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Determinants of MSME Success: The Mediating Role of Innovation in Entrepreneurial Characteristics and Social Capital

Muhammad Arief[1], Isep Amas Priatna[2], Rasyid Widada[3]
[1,2,3] Universitas Pamulang,Indonesia
e-mail: dosen01629@unpam.ac.id

ABSTRAK

Meskipun Usaha Mikro, Kecil, dan Menengah (UMKM) memberikan kontribusi dominan terhadap PDB Indonesia, tantangan terkait keberlanjutan dan daya saing tetap menjadi isu krusial. Penelitian ini bertujuan untuk menganalisis mekanisme pengaruh karakteristik kewirausahaan dan modal sosial terhadap keberhasilan UMKM melalui peran mediasi inovasi. Dengan menggunakan desain kuantitatif eksplanatori, penelitian ini melibatkan 53 pemilik UMKM di Kabupaten Bogor yang dipilih melalui teknik *purposive sampling* dengan kriteria telah beroperasi minimal selama 3 tahun. Data dianalisis menggunakan metode *Structural Equation Modeling-Partial Least Squares* (SEM-PLS). Hasil penelitian menunjukkan bahwa inovasi berperan vital sebagai mediator penuh (*full mediator*) dalam hubungan antara karakteristik kewirausahaan dan keberhasilan usaha. Menariknya, temuan menunjukkan bahwa modal sosial tidak memiliki pengaruh signifikan terhadap keberhasilan usaha, baik secara langsung maupun melalui inovasi. Penelitian ini menyimpulkan bahwa karakteristik kewirausahaan internal merupakan faktor penentu yang lebih unggul dibandingkan modal sosial (eksternal) dalam mendorong inovasi dan keberhasilan usaha. Implikasi praktisnya menyarankan agar para pemangku kepentingan lebih berfokus pada peningkatan kapasitas inovasi dan karakter kewirausahaan daripada sekadar memperluas jaringan.

Kata kunci: Karakteristik Kewirausahaan; Modal Sosial; Mediasi Inovasi; Kinerja UMKM; SEM-PLS

ABSTRACT

Despite the dominant contribution of Micro, Small, and Medium Enterprises (MSMEs) to Indonesia's GDP, challenges regarding sustainability and competitiveness remain crucial issues. This study aims to analyze the mechanism of influence of entrepreneurial characteristics and social capital on MSME success through the mediating role of innovation. Employing an explanatory quantitative design, this study involved 53 MSME owners in Bogor Regency selected via purposive sampling with a criterion of at least 3 years of operation. Data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS). The results demonstrate that innovation plays a vital role as a full mediator in the relationship between entrepreneurial characteristics and business success. Interestingly, the findings indicate that social capital has no significant effect on business success, either directly or through innovation. The study concludes that internal entrepreneurial characteristics are a superior determinant compared to external (social) capital in driving innovation and business success. Practical implications suggest that stakeholders should focus more on enhancing innovation capacity and entrepreneurial character rather than merely expanding networks.

Keywords: Entrepreneurial Characteristics; Social Capital; Innovation Mediation; MSME Performance; SEM-PLS

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role as the backbone of the national economy. Data from the Ministry of Cooperatives and SMEs (2023) indicates that MSMEs contribute over 60% to the Gross Domestic Product (GDP) and absorb 97% of the national workforce. Regionally, Bogor Regency serves as a key epicenter for MSME growth in West Java, hosting more than 450,000 business units (Bogor Regency Cooperative and MSME Agency, 2023). This substantial MSME population not only bolsters local economic resilience but also functions as an effective social safety net for labor absorption in the capital city's satellite region.

However, this large volume does not fully correlate with the quality of business sustainability. MSMEs in Bogor Regency face complex challenges regarding "resilience," particularly after the initial startup phase. Field observations reveal that despite high rates of business formation, many MSMEs experience performance stagnation due to low competitiveness, limited access to technology, and a lack of adaptation to digital markets. This phenomenon indicates that financial capital support alone is insufficient; non-financial determinants are required to accelerate business performance amidst increasingly fierce competition.

Entrepreneurship literature identifies entrepreneurial characteristics as fundamental internal factors. Drawing on McClelland's (1961) "Need for Achievement" theory, entrepreneurs with a high achievement orientation and a tolerance for risk tend to exhibit superior performance (Rauch & Frese, 2007; Collins et al., 2004). Beyond internal factors, the economic sociology perspective highlights the importance of social capital. Putnam (2000) and Nahapiet & Ghoshal (1998) argue that networks, trust, and norms of reciprocity are intangible assets that facilitate access to resources. Empirical studies by Stam et al. (2014) and Hoang et al. (2023) confirms that social capital contributes positively to MSME performance through expanded market access.

