, technological developments, and market dynamics, are considered to have a positive influence on business continuity and growth. A relatively stable business environment that is open to innovation and responsive to changing consumer needs provides opportunities for embroidery entrepreneurs to continue to develop their creativity and increase competitiveness. Furthermore, after categorization, the analysis continued with the calculation of the average score for each dimension of the business environment to identify the

relative contribution of each dimension to embroidery SME activities in Bandung.

Entrepreneurial Competence

This variable was measured through five main dimensions, namely opportunity capability, organizational capability, strategic capability, relationship capability, and commitment capability, with a total of 10 statement indicators used in the questionnaire. The following is a recapitulation of the dimensions of the entrepreneurial competence variable.

Table 3. Summary of Dimensions Entrepreneurial Competence

No	Dimensi	Skor Ideal	Skor Total	%
1	<i>Opportunity competency</i>	1.260	928	73.65
2	<i>Organizing competency</i>	1.260	967	76.75
3	<i>Strategy competency</i>	1.260	963	76.43
4	<i>Relationship competency</i>	1.260	888	70.48
5	<i>Commitment competency</i>	1.260	869	68.97
Total		6.300	4.615	73.25

Based on the results of descriptive analysis, the variable *entrepreneurial competence* obtained a total score of 4.615, placing it in the high category when compared to the predetermined score interval, which is between 4.140 (high category) and 5.220 (very high category).

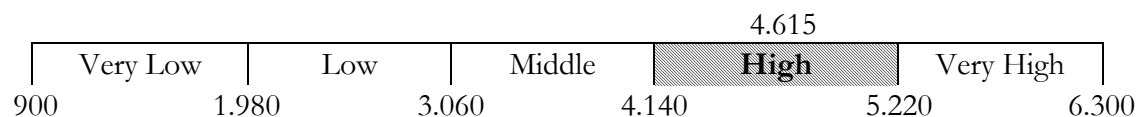


Figure 3. Continuum Line Entrepreneurial Competence Variable

Based on the results of descriptive analysis, the *organizing competency* dimension obtained the highest percentage with a score of 967 or 76.75%, indicating that embroidery businesses in Bandung City are relatively capable of managing operational activities effectively. This is reflected in the smooth production activities, clear division of employee tasks, and minimal operational obstacles, thereby supporting efficiency and consistency in meeting market demand. Conversely, the commitment competency dimension had the lowest percentage with a score of 869 or 68.97%, indicating that the aspect of commitment to maintaining product quality and production timeliness still needs to be improved. This condition has the potential to affect customer satisfaction and business competitiveness if not addressed continuously. Overall, although operational management competencies are already good, strengthening commitment to quality and production discipline is an important aspect for improving the sustainability and competitiveness of embroidery businesses in Bandung.

Entrepreneurial Innovativeness

Entrepreneurial innovativeness was measured through three main dimensions, namely *technology*, *behavior*, and *product*, with a total of 10 statement indicators used in the questionnaire instrument.

Table 4. Summary of Dimensions Entrepreneurial Innovativeness

No	Dimensi	Skor Ideal	Skor Total	%
1	<i>Technology</i>	1.890	1.424	75.34
2	<i>Behaviour</i>	2.520	1.835	72.82
3	<i>Product</i>	1.890	1.371	72.54
Total		6.300	4.630	73.49

Based on the results of descriptive analysis, the variable *entrepreneurial innovativeness* obtained a total score of 4,630 out of an ideal score of 6,300, with a percentage of 73.49%, which falls into the high category.

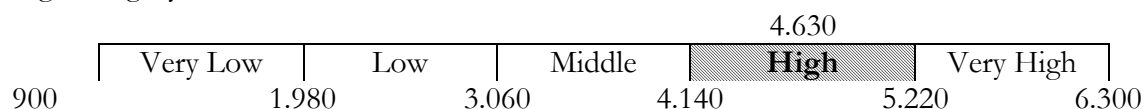


Figure 4. Continuum Line Entrepreneurial Innovativeness Variable

The analysis shows that embroidery businesses in Bandung generally have a good level of entrepreneurial innovation. These businesses are considered capable of utilizing technological developments to support their operations through the use of digital infrastructure and the integration of technology in the production and marketing processes. In terms of behavior, entrepreneurs show innovative tendencies by introducing new products, improving logistics efficiency, and strengthening the digital skills of their workforce. Meanwhile, in terms of products, businesses continue to refine their products and improve production processes to enhance the quality of embroidery. Overall, these findings reflect the strong innovative capabilities of the embroidery industry in Bandung, which supports adaptation to market dynamics, increased competitiveness, and business sustainability in the creative industry sector.

