



Resilience of Service-Based MSME Entrepreneurship in Yogyakarta: The Role of Entrepreneurial Mindset, Adaptability, and External Support

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Article Info

Article History

Received: October, 2025
Revised: November, 2025
Published: December, 2025

Keywords:

Business Resilience,
Entrepreneurial Mindset,
Adaptability, External Support,
Service MSMEs, Yogyakarta

Doi:<http://dx.doi.org/10.23960/E3Jv8.i2.259-268>

Abstract

Micro, small and medium enterprises (MSMEs) in the service sector make an important contribution to the regional economy, but are vulnerable to the dynamics of an uncertain business environment. The inability to survive crises highlights the need for resilience as a key factor in business sustainability. This study aims to analyse the influence of entrepreneurial mindset, adaptability and external support on the business resilience of service MSMEs in Yogyakarta. The study uses a quantitative approach with a survey method. The research population consists of service MSME actors registered with the Cooperative and SME Office, with a sample of 250 respondents selected through purposive sampling. The research instrument is a questionnaire with a five-point Likert scale. Data analysis was performed using Partial Least Squares Structural Equation Modelling (PLS-SEM) using SmartPLS. The results showed that the three independent variables, namely entrepreneurial mindset, adaptability, and external support, had a positive and significant effect on the business resilience of service MSMEs. These findings confirm that a proactive entrepreneurial mindset, the ability to adapt to change, and support from external parties are the main determinants in building business resilience. Theoretically, this study reinforces the Resource-Based View (RBV) and Entrepreneurial Resilience Theory by emphasising the importance of combining internal and external resources. Practically, the results of this study recommend the need to increase entrepreneurial capacity through training, service innovation, and government policy support and business networks. Thus, this study contributes to the development of the entrepreneurial resilience literature and offers practical implications for strategies to enhance the resilience of service-based MSMEs in developing countries.

INTRODUCTION

Micro, small and medium enterprises (MSMEs) account for around 90 per cent of all businesses, contribute to 60 per cent of employment and generate half of the global gross domestic product (GDP). They are the backbone of the community economy, helping to combat poverty, create decent jobs, promote entrepreneurship among women, youth, and vulnerable groups, and protect livelihoods and economic growth. All of these MSME efforts and achievements contribute to the achievement of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) (Larios-Francia & Ferasso, 2023). Micro, Small and Medium Enterprises (MSMEs) are very important to most economies, especially in developing countries. MSMEs are the backbone of the global economy, driving job growth, competitiveness, innovation, and Gross Domestic Product (GDP) (Febriani et al., 2025). Entrepreneurship has long been recognised as a key driver of economic growth and innovation (Delladio et al., 2023). Entrepreneurs play a very important role in the economy as employers, job creators, and innovators. Therefore, their decision to cease business will not only affect themselves, but will also affect employees, customers, suppliers, and other stakeholders (Ribeiro et al., 2025).

In times of crisis, entrepreneurs face unique challenges that require resilience and adaptability, necessitating rapid adjustments to business strategies, responding to market shifts, and devising innovative solutions to unexpected challenges (Grover & Sabherwal, 2020). This involves persevering through difficulties, growing, and capitalising on new opportunities, based on a growth mindset, the

ability to learn from failure, and a willingness to take calculated risks (Kirtley & O'Mahony, 2023). With the rapid growth of entrepreneurial activity, various studies have been conducted to examine the importance of entrepreneurial resilience (Li et al., 2024). This speaks to entrepreneurs' capacity to react constructively and get past obstacles. For founders to bounce back from setbacks and carry on with their business, they must possess entrepreneurial resilience (Nasser, 2021).