However, there are research gaps that warrant critical examination. First, there are inconsistent findings regarding the direct impact of social capital and entrepreneurial characteristics. Some studies have found that extensive social networks do not necessarily lead to increased profitability unless accompanied by competent managerial skills. This raises questions about the actual mechanisms bridging input factors (character and social capital) and output (business success). Second, the role of innovation as a mediating variable is often overlooked in models examining social capital. Yet, Schumpeter (1934) emphasized innovation as a primary driving force (creative destruction). In a modern context, social capital should serve as a "gateway" for information, which is then processed through innovation to create added value (Drucker, 2007; Merin et al., 2024).

Third, there is a contextual gap. Most prior research has been conducted within homogeneous industrial clusters or purely urban areas. Studies focusing on peri-urban regions—such as Bogor Regency, which possesses unique characteristics as a meeting point between Jakarta's economic agglomeration and rural local wisdom—remain limited. MSME dynamics in this region face dual pressures: the demands of urban market standards alongside local resource constraints.

Given this urgency, this study aims to develop an integrative model examining the influence of entrepreneurial characteristics and social capital on MSME success, positioning innovation as a mediating variable. The study's novelty lies in providing empirical evidence regarding the innovation mediation pathway within the context of peri-urban MSMEs. It is expected to make a theoretical contribution by clarifying the transmission pathway—specifically, whether networks and individual characteristics can directly enhance performance or if innovation is strictly required as a primary catalyst.

RESEARCH METHOD

This study employs a quantitative approach with an explanatory research design to test hypotheses regarding causality among variables. This approach was selected to validate a theoretical model linking entrepreneurial characteristics and social capital to business success, mediated by innovation. Given the sample characteristics and the model's predictive objectives, data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The use of SEM-PLS is justified by its robustness in handling small sample sizes, data lacking multivariate normal distribution, and model complexity involving mediating variables (Hair et al., 2019).

The study population consists of MSMEs registered with the Bogor Regency Cooperative and MSME Agency, totaling over 450,000 business units (Cooperative Agency, 2023). Due to the large population size and limited access to all units, a non-probability sampling technique—specifically purposive sampling—was employed.

Strict inclusion criteria were established to ensure data quality: (1) the MSME must have been in operation for at least three years to ensure it has passed the initial survival phase; (2) possession of legal business documentation (NIB/IUMK); and (3) the respondent must be the owner or primary manager with control over strategic decision-making. Based on these criteria, a sample of 53 respondents was obtained. This sample size determination adheres to the SEM-PLS "rule of thumb," which requires a minimum sample size of 5–10 times the number of indicators or the most complex path in the model (Hair et al., 2017). With a total of 16 indicators in the research model, the sample of 53 respondents meets the minimum threshold required to achieve adequate statistical power for the PLS analysis.

Data were collected via a survey using a closed-ended questionnaire. Variables were measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Data sources consist of primary data (questionnaire results) and secondary data (literature reviews and reports from relevant agencies).

Data processing was conducted using SmartPLS software. The analysis procedure involved two main stages:

1. Measurement Model (Outer Model) Evaluation: Aimed at assessing the validity and reliability of the instrument. Convergent validity was assessed based on loading factors (>0.70) and Average Variance Extracted (AVE >0.50). Discriminant validity was tested using the Heterotrait-Monotrait Ratio (HTMT <0.90) criterion. Reliability was measured using Cronbach's Alpha and Composite Reliability, with a threshold of >0.70.
2. Structural Model (Inner Model) Evaluation: Aimed at testing hypothesized relationships. The evaluation included the coefficient of determination (R^2) to assess the model's predictive capability, path coefficients to determine the direction of relationships, and significance testing via bootstrapping (5,000 subsamples) using a T-statistic criterion of >1.96 at a significance level of $\alpha = 5\%$. The mediating role of innovation was tested by examining the significance of the indirect effect in the bootstrapping results.

RESULT AND DISCUSSION

1. Measurement Model Evaluation

The measurement model evaluation was conducted to ensure the validity and reliability of the construct indicators. Based on the PLS algorithm results, all indicators exhibited outer loading values greater than 0.70, indicating good indicator validity. Internal consistency was assessed using Composite Reliability (CR) and Cronbach's Alpha (CA); all latent variables showed values exceeding the 0.70 threshold. Furthermore, convergent validity was established, with Average Variance Extracted (AVE) values exceeding 0.50.