Measurement Model Evaluation

A verificatory analysis was conducted to examine the relationship between variables in a study entitled *The Influence of Business Environment on Entrepreneurial Innovativeness through Entrepreneurial Competence in the Embroidery Industry in Bandung*. This confirmatory analysis aims to empirically prove the conceptual model formulated in the previous chapter and assess the extent to which the business environment variable directly and indirectly influences entrepreneurial innovativeness, with entrepreneurial competence as the mediating variable. The testing was conducted using SmartPLS version 4, namely the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, which is suitable for research with a limited sample size and a predictive model. Through this analysis, a series of stages were carried out, starting from the evaluation of the measurement model (outer model) to ensure the validity and reliability of the indicators, to the evaluation of the structural model (inner model) to test the strength of the relationship between constructs and the significance of the influence that occurs. The results of the analysis presented include the *outer model*, *inner model*, and hypothesis tests in accordance with the PLS-SEM criteria.

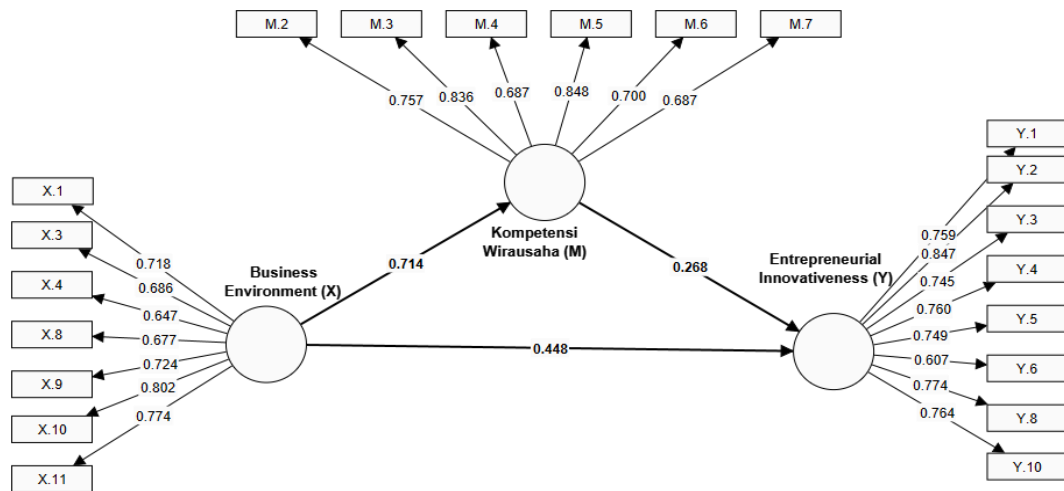


Figure 5. Estimation of Entrepreneurial Competency Measurement Model Parameters of Embroidery SMEs in Bandung City

The results show that all indicators have a loading factor value greater than .50, meeting the convergent validity criteria. Internal consistency was assessed using Cronbach's Alpha and Composite Reliability (CR). As shown in Table 1, all constructs have Cronbach's Alpha and CR values above .70, and Average Variance Extracted (AVE) values above .50, indicating good reliability and validity.

Table 1. Cronbach's Alpha dan Composite Reliability

<i>Outer Model</i>	<i>Cronbach's Alpha</i>	<i>Composite Reliability</i>	<i>AVE</i>	<i>P Value</i>
<i>Business Environment (X)</i>	0.846	0.882	0.519	0.000
<i>Kompetensi Kewirausahaan (M)</i>	0.848	0.888	0.571	0.000
<i>Entrepreneurial Innovativeness (Y)</i>	0.892	0.912	0.567	0.000

Discriminant validity was tested using the Fornell-Larcker criterion, where the square root of AVE for each construct was higher than its correlation with other constructs. This confirms that the constructs are distinct and valid.