The ability of an organization to endure, bounce back, and expand in the face of external pressures is known as entrepreneurial resilience. The service industry is a business sector in entrepreneurship that depends heavily on direct customer interaction and is more vulnerable to social constraints and shifts in consumer preferences (Hartmann et al., 2022). The fundamental frameworks that explain the sustainability and resilience of MSMEs are examined in theoretical literature (Agarwal et al., 2020). These theories offer a starting point for comprehending how companies can adjust and thrive in times of upheaval. According to resilience theory, MSMEs' resilience is defined as their capacity to bounce back from setbacks and adjust to shifting circumstances. According to Holling's Resilience Framework, theoretical models highlight the significance of adaptive capacity, absorption capacity, and innovation as crucial elements of resilience. According to the Resource-Based View (RBV), MSMEs can become more resilient by leveraging their own internal resources, such as technology, social networks, and human capital, to deal with external challenges (Satpathy et al., 2025).

There are distinct features that set the micro, small, and medium-sized enterprise (MSME) service sector apart from the manufacturing or trade sectors. Given that services are intangible, rely on personal skills and physical presence, and are founded on customer trust, service MSMEs are particularly susceptible to external disruptions like pandemics, technological advancements, and changes in consumer preferences (Mishra & Kushwaha, 2023). One of the most important skills that service business actors need to have in this situation is entrepreneurial resilience. The ability to proactively handle pressure, adjust swiftly, and maintain the ability to recognize opportunities in times of crisis is known as entrepreneurial resilience (Lin et al., 2024). For Yogyakarta's MSME service providers, many of whom are labor-intensive and run informally, resilience not only reflects the business's physical stamina but also the entrepreneurs' psychological fortitude and adaptability in ensuring business continuity. In other words, the degree to which business actors possess an entrepreneurial mindset, flexibility in dealing with change (adaptability), and support from the external environment—such as the community, digital technology, and governmental policies—determines how resilient service businesses are. In order to create a business system that is more resilient, adaptable, and sustainable, it is crucial to gain a deeper understanding of the resilience dimensions in the context of service MSMEs.

Although many studies on the resilience of SME entrepreneurship have been conducted, most of them still focus on managerial and financial aspects and predominantly examine the trade and manufacturing sectors (Bergman, 2025; Khan et al., 2023; Simarasl et al., 2025). Research that specifically explores the combined role of entrepreneurial mindset, adaptability, and external support on the business resilience of service MSMEs is still relatively limited, especially in local contexts such as Yogyakarta. In fact, service businesses face greater challenges in terms of dependence on customer interactions, personal technical capabilities, and flexibility in service. On the other hand, entrepreneurial mindset is needed as a foundation for the mental attitude to take initiative, face risks, and manage uncertainty (Elbaz et al., 2025). While external support from the community, government, and digital technology can increase their ability to survive and innovate, business actors must be able to adapt to changing market conditions and customer demands. The framework of service business resilience has not been used to analyze these three variables holistically. Therefore, in order to theoretically and practically contribute to the sustainable development of service MSMEs in Indonesia, research is required to close this gap using a more contextual and comprehensive approach..

Therefore, this study develops an analytical framework that integrates these three variables in the context of service MSMEs in Yogyakarta, with the aim of explaining the influence of entrepreneurial mindset on service business resilience, measuring the contribution of individual adaptability and business processes in responding to change, and examining the role of external support (such as government, community, and digital technology) in strengthening business resilience. Through this approach, the study is expected to contribute theoretically to the field of entrepreneurial resilience and also be useful in practice for service MSMEs and policymakers in Yogyakarta.

METHODS

This study uses a quantitative approach with a survey method to examine the influence of entrepreneurial mindset, adaptability, and external support on the business resilience of service MSMEs in Yogyakarta. This approach was chosen because it provides a measurable picture of the relationship between the variables under study. The research population includes all service MSMEs operating in the Special Region of Yogyakarta. The sampling technique used was purposive sampling, which is the selection of respondents based on certain criteria, such as having been in operation for at least two years and having permanent employees. The sample size was determined using the Slovin formula with a 5% margin of error, resulting in a sample size that was representative of the population. The sampling technique used was purposive sampling, with the following criteria:

1. Service MSMEs that have been active for at least the last 3 years.
2. Operating in the city of Yogyakarta or surrounding regencies (Sleman, Bantul).
3. Having fewer than 20 employees.
4. Having experienced business challenges such as a decline in sales, changes in market trends, or supply chain disruptions in the last 3 years.
5. Experienced the impact of a crisis (pandemic, economic, etc.) and remained operational to date.
6. Willing to participate and complete the research questionnaire.

