

Developing a Model of Entrepreneurial Competencies to Enhance Entrepreneurial Performance

Widodo¹, Nurchayati², Dandri Widyo³

Abstract

This study sought to construct and validate a model of entrepreneurial competencies that fosters improved entrepreneurial performance. Data was collected from 150 SME leaders and analysed using the Structural Equation Modelling (SEM) technique. The results confirmed four of the six proposed hypotheses, establishing significant links where strategic competencies influence network and opportunity competencies, and network competencies influence opportunity competencies. Conversely, the hypotheses suggesting a direct influence of strategic and network competencies on overall entrepreneurial performance were rejected. The study concludes that strategic and network competencies do indeed enhance entrepreneurial performance, but they do so indirectly, with opportunity competency acting as a crucial mediator.

Keywords: *network competencies, opportunity competencies, performance entrepreneur.*

Introduction

The Resource-Based Theory perspective, particularly the knowledge-based view (Grant, R., 1996), the natural-resource-based view (Hart, S., 1995), and the dynamic capabilities view (Teece, D. J., Pisano, G., & Shuen, A., 1997), continues to dominate current strategic thinking. Among these capabilities, entrepreneurial competencies are considered intangible yet effective tools for achieving sustainable business success (Mokbel A. K. et al., 2024).

Entrepreneurial competencies are valuable resources and serve as solutions for tackling complex problems while facilitating the completion of tasks in the most beneficial way (Abawa, A., 2024). These competencies are recognized as crucial factors in enhancing business performance, growth, and the success of SMEs (Ferrerias, G. R. et al., 2021). However, there remains diversity and limitations in the dimensions of entrepreneurial competencies that significantly affect SME success, along with a lack of empirical studies investigating potential causal relationships among these dimensions (Tehseen, S. et al., 2019; Tehseen, S. & Anderson, A. R., 2020).

A key aspect of entrepreneurship lies in identifying the competencies entrepreneurs need, which enables organizations to develop and improve their overall quality (Abawa, A., 2024). The role of network competency is essential in achieving business growth, both in local and international markets (Tehseen, S. et al., 2019). Equally important is the competency in identifying potential opportunities (opportunity competency) (Aidara, S. et al., 2021), as well as entrepreneurs' ability to formulate, evaluate, and implement strategic competencies (Widodo, W., Widjajanti, K., & Widyo, D., 2024). Nonetheless, studies on the substantive dimensions, prioritization, and causal relationships of entrepreneurial competencies remain limited (Aidara, S. et al., 2021). Some findings suggest that strategic competencies significantly influence entrepreneurial performance (Tehseen & Ramayah, 2015; Wickramaratne et al., 2014), while others, such as the study by Tehseen, S. et al. (2019), found no such significance. Research on entrepreneurial competencies has explored a range of areas including conceptual, opportunity, personal, learning, networking, strategic, and ethical competencies. However, the results remain inconsistent in terms of their effect on SME performance (Nakhata, C.,

¹ Sultan Agung Islamic University (UNISSULA), Faculty of Economics, Department of Management, Indonesia; widodo@unissula.ac.id ; orcid.org/0000-0002-7064-5926

² Untag 1945 University, Faculty of Economics, Department of Management, PDIM Faculty of Economics, Department of Management, Indonesia; nuchayatiuntag@gmail.com; orcid.org/0009-0001-9042-6341.

³ Faculty of Economics and Business, Magister Management, Diponegoro University, Indonesia; widyodandri@gmail.com ; orcid.org/0000-0003-0648-5929

2018; Quagrainie, F.A., 2019; Suhaimi, N.H.B.M., 2022). Based on the aforementioned literature, this study aims to examine a model of entrepreneurial competencies that contributes to the realization of entrepreneurial performance.

Literature Review

Entrepreneur Performance

Entrepreneurial activity is acknowledged as a primary driver of economic advancement, operating through a coordinated process of identifying and leveraging opportunities for product, service, and operational innovation (Pinho et al., 2018). Accordingly, an entrepreneur's performance is a fundamental determinant of success. It is this performance that distinguishes successful entrepreneurs from the rest, as it demonstrates tangible outcomes and the effectiveness with which business goals are achieved (Jha, P. & Alam, M. M., 2022; Hisrich & Ozturk, 1999).

