

## Social and Intellectual Capital Effect on MSME Performance: Innovation as a Mediator and Managerial Ability as a Moderator

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**Citation:** Yani, A., J., & Yohana, C. (2025). Social and Intellectual Capital Effect on MSME Performance: Innovation as a Mediator and Managerial Ability as a Moderator. *Journal of Cultural Analysis and Social Change*, 10(3), 2359–2379. <https://doi.org/10.64753/jcasc.v10i3.2748>

**Published:** December 03, 2025

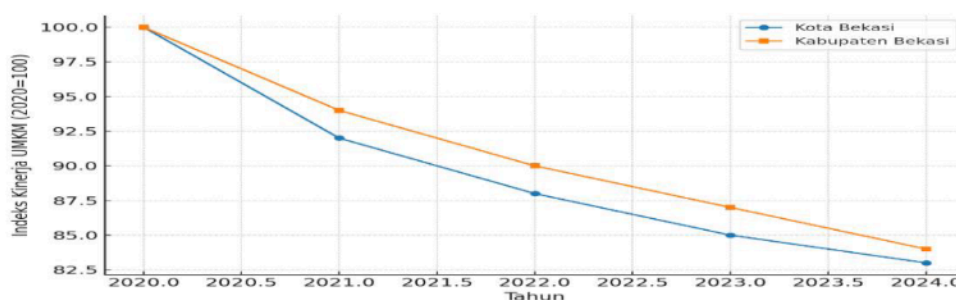
### ABSTRACT

Micro, small, and medium enterprises (MSMEs) in Bekasi Regency and City, West Java, often face challenges in maintaining competitiveness and sustainable performance due to limited innovation and managerial capacity. This study aims to analyze the influence of social and intellectual capital on MSME performance, with innovation as a mediating variable and managerial ability as a moderating variable. A quantitative approach was employed with a sample of 204 MSME owners or managers, determined using the Slovin formula from a population of 209,714 MSMEs. The results show that social capital significantly increases innovation and MSME performance, while intellectual capital also positively affects both innovation and performance. However, managerial ability improves MSME performance directly but does not moderate the relationship between social capital and performance. The novelty of this study lies in identifying managerial ability as an independent factor rather than a moderating variable, emphasizing the central role of innovation as the key mechanism linking social and intellectual capital to MSME performance.

**Keywords:** Social Capital, Intellectual Capital, Innovation, Managerial Skills, and MSME Performance

### INTRODUCTION

The micro, small, and medium enterprises (MSMEs) have been able to overcome challenges from various directions because they are not affected by global issues or macroeconomic situations. For example, during the monetary crisis in 1998, MSMEs continued to survive and support the people's economy. (Saefullah, 2022). The investigation results indicate a drastic decline in the performance of MSMEs in Bekasi City and Regency, as detailed below:



**Figure 1.** Illustrates the declining trend in MSME performance in Bekasi from 2020 to 2024.

Source: West Java Cooperatives and SMEs Service 2024

Figure 1 illustrates that both Bekasi City and Regency have experienced a decline in their performance index since 2020, with Bekasi City experiencing a slightly sharper decline than Bekasi Regency. This is suspected to be caused by social capital, which is believed to be the network, trust, and social norms that shape relationships between individuals and groups within society, thereby significantly improving their performance. (Liu et al., 2022). Meanwhile, several studies have shown that the relationship between social capital and intellectual capital can improve the performance of MSMEs, so it has become an interesting topic in the academic world. (Weqar et al., 2025); (Xu & Zhang, 2021). MSMEs that have excellent relationships with customers can maintain some of their turnover through consumer loyalty. (Jian XuHaris, 2022). Social capital reduces the risk of business isolation when an economic crisis hits. (Shehzad et al., 2022). Several culinary MSMEs in Bekasi that are members of the ultra-micro community have been able to survive and be sustainable. (Jannah et al., 2023).