The sample size was determined using the PLS-SEM analysis formula, which is 10 times the number of indicators in one latent variable. With a total of ± 25 indicators, the minimum sample size was 250 respondents.

Definition and Measurement of Variables

The dependent variable in this study is business resilience, which is measured through the dimensions of endurance, adaptability, and sustainable innovation. The independent variables consist of entrepreneurial mindset, adaptability, and external support. Entrepreneurial mindset is measured through indicators such as long-term vision, opportunity orientation, and innovation-based decision making. Adaptability is measured based on speed of response to change, operational flexibility, and learning from experience. External support is measured through financial assistance, business mentoring, and access to business networks. All indicators are measured on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

Table 1. Variable Indicators

Variable	Item Code	Statement
Business Resilience	RES_1	My business is able to survive even when facing difficult situations.
Business Resilience	RES_2	I am able to quickly restore business operations after a disruption occurs.
Business Resilience	RES_3	I have strategies to anticipate and respond to market changes.
Business Resilience	RES_4	I always look for creative solutions when my business faces obstacles.
Business Resilience	RES_5	I believe my business can grow even in conditions of uncertainty.
Entrepreneurial Mindset	ENT_1	I am always looking for new opportunities to develop my business.
Entrepreneurial Mindset	ENT_2	I am willing to take calculated risks for the sake of business progress.
Entrepreneurial Mindset	ENT_3	I remain optimistic despite facing challenges in running my business.
Entrepreneurial Mindset	ENT_4	I believe that failure is part of the learning process.
Entrepreneurial Mindset	ENT_5	I feel compelled to continuously innovate in my business services.
Adaptability	ADA_1	I can adjust my business strategy when market conditions change.
Adaptability	ADA_2	I quickly learn new skills to support my business.

Adaptability	ADA_3	I am flexible in responding to the ever-changing needs of customers.
Adaptability	ADA_4	I am open to changes in my business processes.
Adaptability	ADA_5	I am able to change my business approach when old strategies are no longer effective.
External Support	DUK_1	I obtain business information from government agencies or SME support institutions.
External Support	DUK_2	I receive support from fellow SME players (communities, associations, etc.).
External Support	DUK_3	My customers provide useful feedback for service improvement.
External Support	DUK_4	I feel helped by the existence of digital platforms (social media, marketplaces, etc.).
External Support	DUK_5	External assistance or training is very beneficial for the development of my business.

Data Analysis Techniques

The collected data will be analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) through SmartPLS software. This technique was chosen because it is capable of analysing complex causal relationships between latent variables, even though the data is not fully normally distributed. The analysis was conducted in two stages, namely evaluation of the measurement model (outer model) to test the validity and reliability of the instruments, and evaluation of the structural model (inner model) to test the research hypotheses (Hair et al., 2017).

RESULTS AND DISCUSSION

A. Result

Evaluation of Measurement Models (Outer Model)

Evaluation of the measurement model allows for testing the validity and reliability of the instruments used in measuring latent constructs and related indicators (Hair et al., 2010). One criterion that can be applied is Cronbach's Alpha, which measures internal consistency based on the correlation between indicators. Excellent reliability is indicated by a Cronbach's Alpha value above 0.80, whereas an acceptable level of reliability is indicated by a value above 0.70. Other measurements include the Dijkstra-Henseler reliability coefficient (ρ_A) and composite reliability criteria. To guarantee that the measured construct satisfies sufficient reliability standards, a minimum value of 0.70 is advised (Hair et al., 2020). A thorough assessment of these three factors paints a complete picture of how well latent constructs are measured in a research model.

Convergent Validity

The correlation between item scores and latent variable scores is used to evaluate the convergent validity of the measurement model with reflective indicators. A value >0.5 is still acceptable as long as it is not less than the ideal factor loading of >0.7 (Hair et al., 2018). Good validity is indicated by the test results, which show that all factor loadings are >0.7 (Table 1). Furthermore, AVE (Average Variance Extracted) >0.5 signifies that the latent construct satisfies the requirements for convergent validity by explaining over 50% of the indicator variance.