In the literature, indicators of entrepreneurial performance have been primarily associated with financial criteria (Lumpkin & Dess, 2001), or a combination of financial and operational indicators (Venkatraman & Ramarujam, 1986). However, this study adopts entrepreneurial performance indicators based on the work of Alim, M. A. et al. (2023), Hossain, M. A. et al. (2024), and Wu, S., Luo, Y., Zhang, H., & Cheng, P. (2024), which include: increased business revenue over the past three years, successful production of desired product quality, and the introduction of new products.

Previous studies have mostly explored issues such as entrepreneurial proactiveness, calculated risk-taking, innovation, opportunity focus, resource utilization, customer intensity, and value creation impact on entrepreneurial performance (Alim, M. A. et al., 2023).

Entrepreneurial Competencies

Entrepreneurial competencies are understood as the combined set of attributes within individual entrepreneurs that empower them to launch and sustain business ventures, especially when navigating challenges. These competencies consist of the specific skills, knowledge, and abilities that individuals apply to their entrepreneurial activities (Shet, 2024). Furthermore, these competencies manifest through personal characteristics such as adaptability, creativity, and problem-solving abilities, which in turn bolster their overall effectiveness as entrepreneurs (Mamun et al., 2019; Pulka et al., 2021).

To ensure business continuity, it is essential to identify and understand the key determinants that influence entrepreneurial performance. A body of research has shown that a deficiency in entrepreneurial competencies impedes the success of SMEs, although findings vary regarding the effectiveness of different competency dimensions (Tehseen, S. et al., 2019).

The dimensions of entrepreneurial competencies are defined by various frameworks. According to Abawa (2024), these include commitment, opportunity, organization, relationship, and strategic competencies. Meanwhile, Tehseen et al. (2019) propose a more extensive model consisting of conceptual, opportunity, personal, learning, network, strategic, and ethical competencies. However, these competencies have shown inconsistent results in contributing to SME performance (Suhaimi, N.H.B.M., 2022). Furthermore, there remains a lack of studies examining the substantive dimensions, prioritization, and causal relationships of entrepreneurial competencies (Aidara, S. et al., 2021). For these reasons, this study concentrates on three core dimensions: strategic competency, network competency, and opportunity competency.

Opportunity Competency

For an entrepreneur's resources to confer a competitive advantage, they must be effectively exploited to capitalize on business opportunities. Thus, the capacity to identify and select the most viable ventures is a cornerstone of successful entrepreneurship (Zainol, N. R., & Al Mamun, A., 2018). This is known as opportunity competency, which refers to the ability to discern market openings within the competitive landscape (Al Mamun, A., et al., 2018). This skill set equips entrepreneurs to find, evaluate, and act upon potential prospects by recognizing market gaps and environmental changes. Furthermore, it involves proactively seeking new ventures via marketing and promotion to secure the firm's long-term sustainability and performance. By focusing on the opportunities and resources at their disposal, entrepreneurs can identify market gaps and align their assets to exploit them. Consequently, achieving their full entrepreneurial potential requires them to leverage their available capabilities and resources to take advantage of business opportunities (Zainol, N. R., & Al Mamun, A., 2018).

Successful entrepreneurs tend to grow rapidly due to their strong opportunity recognition competencies. Such individuals are capable of evaluating both risks and opportunities while identifying actual factors and reciprocal relationships (Lim, W., Lee, Y., & Mamun, A. A., 2023). Complementing this, research by Chatterjee et al. (2019) indicates that sociocultural elements including societal values, cultural religiosity, and family backing are crucial drivers for both success and opportunity identification. Given that opportunity recognition is proven to significantly impact entrepreneurial performance (Hasan & Almubarak, 2016), this study posits the following hypothesis based on these previous findings:

H1. Opportunity competency has appositive effect to performance entrepreneur

Strategic Competency

The ability of an entrepreneur to effectively synchronize with the external business climate to secure sustainable growth is known as strategic competency (Tafti et al., 2017). This competency is defined as the entrepreneur's proficiency in creating, assessing, and implementing strategies aimed at achieving business success (Tehseen, S., et al., 2019). It requires strategic thinking, which is demonstrated by the entrepreneur's aptitude for developing strategic blueprints and a clear vision, and subsequently taking the necessary strategic steps to realize them.