**Table 1.** Research Problem Identification

| No. | Problem Description   | Supporting Evidence / Source   | Implication for MSME Performance  | Research Gap / Justification  |
|-----|---|--|---|---|
| 1   | Both Bekasi City and Regency have shown a decline in MSME performance index since 2020.                           | Regional performance index data (Bekasi City and Regency, 2020–2024).                  | Indicates weakening competitiveness and sustainability among MSMEs.                 | The causes of performance decline have not been empirically explained.  |
| 2   | The decline is suspected to be linked to weak social capital (networks, trust, norms).                            | Liu et al. (2022).   | Low social capital reduces cooperation and access to opportunities.                 | Inconsistent empirical results on how social capital affects MSME performance.  |
| 3   | Intellectual capital has become a crucial factor for MSME resilience and digital adaptation.                      | Khalique, Muhammad & Abdul (2020); Syayu Zhukhruffa (2023); Rosyidiana & Narsa (2024). | MSMEs with strong intellectual capital can shift from offline to digital marketing. | The mechanisms through which intellectual capital influences performance remain unclear.                                |
| 4   | Innovation mediates the effect of social and intellectual capital on MSME performance.                            | Ekaterina et al. (2021); Ji & Suwandej (2024); Rosari et al. (2024); Susanto (2025).   | Without innovation, social and intellectual capital cannot be fully utilized.       | Empirical validation of innovation's mediating role in Bekasi MSMEs is still limited.                                   |
| 5   | Managerial ability determines financial management, marketing strategy, and decision-making quality.              | Hasan & Alam (2025); Hao (2024); Haque & Puwanenthiren (2025); Pasko (2024).           | Managerial ability can strengthen MSME competitiveness and sustainability.          | The moderating role of managerial ability in the link between social capital and MSME performance remains inconclusive. |
| 6   | Prior research on social capital and MSME performance shows inconsistent findings.                                | Ozgun (2022); Aisjah et al. (2024); Ahmed & Guozhu (2020); Kanini (2022).              | Contradictory results make it difficult to generalize effects.                      | Further investigation is required to clarify these relationships in the Bekasi context.                                 |
| 7   | Resource-Based Theory (RBT) views social capital as a resource, but only valuable if processed into capabilities. | Barney (1991).   | Social and intellectual capital alone do not guarantee performance improvement.     | Need to explore innovation as a process that transforms these resources into performance outcomes.                      |

Sources: Presurvey data

In addition to social capital, intellectual capital is a crucial factor in improving MSME performance (Khalique, Muhammad & Abdul, 2020). In the digital era, strong intellectual capital enables MSMEs to shift from traditional marketing channels to digital platforms, such as e-commerce, marketplaces, and app-based delivery services (Syayu Zhukhruffa, 2023). When the culinary sector experienced a decline in offline demand, MSMEs that quickly adapted to online channels proved more resilient (Rosyidiana & Narsa, 2024). Therefore, (Yilmaz, 2023) stated that intellectual capital functions to maintain performance and opens up new opportunities for exploration and growth. Innovation is a key driver of MSME success (Ekaterina et al., 2021); (Ji & Suwandej, 2024); (Amoa-gyarteng et al., 2024). Innovation mediates social capital and intellectual capital in MSME performance recovery UMKM (Rosari et al., 2024); (Heri Susantoa, Alvian Alvin Mubarokb\*, Hadi Oetomoc, 2024).

Without innovation, social networks remain passive relationships, and intellectual capital remains unrealized potential. Product innovation is the tangible result of the interaction between the two (Kadiyono & Susanto, 2025). Innovation holds the key to transforming social and intellectual capital into measurable performance improvements (Kadiyono & Susanto, 2025). Innovation is a crucial variable in determining a company's financial

performance (Amimakmur et al., 2024); (Hutahayan, 2021). The performance of MSMEs is also highly determined by managerial abilities, including financial management skills and decision-making (Hasan & Alam, 2025)(Hao, 2024)(Haque & Puwanenthiren, 2025). MSMEs with managerial skills are able to allocate budgets efficiently, choose appropriate digital marketing strategies, and maintain product quality (Pasko, 2024); (Rasoulkhan, 2024)(Sewpersadh, 2025).