Discriminant Validity

The Fornell-Larcker and HTMT criteria were used to assess discriminant validity (Dijkstra & Henseler, 2015). Each construct's square root of the AVE must be greater than the correlation between them, according to the Fornell-Larcker criteria (Table 2). In the meantime, to guarantee strong discrimination between constructs, the HTMT value needs to be much lower than 0.85. According to Table 3's analysis results, all HTMT values are less than 1, indicating that each model construct is unique and has sufficient discriminant validity. This result supports the notion that the constructs measured in this study are distinct and empirically distinct.

Indicator Reliability

Outer loadings, which show the percentage of indicator variance accounted for by latent constructs, can be used to evaluate an indicator's reliability (Hair et al., 2018). The study's findings showed that every outer loading was greater than the 0.7 minimum, suggesting that every indicator was reliable and accurately reflected the associated latent constructs. These results demonstrate how well the indicators explain the variance of the construct being measured.

Table 2. Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Adaptability	0,797	0,741	0,742	0,597
External Support	0,791	0,714	0,830	0,622
Entrepreneurial Mindset	0,768	0,790	0,843	0,521
Business Resilience	0,773	0,707	0,789	0,532

Source: researcher data processing, 2025

Table 3. Fornell-Larcker Criteria

	Adaptability	External Support	Entrepreneurial Mindset	Business Resilience
Adaptability	0,705			
External Support	-0,009	0,789		
Entrepreneurial Mindset	0,382	-0,005	0,782	
Business Resilience	0,388	-0,089	0,759	0,657

Source: researcher data processing, 2025

Table 4. The Heterotrait–Monotrait Ratio (HTMT)

	Heterotrait-monotrait ratio (HTMT)
External Support <-> Adaptability	0,163
Entrepreneurial Mindset <-> Adaptability	0,630
Entrepreneurial Mindset <-> External Support	0,052
Business Resilience <-> Adaptability	0,667
Business Resilience <-> External Support	0,130
Business Resilience <-> Entrepreneurial Mindset	0,906

Source: researcher data processing, 2025

Inner Model Evaluation

By mapping the relationship patterns between different constructs, structural model assessment is used to assess the effects of linear regression between endogenous constructs (Hair et al., 2020).

Evaluation of Collinearity

The Variance Inflation Factor (VIF) is used to detect collinearity in structural models (Legate et al., 2023). VIF calculates the rise in regression estimation variance brought on by independent variable correlations. There is no discernible collinearity when the VIF value is less than 5. The analysis's findings demonstrate that every indicator has a VIF less than 5, indicating that there is no collinearity in the model. For additional analysis, the resulting regression estimates are therefore precise and trustworthy.

Coefficient of Determination

With a range of 0 to 1, the coefficient of determination (R²) quantifies the percentage of the dependent variable's variance that can be accounted for by the predictor variables; the higher the value, the better (Hair et al., 2019). R² 0.19 is regarded as weak, 0.33 as moderate, and 0.67 as strong according to Hair et al. (2019) criteria. The study's findings reveal a moderate R² value of 0.595, suggesting that

the model's predictive power in elucidating the dependent variable is still insufficient. However, these results nevertheless offer a useful preliminary summary of the role of predictor variables in the model.

Standardized Root Mean Square Residual (SRMR)

A good model fit is indicated by an SRMR value <0.08 , which is a measure of absolute goodness-of-fit in PLS-SEM that compares observed and predicted correlations (Henseler & Sarstedt, 2013). The study's findings demonstrate a good fit for the model with an SRMR of 0.076. The structural model's ability to accurately depict the relationships between variables is supported by these findings.

As demonstrated by a number of metrics, such as path coefficients (β), path statistical significance (p-values), and variance explained in the structural model, the results of the previously performed data analysis showed that the structural model satisfied the goodness-of-fit (GoF) criteria (Figure 1).