Findings from Hossain, M. A. et al. (2024) indicate that entrepreneurial competencies strengthen the influence of e-commerce entrepreneurship on entrepreneurial performance. Moreover, strategic competency has been shown to significantly contribute to business success and growth (Tehseen & Ramayah, 2015; Wickramaratne et al., 2014). Based on the past research findings, this study posits the following hypothesis:

H2. Strategic competencies has appositive effect to performance entrepreneur

A firm's ability to secure a competitive edge is fundamentally dependent on its strategic competencies. Reinforcing this, Farooq and Abideen (2015) determined that for Small and Medium-sized Enterprises (SMEs) to cope with an unpredictable business climate, strong strategic readiness is essential.

The competency of opportunity recognition is not considered an innate talent but rather a skill that can be actively developed and learned (Bird, 1995). This learning process is heavily reliant on an entrepreneur's knowledge base, as a greater depth of knowledge directly improves their ability to identify and assess new opportunities (Tsai et al., 2016; Yaghoubi Farani et al., 2017). Consequently, formal entrepreneurship education serves as a key vehicle for enhancing this competency, equipping individuals to better initiate and manage ventures and master other skills (Karimi et al., 2016; Muñoz et al., 2011). Moreover, for a successful entrepreneur, a commitment to continuous learning is necessary to consistently hone these recognition skills (Yaghoubi Farani et al., 2017). Building upon this established body of research, the following hypothesis is formulated:

H3. Strategic competencies have a positive effect on opportunity competencies.

Network Competency

The effectiveness of entrepreneurial and strategic competencies in driving business success is significantly enhanced when they are complemented by robust network competencies. These networks are instrumental for a company to access critical resources, including knowledge, technology, and specialized expertise. Networking as a practice involves purposeful behaviors directed at creating and cultivating informal connections, both internal and external to the organization, with the aim of obtaining valuable assets relevant to its work (Bendella, H., & Wolff, H. G. 2020).

Consequently, the significance of network competency in fostering business expansion, whether in domestic or global markets, should not be underestimated (Tehseen, S., et al., 2019). By leveraging their networks, entrepreneurs can identify promising opportunities, gain access to critical information, and obtain valuable feedback on their offerings (Jha, P., & Alam, M. M., 2022). The growing reliance of organizations on inter-firm connections makes these networks increasingly essential. Ultimately, the resources sourced from networks can influence a company's strategic behavior by altering the set of opportunities available to it (Hsu, S. H., 2007). In light of these previous scholarly findings, this study puts forward the following hypothesis:

H4. Network competencies has a ppositive effect to opportunity competencies

The scholarly literature provides robust empirical evidence for a significant link between strategic competencies and networking (Barringer & Ireland, 2019; Ritter & Gemünden, 2004).. Organizations

thrive by continuously interacting with their external environment and creating long-term strategies to cope with its inherent uncertainty, a task for which strategic skills are essential (Hambrick, 1982). Since business expansion depends on external relationships, a positive correlation between strategic and network competencies is clear. This connection is rooted in resource acquisition: an entrepreneur's strategic capacity relies on inputs such as market knowledge sourced through networks. In other words, access to crucial, up-to-date market information is contingent upon having well-developed relationships with stakeholders, including customers, suppliers, and rivals (Tehseen, S., 2019). Based on this body of evidence, the following hypothesis is proposed:

H5. Strategic competencies has appositive effect to network competencies

The impact of networking is considerable across all phases of a business's life, from its early stages to its long-term growth (Al Mamun, A., Fazal, S. A., & Muniady, R., 2019). This sustained influence stems from the fact that networking is a distinct capability that is a powerful determinant of firm performance. It enhances performance by furnishing entrepreneurs with essential expertise and a range of support structures, which are key to achieving better business outcomes. Network competency is particularly vital for SMEs, enabling them to access the resources needed to meet commitments and capitalize on growth opportunities. This, in turn, enhances their competitive standing and allows them to secure a greater portion of a constrained domestic market (Torkkeli, L., 2016; Jha, P., & Alam, M. M., 2022). In light of these previous scholarly findings, this study proposes the following hypothesis:

H6. Network competencies has appositive effect to performance entrepreneur

Methodology

Measurement

The study of these variables includes strategic competencies, network competencies, opportunity competencies and entrepreneur competencies. The variables and indicators can be described in Table 1.