Structural Model and Hypothesis Testing

The structural model was evaluated to test the proposed hypotheses. The R-square R^2 value for Entrepreneurial Competence is .510, indicating that 51% of the variance in competence is explained by the business environment. For Entrepreneurial Innovativeness, the R^2 is .445, meaning 44.5% of the variance is explained by the business environment and entrepreneurial competence. The hypothesis testing results are presented in Table 2.

Table 2. Hypothesis Testing Results

<i>Research Hypothesis</i>	<i>Construct</i>	<i>Original Sample (O)</i>	<i>T Statistic (Io/stdevI)</i>	<i>CR</i>	<i>P Value</i>	<i>Description</i>
H ₁	X → M	0.714	16.448	1.96	0.000	Accepted
H ₂	X → Y	0.448	4.038		0.000	Accepted
H ₃	M → Y	0.268	2.308		0.021	Accepted
H ₄	X → M → Y	0.192	2.229		0.026	Accepted

DISCUSSION

The first finding (H1) confirms that the business environment has a positive and significant effect on entrepreneurial competence ($\beta = .714$, $p < .05$). This indicates that a conducive business environment—characterized by market dynamics and available resources—

serves as a learning arena that strengthens the internal capabilities of embroidery entrepreneurs. This aligns with Luo et al. (2022), who found that the quality of the entrepreneurial environment is positively related to competence development.

The second finding (H2) demonstrates that the business environment directly influences entrepreneurial innovativeness ($\beta = .448, p < .05$). Supportive external factors, such as technology availability and healthy competition, drive entrepreneurs to create new products and improve processes. This result supports Perez De Lema et al. (2019), who stated that dynamic environments encourage firms to strengthen innovation strategies.

The third finding (H3) shows that entrepreneurial competence positively affects innovativeness ($\beta = .268, p < .05$). Competencies in strategy, organizing, and relationships enable entrepreneurs to identify opportunities and manage resources for innovation. This is consistent with previous studies (Kamuri, 2021; Somwethee et al., 2023), which highlight the contribution of internal skills to innovation outcomes.

Finally, the study confirms the mediating role of entrepreneurial competence (H4). The indirect effect ($\beta = .192, p < .05$) suggests that a favorable business environment fosters innovation not only directly but also by enhancing the entrepreneurs' competencies. This supports the view that external opportunities require adequate internal capabilities to be translated into innovative outputs (Esubalew & Raghurama, 2020; Diwanti, 2023).

CONCLUSION

The results of this study indicate that the business environment has a positive effect on entrepreneurial innovation in embroidery SMEs in Bandung. These findings suggest that favorable external conditions, such as business environment support, technological developments, and market dynamics, can encourage entrepreneurs to innovate. In addition, entrepreneurial competence has a positive effect on entrepreneurial innovation, which confirms the importance of business actors' ability to recognize opportunities, manage resources, formulate strategies, and build business relationships.

This study also proves that the business environment has a positive effect on entrepreneurial competence, which shows that supportive external conditions play a role in strengthening the internal capabilities of business actors. Furthermore, entrepreneurial competence acts as a mediating variable in the relationship between the business environment and entrepreneurial innovation. This confirms that the influence of the business environment on entrepreneurial innovation will be more optimal if it is supported by adequate entrepreneurial competence among embroidery entrepreneurs in Bandung.

Based on the results and limitations of this study, further research is recommended to expand the research object by involving other industrial sectors or different regions in order to improve the generalization of the findings. In addition, future research can add other variables, such as entrepreneurial orientation, digital capabilities, or government innovation support, to obtain a more comprehensive understanding of the factors that influence entrepreneurial innovation. Future research is also recommended to use more diverse data sources or different methodological approaches to enrich perspectives and strengthen the validity of research results.

REFERENCE

Abbas, D., & Handayani, T. (2023). *Exploring the effects of entrepreneurship competency and environmental adaptability on marketing*