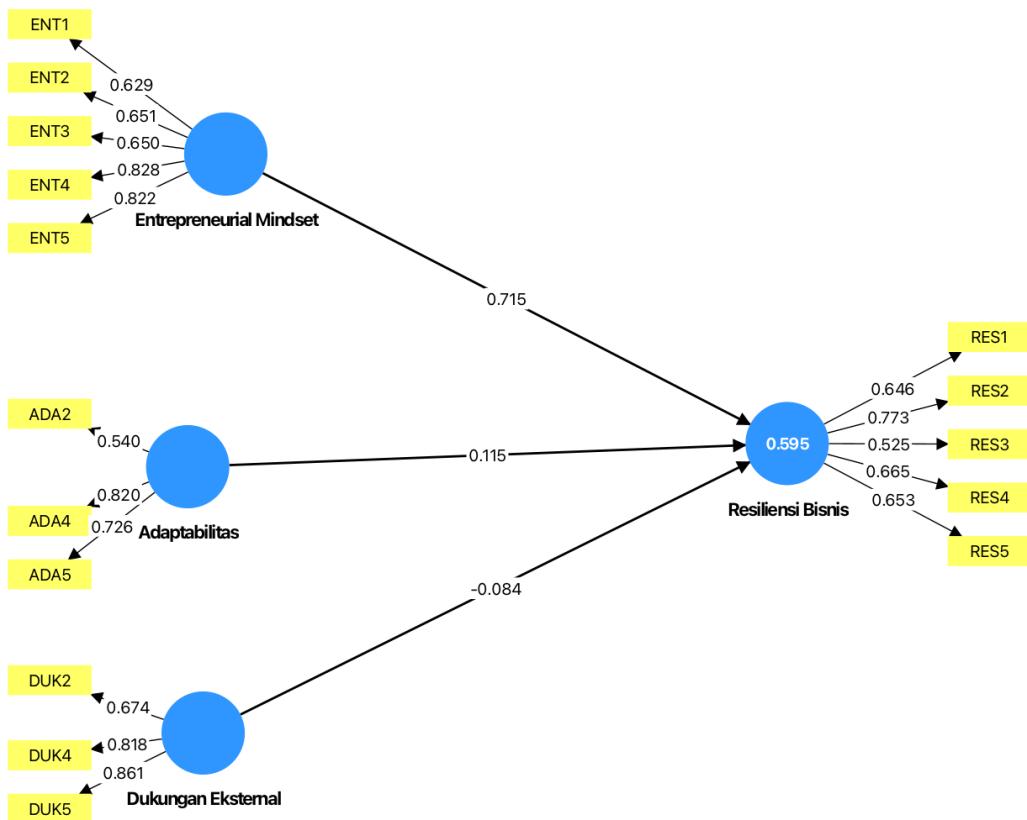


Figure 1. Structural Fit Models that Meet the GoF Criteria

Hypothesis Testing

A bootstrapping procedure was employed to test the hypothesis pertaining to the direct relationship in the model, with reference to Hair et al. (2018) to evaluate the statistical significance of the resulting coefficients. Table 4 presents the analysis's findings, including direct effects as well as supplementary data like means, standard deviations, t-values, and p-values. The table demonstrates that Business Resilience is significantly impacted by all three variables. The greatest influence is found in entrepreneurial mindset ($\beta=0.715$, $p=0.000$), meaning that a one-unit increase in this variable will result in a 0.715-unit increase in business resilience.. Adaptability also has a positive and significant effect ($\beta=0.115$, $p=0.008$), although it is smaller. Meanwhile, External Support shows a significant negative effect ($\beta = -0.084$, $p = 0.043$), meaning that an increase in external support actually reduces business resilience in the context of this study. All p values < 0.05 indicate that the three relationships are statistically significant.