Numerous studies linking social capital to MSME performance, including: (Ozgun et al., 2022); (Aisjah et al., 2024); (Ojokuku, R. M. ; Olomu & David, 2024); (Ibeku, 2024); (Muna et al., 2024); (Welhelmina et al., 2024); (Ahmed & Guozhu, 2020); (Dar & Mishra, 2020); (Analia et al., 2020); (Kanini, 2022); (Rustiarini et al., 2022) but their research results are quite diverse. Some state that social capital can improve performance: (Aisjah et al., 2024); (Ojokuku, R. M. ; Olomu & David, 2024); (Ibeku, 2024); (Muna et al., 2024); (Welhelmina et al., 2024),, but there are also those who state that it has no effect, including: (Ozgun et al., 2022); (Ahmed & Guozhu, 2020); (Kanini, 2022).

The results of previous studies are inconsistent, thus creating a gap for further research. From the perspective of the connection between intellectual capital and MSME performance, such as that found in (Aljuboori et al., 2022); (Sohu et al., 2024); (Ali & Castro, 2025); (Prasad & Mondal, 2025); (Shahbaz & Ahmad, 2024);(Khaliq, Muhammad & Abdul, 2020); (Zahid et al., 2024). Resource-Based Theory (RBT) is the overarching theory used in this work to fill this gap. According to RBT, social capital can be seen as one of the everyday characteristics that facilitate information sharing, access to a variety of possibilities, and the development of small-business communities . These characteristics encompass networks, trust, and norms. However, if these materials are not further processed, they may not always improve performance excellence (Barney, 1991).

Studies by (Ozgun et al., 2022); (Rehman et al., 2021); (Rustiarini et al., 2022)found that innovation can bridge social capital and intellectual capital in improving performance. Social capital has been shown to play an important role in driving innovation (Ozgun et al., 2022); (Rehman et al., 2021); (Rustiarini et al., 2022)). On the other hand, intellectual capital, which includes employee knowledge, skills, and competencies, has also been shown to contribute significantly to innovation (Beltramo 2021; (Rideg et al., 2023) (Aljuboori et al., 2022). Innovation acts as a catalyst for improving MSME performance ((Hama & Cavusoglu, 2023) (Aljuboori et al., 2022) (Rustiarini et al., 2022); (Vijayakumar & Chandrasekar, 2022); (Faturachman, 2023) Beltramo *et al* 2021). The impact of social capital on MSME success is mitigated by innovation (Kanini, 2022); (Aljuboori et al., 2022); (Saleh & Koliby, 2024a). A similar trend is evident in intellectual capital, where new knowledge and skills can improve performance if implemented in the form of innovation ((Rustiarini et al., 2022)

**Table 2.** State-of-the-Art (SOTA)

| No. | Theme / Variable                            | Key Findings (SOTA)   | Representative Authors & Year  | Limitations / Research Gap  | Implication for Current Study  |
|-----|---|---|--|---|--|
| 1   | Intellectual capital and digital adaptation | Strong intellectual capital enables MSMEs to move from traditional channels to e-commerce/marketplaces and enhances resilience when offline demand falls.                   | Khaliq et al. (2020); Syayu Zhukhruffa (2023); Rosyidiana & Narsa (2024); Yilmaz (2023)                                  | Need for context-specific empirical evidence (e.g., Bekasi MSMEs) on how different IC components enable digital shifts. | Measure IC subdimensions (human, structural, relational) and test their direct effect on digital adoption and performance. |
| 2   | Innovation as a driver of MSME success      | Innovation is a central driver of MSME recovery and sustained financial performance; product innovation is a tangible outcome of social + intellectual capital interaction. | Ekaterina et al. (2021); Amoa-gyarteng et al. (2024); Kadiyono & Susanto (2025); Susanto (2025); Amimakmur et al. (2024) | Empirical mediation tests of innovation between SC/IC and performance are limited in some local contexts.               | Include innovation as mediator (operationalize product/service/process innovation) in the hypothesized model.              |
| 3   | Innovation mediates SC/IC → Performance     | Innovation transmits the benefits of social and intellectual capital into measurable performance improvements.  | Rosari et al. (2024); Heri Susanto et al. (2024);  | Causal mechanisms and strength of mediation vary across studies;  | Use mediation analysis to quantify indirect effects and discuss causality limitations.                                     |