Table 1. Variable and Indicator

No	Variable	Indicator	Reference
1	Performance Entrepreneur	Sales growth Social responsibility Product quality Market expansion	Alim, M. A., et al, (2023); Hossain, M. A., et al (2024) ; Wu, S., Luo, Y., Zhang, H., & Cheng, P. (2024).
2	Opportunity Competency	Opportunity exploitation Opportunity identification Customer-oriented innovation Sensitivity to new ventures	Mokbel A. I. S., et al (2024); Alim, M. A., et al (2023).
3	Strategic Competency	Identification of long-term issues and opportunities Business adaptability Goal alignment Redesigning business objectives and long-term changes	Tehseen, S., et al (2019); Ahmad (2007); Man and Lau (2000)
4	Network Competency	Collaborative partnerships Partner engagement Activity coordination	Tehseen, S., et al (2019). ; Ritter et al. (2002)

Respondent

This research focused on a population of leaders from batik SMEs within Indonesia's Central Java Province. The study utilized a purposive sampling technique, meaning participants were selected based on predefined criteria: their geographic location and a minimum business operation history of 10 years. The determination of the sample size followed the recommendations of Hair et al. (1996), which

advocate for at least 100 participants or a sample five to ten times larger than the number of indicators. Ultimately, to bolster the generalizability of the results, a final sample of 150 respondents was included in the research.

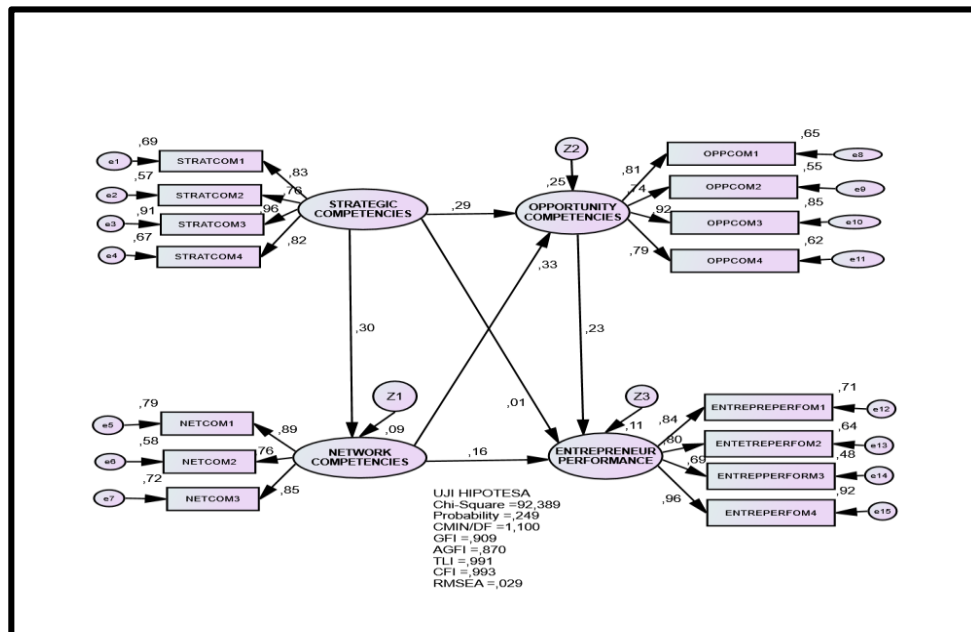
Data Analysis Technique

The quantitative data analysis for this research was conducted using Structural Equation Modelling (SEM) implemented via AMOS software. This model is a statistical technique that permits the examination of a complex network of relationships. A primary benefit of SEM in management studies is its ability to concurrently analyze two distinct components: the structural model (the relationships among independent and dependent constructs) and the measurement model (the relationships between indicators and their corresponding constructs).

Discussion

Based on the full model calculation of the Structural Equation Model (SEM) with AMOS software, Figure 1 and Table 2 are presented.

Figure 1: Model Entrepreneurial Competencies Performance Entrepreneur



The model testing results met the recommended cut-off values, as indicated by the acceptable levels of Chi-Square, Probability, CMIN/DF, and TL, all of which fall within the appropriate ranges. However, the AGFI value was only marginally acceptable. The results of the hypothesis testing are summarized in Table 1.

Table 2: Standardized Regression Weight (Loading Factor) Entrepreneur Performance

No	Effects	Estimate	C.R.	P	
1	Strategic Competencies → Network Competencies	,297	2,975	,003	Sig.*
2	Network Competencies → Opportunity Competencies	,335	3,348	***	Sig.
3	Strategic Competencies → Opportunity Competencies	,290	3,010	,003	Sig.
4	Network Competencies → Entrepreneur Performance	,156	1,430	,153	N.S.
5	Strategic Competencies → Entrepreneur Performance	,011	0,107	,914	N.S
6	Opportunity Competencies → Entrepreneur Performance	,234	2,068	,039	Sig.