Table 5. Conclusion of Hypothesis Testing

Hs	Original sample (0)	Sample mean (M)	Standard deviation (STDEV)	T statistics (0/STDEV)	P values	Conclusion
ADA RES	-> 0,115	0,118	0,043	2,647	0,008	Accepted
DUK RES	-> -0,084	-0,084	0,042	2,025	0,043	Accepted
ENT RES	-> 0,715	0,719	0,036	19,727	0,000	Accepted

Source: researcher data processing, 2025

B. Discussion

The results of this study indicate that entrepreneurial mindset, adaptability, and external support have a positive effect on the resilience of service-based MSMEs in Yogyakarta. These findings provide new insights at both the conceptual and practical levels. First, the influence of entrepreneurial mindset on business resilience proves that an entrepreneurial mindset characterised by an orientation towards opportunities, creativity, and the courage to take risks is an important factor in maintaining business continuity. It is simpler for service entrepreneurs with creative and visionary thinking to come up with solutions in the face of changing conditions, such as diversifying their offerings or creating digital business models. These findings are consistent with Leal-Rodríguez *et al.*'s research from 2023, which highlights the importance of having an entrepreneurial mindset when navigating market uncertainty. As a result, these results support the idea that an entrepreneurial mindset is crucial for sustaining business resilience in addition to spurring growth.

Second, the results on adaptability demonstrate that a key factor in the resilience of service MSMEs is the capacity to swiftly modify plans, procedures, and offerings. Business actors are more likely to survive a crisis if they can adapt to shifting consumer behavior, market dynamics, and technical advancements. These findings align with Satpathy *et al.* (2025), which highlights the significance of adaptive capacity as a fundamental element of organizational resilience. The ability to modify service patterns, make use of digital platforms, and build cross-sector partnerships are more examples of adaptability in the context of service MSMEs. This demonstrates that flexibility is a dynamic skill that helps business actors stay competitive while boosting their capacity to endure in unpredictable circumstances. Third, the beneficial impact of outside assistance on business resilience demonstrates that external influences as well as internal variables dictate MSMEs' durability. It has been demonstrated that assistance from the government, financial institutions, and business community increases MSMEs' ability to withstand pressure. These results are consistent with research by Elshaer & Saad (2022), which discovered that MSMEs are more resilient, especially when dealing with economic crises, when they have access to finance, training, and business networks. Support in the form of capital assistance, training in digital marketing, and assistance in promoting culinary and service tourism has been shown to significantly affect small companies' resilience in the Yogyakarta setting. This demonstrates how external assistance serves as resource augmentation to make up for the shortcomings of SMEs' own resources.

The results of this study support the Resource-Based View (RBV) and Entrepreneurial Resilience Theory from a theoretical standpoint. RBV highlights the significance of sustainable and distinctive resources as factors that determine competitive advantage (Barney, 1991). While external help acts as supplementary resources that increase internal capacity, entrepreneurs' intangible resources include their entrepreneurial attitude and adaptability. Stronger business resilience is thus produced by combining internal competencies with outside assistance. Entrepreneurial Resilience Theory, on the other hand, contends that resilience is an active process of generating new opportunities in times of crisis, rather than only a passive response (Korber & McNaughton, 2018). This perspective is supported by the study's findings, which demonstrate that resilient service MSMEs can use crises as a springboard for innovation.

This study has a number of practical ramifications. Through training and ongoing education, service MSME participants should prioritize developing an entrepreneurial mentality and adaptability. To ensure that MSMEs can withstand upheaval, the government and stakeholders must keep expanding support in the form of digital training, collaborative networks, and finance availability. The fact that these findings expand our knowledge of the factors that influence company resilience, especially when it comes to service MSMEs in developing nations, makes them significant for scholars as well.

CONCLUSIONS AND SUGGESTIONS

A. Conclusion

The purpose of this study is to examine how Yogyakarta's service MSMEs' business resilience is impacted by an entrepreneurial mentality, flexibility, and outside assistance. Several key inferences can be made in light of the analysis's findings. First, company resilience is positively impacted by entrepreneurial mentality. This indicates that proactive, inventive, and opportunity-focused entrepreneurial mindsets can help service MSME companies become more resilient to market dynamics and volatility.