|   |  |   |   |  |  |
|---|--|---|---|--|--|
|   |  |   | Rustiarini (2022)   | longitudinal evidence is scarce.   |  |
| 4 | Social capital's heterogeneous effects | Social capital can increase customer loyalty, reduce isolation in crises, and support survival; yet empirical results are mixed (positive, null). | Jian Xu & Haris (2022); Shehzad et al. (2022); Jannah et al. (2023); Aisjah (2024); Ozgun (2022); Ahmed & Guozhu (2020) | Inconsistent findings—possible due to measurement differences, context, or unobserved moderators.              | Clarify SC measurement (bonding/bridging/linking) and test moderators (e.g., managerial ability).                              |
| 5 | Managerial ability and performance     | Managerial skills (financial management, decision-making, digital marketing choices) strongly influence MSME performance.                         | Hasan & Alam (2025); Hao (2024); Haque & Puwanenthiren (2025); Pasko (2024)   | Unclear whether managerial ability moderates or acts as a direct predictor; interaction effects underexplored. | Test managerial ability both as direct predictor and as potential moderator; report evidence if moderation is non-significant. |

Sources: state of the art 2025

Managerial ability is also a crucial factor that positively influences MSME performance ((Ting et al., 2021), (Ratnawati, Rokhman, & Rahayu, 2021); (Sebastian NG'ORA, 2022); (Agustia et al., 2022)). One reason managerial ability is used as a moderating variable is that it determines the extent to which MSMEs' networks, trust, and norms can be leveraged to create business opportunities. Extensive social capital is meaningless without managers capable of managing and executing the potential of these networks. The impact of social capital on MSME performance increases with managerial skill.

The novelty of this study lies in its comprehensive integration of social capital, intellectual capital, innovation, and managerial ability within the MSME performance framework, specifically in the context of Bekasi City and Regency. Unlike previous studies that examined these variables separately or produced inconsistent results, this research simultaneously tests innovation as a mediating variable and managerial ability as both a moderating and independent factor. By applying the Resource-Based Theory (RBT), the study highlights how social and intellectual capital must be transformed through innovation to generate measurable performance improvements. Furthermore, it provides new empirical evidence from a developing regional economy, offering contextual insights into how digital adaptation, innovation, and managerial capacity interact to strengthen MSME competitiveness in the post-pandemic digital era.

## LITERATURE REVIEW

### Social Capital and MSME Performance

Aisjah et al. (2024) found that social capital contributes significantly to improving MSME performance. Ojokuku, R. M. (2024) confirmed that social capital variables can quantitatively improve financial performance. Ibeku (2024) highlighted the role of social trust, which has implications for easier access to capital, reduced uncertainty, and increased decision-making ability based on more reliable information. Muna (2024) analyzed social capital from a local community perspective, including the role of MSME associations and community-based training in improving MSME performance. Welhelmina (2024) found that MSMEs with strong social capital linkages tend to experience more stable business growth and are more adaptable to changes in regulations and market conditions.

Building on these findings, several researchers have emphasized that social capital not only strengthens the relational aspects among MSMEs but also enhances collective learning and resource sharing. Strong social networks enable entrepreneurs to exchange market information, technological knowledge, and managerial experience that support business innovation and efficiency. Through mutual trust and cooperation, MSMEs are able to reduce transaction costs, gain access to broader supply chains, and respond more effectively to external shocks. These relational assets, therefore, become a critical component in sustaining long-term business performance, particularly in dynamic and competitive environments such as Bekasi's MSME sector.

In addition, social capital plays a strategic role in fostering collaboration between MSMEs and external stakeholders, including local governments, financial institutions, and digital platforms. The integration of community-based trust and institutional support accelerates the diffusion of innovation and the adoption of digital technologies. This aligns with the view that social capital serves as an enabler of knowledge flow and entrepreneurial resilience. Consequently, enhancing social capital within MSME ecosystems can create a multiplier effect

**H1:** *MSME Performance is significantly impacted by social capital.*

### **Innovation and Social Capital**

Ozgun (2022) asserts that strong social networks can enhance knowledge sharing among business actors. Meanwhile, Rehman et al. (2021) found that social capital is closely related to product and process innovation. Rustiarini et al. (2022) found that social capital not only directly drives innovation but also functions as a factor in the ability to absorb external knowledge. Social capital is crucial for innovation. Networks, trust, and social norms are the foundations that enable MSMEs not only to generate new ideas but also to implement them into products, services, and business strategies that enhance business sustainability.