*0.05

The results presented in Table 1 indicate that out of six hypotheses tested, four were validated by the empirical evidence. The findings confirmed a significant effect of strategic competencies on network competencies, of network competencies on opportunity competencies, and of strategic competencies on opportunity competencies. However, the two hypotheses that posited a direct influence of strategic competencies and network competencies on entrepreneurial performance were not supported by the data.

This study highlights factors that have both direct and indirect effects on entrepreneurial performance. It finds specifically that opportunity competencies which encompass the ability to exploit opportunities, identify new ones, and align product benefits with customer needs exert a direct and significant impact on entrepreneurial performance. For this research, entrepreneurial performance was assessed using metrics like increased sales, dedication to social responsibility, consistent product quality, and market share. These findings are in line with prior work by Hasan and Almubarak (2016) and support the perspective that entrepreneurial performance is driven by the capacity to recognize business opportunities (Zainol and Al Mamun, 2018; Lim, Lee, and Mamun, 2023; Chatterjee et al., 2019). This implies that opportunity competency reflects an entrepreneur's talent for identifying market gaps and environmental shifts, evaluating them accurately, and pursuing promising business prospects to ensure sustained entrepreneurial performance.

The second finding indicates that network competencies and strategic competencies do not have a direct significant effect on entrepreneurial performance. However, they do have a significant indirect effect through the mediating role of opportunity competencies. This suggests that opportunity competencies are enhanced through network competencies, such as collaboration with complementary partners, engagement with partners, and coordination of joint activities. Similarly, they are also influenced by strategic competencies, such as identifying long-term issues and opportunities, adapting business direction, prioritizing strategic tasks, and redesigning business objectives. These results are in line with the findings of previous studies by Tsai et al. (2016), Yaghoubi Farani et al. (2017), and Jha and Alam (2022). Moreover, this study addresses the existing gap in the literature regarding the substantive dimensions, prioritization, and causality of entrepreneurial competencies, as highlighted by Aidara et al. (2021).

Comprehending both the direct and indirect effects of entrepreneurial competencies on the performance of SMEs is essential for economic growth. This study adds to the field by underscoring how strategic, network, and opportunity competencies are critical for firms navigating volatile business climates. A key contribution is the finding that opportunity competency acts as a mediator, channelling the influence of strategic and network competencies onto SME performance. This insight offers significant value and advances the current body of knowledge in entrepreneurship and SME development studies.

Limitation and Future Research

The results of the full model Structural Equation Modelling (SEM) analysis indicate that the model fits the data well. However, two fit indices were accepted only marginally, particularly the Adjusted Goodness of Fit Index (AGFI = 0.870). The effects of network competencies on entrepreneurial performance and strategic competencies on entrepreneurial performance were found to be statistically insignificant. Therefore, future research is recommended to introduce a mediating variable between network competencies and entrepreneurial performance, as well as between strategic competencies and entrepreneurial performance. One such potential mediator is strategic thinking, which includes

dimensions such as systemic thinking, creative thinking, vision-driven thinking, and market-oriented thinking.

Funding

This research is supported by Ministry of Research and Technology of the Republic of Indonesia through Fundamental Research (Grant number: 002/LL6/PL/AL.04/2025, 26/B.1/SA-LPPM/V/2025).