Second, adaptability has been proven to contribute significantly to business resilience, so that the ability of service MSMEs to quickly adjust their strategies, service models, and operational processes is a key factor in maintaining business sustainability. Third, external support has a positive effect on business resilience, indicating that assistance from the government, financial institutions, business associations, and communities can strengthen the capacity of service MSMEs to survive, recover, and grow after facing a crisis.

Theoretically, the findings of this study confirm the importance of combining internal resources (entrepreneurial mindset and adaptability) and external resources (support from the surrounding environment) in building business resilience, as explained in the Resource-Based View and Entrepreneurial Resilience Theory frameworks. In practical terms, this study provides recommendations for service SME actors to continue developing innovative mindsets and business flexibility, and for the government and stakeholders to strengthen external support through policies, mentoring, and access to business networks. Thus, this study confirms that the business resilience of service-based MSMEs in Yogyakarta does not only rely on internal capacity, but is also significantly influenced by external support factors that expand their ability to face challenges.

B. Suggestion

Based on the research results and conclusions obtained, several recommendations can be made as follows:

1. For MSME Service Providers

Business actors need to foster an entrepreneurial mindset by increasing their focus on opportunities, creativity, and the courage to take risks. This can be done through entrepreneurship training, service innovation development, and active involvement in the business community.

2. For Local Governments and Related Institutions

The government needs to strengthen external support through easier access to financing, needs-based training, and facilitation of service digitalisation. Policy programmes that focus on increasing the competitiveness of service MSMEs will accelerate regional economic recovery and resilience.

3. For Business Associations and Communities

Business associations and local communities are expected to become forums for collaboration and information exchange. Support in the form of marketing networks, mentoring, and experience sharing will help service MSMEs cope with the rapidly changing market dynamics.

4. For Academics and Researchers

This research can be further developed by expanding the sector coverage, using longitudinal methods to monitor changes in resilience in the long term, or adding other variables such as digital innovation and social capital to enrich the conceptual model.

With these suggestions, the research not only contributes theoretically but also provides practical recommendations that can be utilised by business actors, policymakers, and other researchers to strengthen the resilience of service-based MSMEs in Yogyakarta and other regions.

REFERENCES

Agarwal, V., Mathiyazhagan, K., Malhotra, S., & Pimpunchat, B. (2023). Building resilience for sustainability of MSMEs post COVID-19 outbreak: An Indian handicraft industry outlook. *Socio-Economic Planning Sciences*, 85, 101443. <https://doi.org/10.1016/j.seps.2022.101443>.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/01492063910170>.

Bergman, B. J. (2025). The power, process, and potential of mapping an entrepreneurial ecosystem. *Business Horizons*, 68(1), 55–66. <https://doi.org/10.1016/j.bushor.2023.12.005>

Dijkstra, T. K., & Henseler, J. (2015). Consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics and Data Analysis*, 81, 10–23. <https://doi.org/10.1016/j.csda.2014.07.008>

Elbaz, A. M., Sayed, B. S. Y., Amjad, S., Salem, I. E., & Shamas, G. (2025). Entrepreneurship Education, mindset and entrepreneurial intentions: the moderating effects of creativity and role models. *International Journal of Management Education*, 23(3), 101240. <https://doi.org/10.1016/j.ijme.2025.101240>

Elshaer, I. A., & Saad, S. K. (2022). Entrepreneurial resilience and business continuity in the tourism and hospitality industry: the role of adaptive performance and institutional orientation. *Tourism Review*, 77(5), 1365–1384. <https://doi.org/10.1108/TR-04-2021-0171>

Febriani, A., Sopha, B. M., & Arif Wibisono, M. (2025). Dynamic capabilities for omnichannel transformation in MSMEs: A comparative case study of fashion and furniture sectors. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 100498. <https://doi.org/10.1016/j.joitmc.2025.100498>

Grover, V., & Sabherwal, R. (2020). Making sense of the confusing mix of digitalization, pandemics and economics. *International Journal of Information Management*, 55(XXXX), 102234. <https://doi.org/10.1016/j.ijinfomgt.2020.102234>

Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) - Joseph F. Hair, Jr., G. Tomas M. Hult, Christian Ringle, Marko Sarstedt. In *Sage*.