Furthermore, the presence of robust social capital contributes to the development of collaborative learning within MSME ecosystems. Through consistent interactions, entrepreneurs are exposed to diverse perspectives, market insights, and technological updates that stimulate their problem-solving capacity. This collaborative atmosphere ultimately accelerates the creation of innovative solutions, as MSMEs can combine resources and competencies that may not be attainable individually. Thus, social capital plays a pivotal role in shaping dynamic capabilities that support continuous improvement and competitive advantage.

In addition, social capital enhances resilience and adaptability in uncertain business environments. Strong interpersonal trust within networks facilitates the rapid exchange of strategic information, allowing MSMEs to respond more quickly to changes in customer preferences, regulatory shifts, and competitive pressures. These adaptive responses help minimize operational risks and increase the likelihood of successful innovation outcomes. Hence, social capital not only influences the early phases of idea generation but also strengthens the sustainability and scalability of innovation, positioning MSMEs to thrive in increasingly competitive markets.

**H2:** *Innovation is significantly impacted by social capital.*

### **Intellectual Capital and MSME Performance.**

According to Sohu et al. (2024), the higher the quality of intellectual capital, the greater their chances of surviving and growing in business competition. Faturachman et al. (2024) emphasized that intellectual capital enables MSMEs to increase productivity, helps maintain the sustainability of knowledge within the organization, plays a crucial role in expanding markets, and strengthens the business's position. In the context of MSMEs, limited physical and financial capital are often major obstacles.

In this regard, intellectual capital becomes a strategic intangible asset that compensates for the limitations of physical and financial resources. MSMEs that effectively manage their intellectual capital—through human skills, organizational processes, and relational networks—can generate new knowledge and innovative practices that drive competitiveness. As noted by Aljuboori et al. (2022) and Rideg (2023), the development of intellectual capital allows MSMEs to adapt to environmental changes, create unique value propositions, and improve customer satisfaction. This resource-based advantage is particularly important for small enterprises that operate with limited capital yet need to respond swiftly to market dynamics.

Furthermore, intellectual capital has been identified as a key determinant of digital transformation among MSMEs. The mastery of digital literacy, creative problem-solving, and technology-based innovation enables firms to shift from conventional operations to more efficient digital ecosystems. Studies by Rosyidiana and Narsa (2024) and Syayu Zhukhruffa (2023) demonstrated that MSMEs with strong intellectual capital were more resilient during periods of reduced offline demand, particularly by adopting e-commerce and app-based delivery services. This finding underscores the capacity of intellectual capital to not only enhance business continuity but also open new opportunities for growth and diversification in the digital economy.

Beyond internal benefits, intellectual capital also promotes strategic collaboration and external knowledge acquisition. According to Yilmaz (2023), the ability to utilize intellectual resources—such as managerial knowledge, technical expertise, and innovation-oriented culture—enables MSMEs to establish partnerships, attract investors, and integrate into broader value chains. These interactions, in turn, facilitate continuous learning and capability upgrading, ensuring that MSMEs remain agile and competitive in a rapidly evolving business environment. Thus, intellectual capital serves as both a driver of innovation and a foundation for sustainable competitive advantage.

However, by utilizing intellectual capital, MSMEs can optimize their knowledge-based advantages to improve performance.

**Hypothesis 3:** *Intellectual capital able to improve MSME performance.*

## Intellectual Capital and Innovation

Do et al. (2025) explain that intellectual capital is the combination of knowledge into something that can generate value. According to Matos & Nunes (2024), intellectual capital is a strategic resource that can enhance an organization's ability to innovate. MSMEs that optimize their intellectual capital will be better able to create value-added products and services. Podungge (2025) emphasized that knowledge needs to be managed and transformed so that it can be used collectively for innovation. This illustrates how closely the innovation process and intellectual capital are related.