Table 1. Validity and Reliability Results (Construct Reliability & Validity)

Variable	Item Code	Loading Factor	Cronbach's Alpha	Composite Reliability (CR)	AVE
Entrepreneurial Characteristics	X1.1 - X1.5	0.740 – 0.785	0.819	0.873	0.580
Social Capital	X2.1, X2.2, X2.4	0.798 – 0.880	0.791	0.878	0.706
Innovation	M1.1, M1.3	0.855 – 0.879	0.671	0.858	0.752

Business Success	Y1 - Y5	0.769 – 0.823	0.861	0.900	0.643

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) criterion. The analysis results show that all HTMT values between variables were below 0.90, confirming that each construct is empirically distinct from the others (Henseler et al., 2015). Furthermore, the collinearity evaluation revealed VIF values below 5.0 for all predictors, indicating that the model is free from multicollinearity bias.

2. Structural Model Evaluation (Inner Model) and Hypothesis Testing

Evaluation of the structural model yielded R^2 values of 0.468 for Innovation and 0.424 for Business Success. This indicates a moderate model fit, where 42.4% of the variation in MSME success can be explained by entrepreneurial characteristics, social capital, and innovation. Predictive Q^2 values greater than zero (0.322 for Innovation and 0.233 for Business Success) confirm that the model possesses good predictive relevance.

Hypothesis testing was conducted using a bootstrapping procedure with 5,000 subsamples. The results regarding direct and indirect effects are summarized in Table 2.

Table 2. Hypothesis Testing Results (Path Coefficients)

Relationship Path (Hypothesis)	Beta (β)	T-Statistics	P-Values	Decision
Direct Effects				
Entrepreneurial Characteristics -> Innovation	0.427	3.229	0.001	Accepted
Social Capital -> Innovation	0.342	2.849	0.005	Accepted
Innovation -> Business Success	0.333	2.472	0.014	Accepted
Entrepreneurial Characteristics -> Business Success	0.199	1.310	0.191	Rejected
Social Capital -> Business Success	0.225	1.402	0.162	Rejected
Indirect Effects (Mediasi)				
Entrepreneurial Characteristics -> Innovation -> Business Success	0.142	1.962	0.050	Accepted
Social Capital -> Innovation -> Business Success	0.114	1.776	0.076	Rejected

Note: Significant at the level of $\alpha = 5\ \%$ ($t > 1.96$, $\varrho < 0.05$)

Discussion:

1. Entrepreneurial Characteristics and Social Capital as Antecedents of Innovation

This study demonstrates that entrepreneurial characteristics are the strongest predictor of innovation capability among MSMEs ($\beta=0.427$; $p<0.01$). This finding confirms the proposition of upper echelons theory (Hambrick & Mason, 1984), which states that a firm's strategic decisions—including the decision to innovate—reflect the cognitive and psychological characteristics of its leaders. In the context of MSMEs in Bogor Regency, business owners possessing an internal locus of control, a willingness to take risks, and a future-oriented mindset proved more agile in executing product modifications and digital adaptations. These results align with findings by Rauch and Frese (2007) and Tambunan et al. (2021),

emphasizing that "innovation DNA" does not emerge spontaneously but is driven by an entrepreneurial mindset that refuses to remain complacent within a comfort zone.

Furthermore, social capital was also found to have a significant positive effect on innovation (β=0.342; $p<0.01$). This validates the view held by Nahapiet and Ghoshal (1998) that innovation is a process of knowledge recombination, with such knowledge often derived from external networks. For MSMEs facing internal resource constraints, networks involving communities, suppliers, and customers serve as cost-effective "information channels" for identifying market trends. These findings support the study by Sutrisno et al. (2024), which found that intensive social interaction facilitates knowledge sharing, which is subsequently transformed into innovative ideas.

2. The Vital Role of Innovation in Enhancing Business Success

Test results indicate that innovation has a significant positive effect on business success (β=0.333; $p<0.05$). These findings underscore the relevance of Schumpeter's (1934) theory of "creative destruction" in the modern economic context, where the ability to disrupt the status quo through new products or methods is key to survival. Amidst the intense market competition in the peri-urban areas of Bogor Regency, MSMEs that innovate—whether through product diversification, re-packaging, or marketing digitalization—demonstrate superior sales performance and asset growth compared to those that remain stagnant.

These results align with the findings of Rosli and Sidek (2013) as well as Widjajanti and Sugiyanto (2024), who concluded that innovation is a primary determinant of competitiveness. This implies that the success of MSMEs today no longer relies solely on low prices, but rather on the value creation derived from innovation activities.