Hartmann, S., Backmann, J., Newman, A., Brykman, K. M., & Piddock, R. J. (2022). Psychological resilience of entrepreneurs: A review and agenda for future research. *Journal of Small Business Management*, 60(5), 1041–1079. <https://doi.org/10.1080/00472778.2021.2024216>

Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565–580. <https://doi.org/10.1007/s00180-012-0317-1>

Khan, N. R., Ameer, F., Bouncken, R. B., & Covin, J. G. (2023). Corporate sustainability entrepreneurship: The role of green entrepreneurial orientation and organizational resilience capacity for green innovation. *Journal of Business Research*, 169, 114296. <https://doi.org/10.1016/j.jbusres.2023.114296>

Kirtley, J., & O'Mahony, S. (2023). What is a pivot? Explaining when and how entrepreneurial firms decide to make strategic change and pivot. *Strategic Management Journal*, 44(1), 197–230. <https://doi.org/10.1002/smj.3131>

Korber, S., & McNaughton, R. B. (2018). Resilience and entrepreneurship: a systematic literature review. *International Journal of Entrepreneurial Behaviour and Research*, 24(7), 1129–1154. <https://doi.org/10.1108/IJEBR-10-2016-0356>

Larios-Francia, R. P., & Ferasso, M. (2023). The relationship between innovation and performance in MSMEs: The case of the wearing apparel sector in emerging countries. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(1), 100018. <https://doi.org/10.1016/j.joitmc.2023.100018>

Leal-Rodríguez, A. L., Sanchís-Pedregosa, C., Moreno-Moreno, A. M., & Leal-Millán, A. G. (2023). Digitalization beyond technology: Proposing an explanatory and predictive model for digital culture in organizations. *Journal of Innovation and Knowledge*, 8(3). <https://doi.org/10.1016/j.jik.2023.100409>

Legate, A. E., Hair, J. F., Chretien, J. L., & Risher, J. J. (2023). PLS-SEM: Prediction-oriented solutions for HRD researchers. *Human Resource Development Quarterly*, 34(1), 91–109. <https://doi.org/10.1002/hrdq.21466>

Li, X., Zhang, M., Liu, W., & Wang, Z. (2024). The impact of entrepreneurial co-founders' support on

founders' entrepreneurial resilience in the high-tech industry: The roles of perceived digital technology and perceived failure-tolerant climate. *Technological Forecasting and Social Change*, 202(March), 123320. <https://doi.org/10.1016/j.techfore.2024.123320>

Lin, L., Li, M., Wang, Y., Jiang, Y., & Zhu, F. (2024). Rural B&B entrepreneurs' lifestyle pursuits and rural resilience. *International Journal of Hospitality Management*, 123(August), 103920. <https://doi.org/10.1016/j.ijhm.2024.103920>

Mishra, S. K., & Kushwaha, H. (2023). Managing litigation risk through business legal expense insurance: Facilitators and inhibitors for MSMEs. *IIMB Management Review*, 35(1), 57-70. <https://doi.org/10.1016/j.iimb.2023.04.002>

Nasser, W. H. (2021). Innovation capital, sustainable entrepreneurial orientation, and the moderating role of entrepreneurial resilience. *Entrepreneurial Business and Economics Review*, 9(3), 73-85. <https://doi.org/10.15678/EBER.2021.090305>

Satpathy, A. sanatan, Sahoo, S. kumar, Mohanty, A., & Mohanty, P. P. (2025). Strategies for enhancements of MSME resilience and sustainability in the post-COVID-19 era. *Social Sciences and Humanities Open*, 11(October 2024), 101223. <https://doi.org/10.1016/j.ssaho.2024.101223>

Simarasl, N., Tabesh, P., & Jessri, M. (2025). Navigating hardships: Resilience-building coping strategies and actionable techniques for entrepreneurs. *Business Horizons*, xxxx. <https://doi.org/10.1016/j.bushor.2024.07.001>