References

- Abawa, A. (2024). Entrepreneurial competency in agriculture: is it a panacea for the problem of farmers' welfare?. *Journal of Agribusiness in Developing and Emerging Economies*, 14(1), 60-76.
- Aftab, J., Veneziani, M., Sarwar, H., & Ishaq, M. I. (2024). Entrepreneurial orientation and firm performance in SMEs: The mediating role of entrepreneurial competencies and moderating role of environmental dynamism. *International Journal of Emerging Markets*, 19(10), 3329-3352.
- Al Mamun, A., Muniady, R. A. L., Ibrahim, M. A. H. B., & Nawati, N. B. C. (2018). Effect of economic vulnerability on entrepreneurial competencies among Malaysian micro-entrepreneurs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(2), 222-237.
- Al Mamun, A., Fazal, S. A., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance: A study of micro-enterprises in Kelantan, Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 29-48.
- Ahmad, N.H. (2007), "A cross-cultural study of entrepreneurial competencies and entrepreneurial success in SMEs in Australia and Malaysia", unpublished PhD thesis, University of Adelaide, Adelaide.
- Aidara, S., Mamun, A. A., Nasir, N. A. M., Mohiuddin, M., Nawati, N. C., & Zainol, N. R. (2021). Competitive advantages of the relationship between entrepreneurial competencies and economic sustainability performance. *Sustainability*, 13(2), 864.
- Alim, M. A., Tan, K. L., Jee, T. W., Voon, B. H., Hossain, M. J., & Mia, M. U. (2023). To explain and to predict: analysis of opportunity recognition on the relationship between personal factors, environmental factors and entrepreneurs' performance. *Asia-Pacific Journal of Business Administration*, 15(5), 772-794
- Bendella, H., & Wolff, H. G. (2020). Who networks?—A meta-analysis of networking and personality. *Career Development International*, 25(5), 461-479.
- Chatterjee, N., Das, N. and Srivastava, N.K. (2019), "A structural model assessing key factors affecting women's entrepreneurial success: evidence from India", *Journal of Entrepreneurship in Emerging Economies*, Vol. 11 No. 1, pp. 122-151.
- Farooq, W. and Abideen, Z.U. (2015), "SMEs' preparedness to face economic crisis: a proposed framework for Malaysian SMEs", *East West Journal of Business and Social Studies*, Vol. 4 No. 2, pp. 66-79.
- Ferreras-Garcia, R., Sales-Zaguirre, J., & Serradell-López, E. (2021). Developing entrepreneurial competencies in higher education: a structural model approach. *Education+ Training*, 63(5), 720-743.
- Grant, R. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17: 109-122.
- Hasan, F.S. and Almubarak, M.M.S. (2016), "Factors influencing women entrepreneurs' performance in SMEs", *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 12 No. 2, pp. 82-101.
- Hsu, S. H. (2007). Human capital, organizational learning, network resources and organizational innovativeness. *Total Quality Management*, 18(9), 983-998.
- Hossain, M. A., Jahan, N., Al Masud, A., Nabi, M. N., Hossain, M. S., & Ahmed, S. (2024). Dynamic effect of critical success factors of SMEs on entrepreneurial performance via e-commerce performance. *The Journal of High Technology Management Research*, 35(2), 100515.
- Hart, S. 1995. A natural resource-based view of the firm. *Academy of Management Review*, 20: 986-1014.
- Hossain, M. A., Jahan, N., Al Masud, A., Nabi, M. N., Hossain, M. S., & Ahmed, S. (2024). Dynamic effect of critical success factors of SMEs on entrepreneurial performance via e-commerce performance. *The Journal of High Technology Management Research*, 35(2), 100515.
- Jha, P., & Alam, M. M. (2022). Antecedents of women entrepreneurs' performance: an empirical perspective. *Management Decision*, 60(1), 86-122.
- Lim, W., Lee, Y., & Mamun, A. A. (2023). Delineating competency and opportunity recognition in the entrepreneurial intention analysis framework. *Journal of Entrepreneurship in Emerging Economies*, 15(1), 212-232.
- Lumpkin, G.T. and Dess, G.G. (2001), "Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle", *Journal of Business Venturing*, Vol. 16, pp. 429-451.
- Man, T.W., Lau, T. and Chan, K.F. (2002), "The competitiveness of small and medium enterprises: a conceptualisation with focus on entrepreneurial competencies", *Journal of Business Venturing*, Vol. 17 No. 2, pp. 123-142.
- Mamun, A.A., Fazal, S.A. and Zainol, N.R. (2019), "Economic vulnerability, entrepreneurial competencies, and performance of informal micro-enterprises", *Journal of Poverty*, Vol. 23 No. 5, pp. 415-436, doi: 10.1080/10875549.2019.1587676.