3. Entrepreneurial Characteristics and the "Full Mediation" Phenomenon

One of the most crucial and intriguing findings of this study is the role of "full mediation" played by innovation in the relationship between entrepreneurial characteristics and business success. Statistically, entrepreneurial characteristics do not have a significant direct effect on success ($p > 0.05$); however, they exert a significant influence through the pathway of innovation.

This finding offers an important theoretical correction. Much of the existing literature assumes that an entrepreneur's personal traits (such as high drive or a strong work ethic) automatically lead to increased profits. However, this study demonstrates that such traits represent merely "potential capital." This potential fails to impact business performance unless it is transformed into concrete strategic actions—specifically, innovation. An entrepreneur in Bogor might possess immense resilience and high motivation, yet if they continue to sell outdated products using obsolete methods, their business will not grow.

Conversely, when those traits drive the creation of new products (innovation), business success is achieved. These findings enrich the Resource-Based View (RBV) perspective by highlighting that human capital requires a deployment mechanism—namely innovation—to generate competitive advantage.

4. The Social Capital Anomaly: Why Do Networks Fail to Boost Performance?

Contrary to expectations and the majority of prior studies (e.g., Hidayat et al., 2020), this study finds that social capital does not significantly influence business success, either directly or through mediation. This "negative" finding actually offers novelty and deep contextual insight. This lack of significance can be explained through the analytical lens of Bonding versus Bridging Social Capital (Putnam, 2000).

- Dominance of Bonding Social Capital: There are indications that the social networks possessed by the respondents (MSMEs in Bogor) are primarily "bonding" in nature—characterized by close ties with fellow entrepreneurs in the same sector or within their immediate environment. While this type of network fosters emotional solidarity, the business information exchanged is often redundant; the information circulating within these circles tends to be uniform and fails to provide access to new markets.
- Lack of Bridging Social Capital: These MSMEs may lack "bridging" networks—connections to strategic parties outside their immediate circles, such as investors, corporate buyers, or large-scale distributors.
- Social Cost Inefficiency: Maintaining social relationships entails costs and time commitments (e.g., attending weddings, community gatherings). If the return on relationships from these activities is low, social capital becomes a burden rather than an asset.

These results offer an empirical critique of the notion that "having many friends" automatically translates to "greater prosperity" in a business context, particularly when the quality of those networks lacks a transactional or strategic dimension. This aligns with the argument regarding "The Dark Side of Social Capital" (Portes, 1998), where excessive social obligations can actually hinder an entrepreneur's economic performance.

CONCLUSION

This study provides empirical evidence regarding the mechanisms linking internal factors (entrepreneurial characteristics) and external factors (social capital) to the success of MSMEs in the peri-urban area of Bogor Regency. Based on the analysis and discussion, several strategic conclusions can be drawn:

First, innovation is proven to be the primary key driver. This study finds that entrepreneurial characteristics—such as risk-taking propensity and achievement orientation—do not directly enhance business success. These characteristics impact performance only if, and when, they are transformed into concrete innovation activities. This confirms the role of innovation as a full mediator. In other words, without product, process, or marketing innovation, strong entrepreneurial traits remain merely potential rather than being actualized into profit.

Second, social capital plays a dual yet limited role. On one hand, social capital (networks and trust) fosters innovation. On the other hand, social capital was not found to enhance business success, either directly or indirectly. This suggests that the networks possessed by MSMEs in the study area are likely "bonding" in nature (based solely on social solidarity) rather than "bridging" (providing strategic market access); consequently, they do not translate into increased sales or business assets.

Third, theoretically, this study reinforces the Resource-Based View, demonstrating that the mere possession of resources (such as character and networks) is insufficient to create competitive advantage. Dynamic capabilities—specifically innovation—are required to convert these resources into tangible economic performance.

Practical Implications

1. For MSME Entrepreneurs: It is recommended to shift the mindset from merely expanding social circles (social capital) to focusing on idea execution (innovation). Given that social networks were not proven to directly boost performance, entrepreneurs should be more selective about the communities they join; priority should be given to networks offering concrete market access or technology, rather than those serving merely as social gatherings.
2. For the Bogor Regency Government: MSME development policies should move away from basic motivational training and instead focus on technical training regarding innovation. Programs such as "Packaging Clinics," "Digital Marketing Workshops," or "Production Equipment Grants" will be more effective in boosting business success than ceremonial gatherings of MSME communities.

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