- performance. *International Journal of Economics, Management, and Accounting (IJEMA)*, 1(3), 176–189. <https://doi.org/10.61132/ijema.v1i3.176>
- Ahmad, N. H., 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 Behavior & Research*, 16(3), 182–203. <https://doi.org/10.1108/13552551011042780>
- Ahmed, W., Najmi, A., & Ikram, M. (2020). Steering firm performance through innovative capabilities: A contingency approach to innovation management. *Technology in Society*, 63, 101385. <https://doi.org/10.1016/j.techsoc.2020.101385>
- Avlonitis, G. J., & Salavou, H. E. (2007). Entrepreneurial orientation of SMEs, product innovativeness, and performance. *Journal of Business Research*, 60(5), 566–575. <https://doi.org/10.1016/j.jbusres.2007.01.001>
- Bercu, A. & Lupu, D. (2022). Entrepreneurial Competencies as Strategic Tools: A Comparative Study for Eastern European Countries. In I. Management Association (Ed.), *Research Anthology on Vocational Education and Preparing Future Workers* (pp. 235-254). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-6684-5696-5.ch015>
- Chi, T. (2015). Business Contingency, Strategy Formation, and Firm Performance: An Empirical Study of Chinese Apparel SMEs. *Administrative Sciences*, 5(2), 27–45. <https://doi.org/10.3390/admsci5020027>
- Chen L, Su Z, He X, Chen X, Dong L (2022), The application of robotics and artificial intelligence in embroidery: challenges and benefits. *Assembly Automation*, Vol. 42 No. 6 pp. 851–868, doi: <https://doi.org/10.1108/AA-07-2022-0183>
- Diwanti, D.P., (2023). The Mediating Role of Competence on the Effect of Organizational Culture and Readiness To Change on Organizational Entrepreneurship. *Jurnal Manajerial*, Vol. 10 No. 03 (2023), DOI: <https://doi.org/10.30587/jurnalmanajerial.v10i03.6244>
- 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.iiedeen.2020.03.001>
- Falahat, Mohammad., Tehsen, Shehnaz., Horne, Constance Van (2018). Entrepreneurial Innovativeness and Its Impact on SMEs Performances. *International Journal of Entrepreneurship*, Vol: 22 Issue: 3, ISSN: 1939-4675
- Gaglio, C. M. (2004). The Role of Mental Simulations and Counterfactual Thinking in the Opportunity Identification Process*. *Entrepreneurship Theory and Practice*, 28(6), 533–552. <https://doi.org/10.1111/j.1540-6520.2004.00063.x> (Original work published 2004)
- Gatautis, R., Vaiciukynaite, E., & Tarute, A. (2019). Impact of business model innovations on SME's innovativeness and performance. *Baltic Journal of Management*, 14(4), 521–539
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Ibidunni, A. S., Ogundana, O. M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, 22(4), 468–490. <https://doi.org/10.1080/15228916.2021.1874784>
- Ismail, I. J. (2022). Entrepreneurs' competencies and sustainability of small and medium enterprises in Tanzania. A mediating effect of entrepreneurial innovations. *Cogent Business & Management*, 9(1), 2111036.
- Kamuri, S. (2021). Creating as an entrepreneurial competence, innovation and performance of value-system actors in Kenya's leather industry. *Scientific African*, 11, e00664. <https://doi.org/10.1016/j.sciaf.2020.e00664>
- Li, J., Zhang, T. (2022). The Influence Mechanism of Business Environment on the Allocation of Entrepreneurship. In: Hassanien, A.E., Xu, Y., Zhao, Z., Mohammed, S., Fan, Z. (eds) *Business Intelligence and Information Technology. BIIT 2021. Lecture Notes on Data Engineering and Communications Technologies*, vol 107. Springer, Cham. https://doi.org/10.1007/978-3-030-92632-8_57
- Luo, L., Guo, M., Huang, J., & Yang, J. (2022). Research on the Effect of an Entrepreneurial Environment on College Students' Entrepreneurial Self-Efficacy: The Mediating Effect of Entrepreneurial Competence and Moderating Effect of Entrepreneurial Education. *Sustainability*, 14(11), 6744. <https://doi.org/10.3390/su14116744>
- Man, T. W., Lau, T., & Chan, K. (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*, Vol. 16 No. 2 pp. 92–111, doi: <https://doi.org/10.1108/13552551011026995>
- Mokbel Al Koliby IS, Abdullah HH, Mohd Suki N (2024), "Linking entrepreneurial competencies, innovation and sustainable performance of manufacturing SMEs". *Asia-Pacific Journal of Business Administration*, Vol. 16 No. 1 pp. 21–40, doi: <https://doi.org/10.1108/APJBA-09-2021-0480>
- Peng, B., Zhao, Y., Elahi, E., & Wan, A. (2022). Does the business environment improve the competitiveness of start-ups? The moderating effect of cross-border ability and the mediating effect of entrepreneurship. *Corporate Social Responsibility and Environmental Management*, 29(5), 1173–1185. <https://doi.org/10.1002/csr.2262>
- Domingo García Pérez-De-Lema & Peter Bent Hansen & Antonia Madrid-Gujarro & Jane Lucia Silva-Santos, 2019. ["Influence Of The Business Environment In The Dynamics Of Innovation And In The Performance Of](https://doi.org/10.1108/13552551011026995)