- Mokbel Al Koliby, I. S., Abdullah, H. H., & Mohd Suki, N. (2024). Linking entrepreneurial competencies, innovation and sustainable performance of manufacturing SMEs. *Asia-Pacific Journal of Business Administration*, 16(1), 21-40.
- Man, T.W. and Lau, T. (2000), "Entrepreneurial competencies of SME owner/managers in the Hong Kong services sector: a qualitative analysis", *Journal of Enterprising Culture*, Vol. 8 No. 3, pp. 235-254.
- Mokbel Al Koliby, I. S., Abdullah, H. H., & Mohd Suki, N. (2024). Linking entrepreneurial competencies, innovation and sustainable performance of manufacturing SMEs. *Asia-Pacific Journal of Business Administration*, 16(1), 21-40.
- Nakhata, C. (2018), "The relationships between human capital, entrepreneurial competencies and career success of SME entrepreneurs in Thailand", *AU Journal of Management*, Vol. 5 No. 1, pp. 17-26
- Pinho, J.C.M., Martins, L. and Soares, A.M. (2018), "Small businesses' internationalization: international readiness in the context of Asian countries", *Asia-Pacific Journal of Business Administration*, Vol. 10 No. 1, pp. 50-63.
- Pulka, B.M., Ramli, A. and Mohamad, Z. (2021), "Personal characteristics and competencies of informal female entrepreneurs in emerging economies", *Entrepreneurship and Sustainability Issues*, Vol. 8 No. 2, pp. 1522-1543, doi: 10.9770/jesi.2021.8.2(79).
- Quagrainie, F.A. (2019), "Family values and practices promoting entrepreneurial competencies among Ghanaian women", *International Journal of Entrepreneurship and Small Business*, Vol. 33 No. 2, pp. 202-219.
- Rahman, S. A., Amran, A., Ahmad, N. H., & Taghizadeh, S. K. (2015). Supporting entrepreneurial business success at the base of pyramid through entrepreneurial competencies. *Management decision*, 53(6), 1203-1223
- 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*, 14(20), 13643
- Shet, S. V., Raut, G., Shet, P., Argade, P., & Piekara, A. (2024). From challenges to competencies: informal female entrepreneurship in emerging economies. *Journal of Small Business and Enterprise Development*.
- Suhaimi, N.H.B.M., Al Mamun, A., Zainol, N.R. and Naw, N. (2022), "The moderating effect of a supportive environment toward the relationship of entrepreneurial competencies and the performance of informal women entrepreneurs in Kelantan, Malaysia", *The Journal of Developing Areas*, Vol. 52 No. 1, pp. 251-259.
- Tafti, M.M., Tafti, M.M., Mahmoudsalehi, M., Mahmoudsalehi, M., Amiri, M. and Amiri, M. (2017), "Critical success factors, challenges and obstacles in talent management", *Industrial and Commercial Training*, Vol. 49 No. 1, pp. 15-21.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Tehseen, S., & Anderson, A. R. (2020). Cultures and entrepreneurial competencies; ethnic propensities and performance in Malaysia. *Journal of Entrepreneurship in Emerging Economies*, 12(5), 643-666.
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., & Uddin, M. J. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1), 2-29.
- Tehseen, S. and Ramayah, T. (2015), "Entrepreneurial competencies and SMEs business success: the contingent role of external integration", *Mediterranean Journal of Social Sciences*, Vol. 6 No. 1, pp. 50-61.
- Teece, D. J., Pisano, G., & Shuen, A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18: 509-534.
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puimalainen, K. (2016). Network competence in Finnish SMEs: implications for growth. *Baltic Journal of Management*, 11(2), 207-230.
- Ritter, T., Wilkinson, I.F. and Johnston, W.J. (2002), "Network competence: some international evidence", *Journal of Business & Industrial Marketing*, Vol. 17 Nos 2/3, pp. 119-138.
- Wu, S., Luo, Y., Zhang, H., & Cheng, P. (2024). Entrepreneurial bricolage and entrepreneurial performance: The role of business model innovation and market orientation. *Heliyon*, 10(4).
- Wickramaratne, A., Kiminami, A. and Yagi, H. (2014), "Entrepreneurial competencies and entrepreneurial orientation of tea manufacturing firms in Sri Lanka", *Asian Social Science*, Vol. 10 No. 18, pp. 50-62.
- Widodo, W., Widajanti, K. ., & Widyo, D. (2024). Antecedents and Consequence Straregic Entrepreneur. *Journal of Management World*, 2024(4), 340-346. <https://doi.org/10.53935/jomw.v2024i4.397>
- Venkatraman, N. and Ramanujam, V. (1986), "Measurement of business performance in strategy research: a comparison of approaches", *Academy of Management Review*, *Academy of Management*, Vol. 11 No. 4, pp. 801-814.
- Zainol, N. R., & Al Mamun, A. (2018). Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12(3), 299-321.