- Smes," [International Journal of Innovation Management \(ijim\)](#), World Scientific Publishing Co. Pte. Ltd., vol. 23(05), pages 1-25, June.
- Prajogo, D. I. (2015). The strategic fit between innovation strategies and business environment in delivering business performance. *International Journal of Production Economics*, 171, 241-249. <https://doi.org/10.1016/j.ijpe.2015.07.037>
- Pranowo, A.S.Sutrisno, J.Sulastiono, P.Siregar, Z.M.E.(2020) The entrepreneurial competency, innovation capability, and business success: The case of footwear industry in Indonesia. *Quality - Access to Success*. 21(178):20-25
- Pratama, A. R., Moeljadi, M., & Rofiq, A. (2022). The Effects of Entrepreneurial Skills on Competitiveness at SMEs of Tempe Chips: The Role of Innovation Ability. *Jurnal Aplikasi Manajemen*, 20(3), 711-â.
- Rahman, V. (2024). The Influence of Entrepreneurial Competence, Digital Transformation And Innovation Behavior on The Development of SMEs. In *International Student Conference on Business, Education, Economics, Accounting, and Management (ISC-BEAM)* (Vol. 2, No. 1, pp. 3108-3116).
- Singh, E. H., & Ao, M. (2025). Mediative Role of Entrepreneurial Environment and Innovation in the Relationship between Entrepreneurial Competency and Performance in Nagaland, India. *Open Journal of Business and Management*, 13(2), 1249-1267.
- Somwethee, P., Aujirapongpan, S., & Ru-Zhue, J. (2023). The influence of entrepreneurial capability and innovation capability on sustainable organization performance: Evidence of community enterprise in Thailand. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(2), 100082. <https://doi.org/10.1016/j.joitmc.2023.100082>
- Sun, L., Lu, F., Guan, H., Lu, X., Zhai, J., & Liu, J. (2025). Tax incentives, business environment, and entrepreneurial and innovation outcome. *International Review of Financial Analysis*, 103, 104154. <https://doi.org/10.1016/j.irfa.2025.104154>
- Slovin, E. (1960). *Sampling Techniques*. New York: John Wiley & Sons.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Umar, Azmi., Omar, Che Mohd Zulkifli., Hamzah, Mohd Sahandri Gani., Hashim, Azizah (2018). The Mediating Effect of Innovation on Entrepreneurial Competencies and Business Success in Malaysian SMEs. *International Business Research*. Vol. 11, No. 8. ISSN(Online): 1913-9012. DOI:[10.5539/ibr.v11n8p142](https://doi.org/10.5539/ibr.v11n8p142)
- Wang, N., Cui, D., & Dong, Y. (2023). Study on the impact of business environment on private enterprises' technological innovation from the perspective of transaction cost. *Innovation and Green Development*, 2(1), 100034. <https://doi.org/10.1016/j.igd.2023.100034>
- Yu, L., Tang, X., & Huang, X. (2023). Does the business environment promote entrepreneurship?—Evidence from the China Household Finance Survey. *China Economic Review*, 79, 101977. <https://doi.org/10.1016/j.chieco.2023.101977>
- Zabalawi, E. A., Bakhouch, A., & El Chaar, R. (2021). Risk Management: Minimizing the Triple Risks – Strategic, Financial, and Operational. In H. Webb, W. Wu, & H. Al Numairy (Eds.), *Innovation Management and Growth in Emerging Economies* (pp. 206-225). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-4195-1.ch010>
- Zheng, S., & Wen, J. (2023). How Does Firm-Level Economic Policy Uncertainty Affect Corporate Innovation? Evidence from China. *Sustainability*, 15(7), 6219. <https://doi.org/10.3390/su15076219>