This interconnection between intellectual capital and innovation highlights the importance of developing a learning-oriented culture within MSMEs. As noted by Beltramino et al. (2021), organizations that continuously accumulate, share, and apply knowledge are more capable of generating innovative solutions that respond to changing customer needs and technological trends. Intellectual capital—particularly human capital—plays a vital role in this process by enabling employees to convert tacit knowledge into explicit innovations, such as new product designs, marketing strategies, or production methods. Moreover, the interaction between intellectual and social capital strengthens collective creativity, as trust-based relationships facilitate the open exchange of ideas and the co-creation of knowledge.

In addition, innovation acts as the practical output of intellectual capital utilization. When MSMEs effectively harness their intellectual resources, they can transform abstract knowledge into tangible innovations that contribute to productivity and market competitiveness. As supported by Rustiarini (2022) and Vijayakumar & Chandrasekar (2022), innovation serves as a bridge that connects intellectual capabilities with performance outcomes. It enables MSMEs to respond more effectively to market disruptions, adopt new technologies, and sustain growth in increasingly competitive environments. Therefore, the ability to integrate intellectual capital management with systematic innovation processes becomes a key factor in ensuring long-term sustainability and performance excellence among MSMEs.

*H4: Innovation is significantly influenced by intellectual capital*

## Innovation and MSME Performance

According to Rideg (2023), innovation enables small businesses not only to survive but also to thrive through improved product quality, operational efficiency, and more effective marketing strategies. This ultimately increases profitability, sales growth, and customer satisfaction, all indicators of MSME performance. Beltramino et al. (2022) state that innovation orientation has a positive relationship with organizational performance. Organizations with a culture of innovation tend to be more capable of creating competitive advantages and improving business performance. Aljuboori (2022) asserts that innovative-oriented companies are more adaptive to market changes and have superior performance compared to competitors.

In line with these findings, Ji and Suwandej (2024) emphasize that innovation acts as a central mechanism that connects various organizational resources—such as social networks, knowledge assets, and managerial capabilities—into measurable business outcomes. MSMEs that consistently implement innovation in their business models, product development, and marketing activities demonstrate higher resilience against market uncertainty and economic shocks. This adaptability allows them to maintain relevance in competitive markets, particularly during periods of digital disruption and rapid technological advancement. Moreover, innovation not only enhances internal efficiency but also fosters customer loyalty by offering differentiated products and services that align with evolving consumer preferences.

Furthermore, research by Hama and Cavusoglu (2023) and Faturachman (2023) shows that innovation capability directly influences financial and non-financial performance indicators, including profitability, productivity, and reputation. MSMEs that embrace innovation as a continuous process—rather than a one-time activity—tend to sustain long-term growth and competitiveness. This continuous innovation culture also encourages collaboration, experimentation, and risk-taking, which are essential for maintaining momentum in dynamic business environments. Therefore, innovation is not merely a support factor but a strategic core that transforms resources such as social and intellectual capital into sustainable performance outcomes for MSMEs.

*H5: Innovation influences MSME Performance*

## Innovation Mediates the Social Model and MSME Performance

According to Ozgun's (2022) research, social capital has an impact on innovation. Analia et al.'s (2020) findings confirm that social capital can improve MSME performance. Kanini's (2022) research explains that social capital (relational and cognitive) positively and significantly predicts performance. Performance and social capital are mediated by organizational innovation. The association between social capital and MSME performance is partially mediated by organizational innovation.

Building upon these studies, Rustiarini (2022) and Rehman (2021) further revealed that social capital fosters an environment of trust, shared norms, and collaboration, which are essential precursors for innovation within

MSMEs. The presence of strong social ties allows for the rapid diffusion of ideas and technologies, enabling firms to adapt faster to market changes and consumer demands. Through effective communication and cooperation, MSMEs can access new information, exchange best practices, and collectively solve problems that lead to innovative outcomes. This social embeddedness not only strengthens the innovation process but also enhances overall organizational learning, ensuring that innovation becomes an integral part of the enterprise's culture and long-term strategy.

Moreover, Ozgun (2022) highlighted that social capital's influence on innovation and performance is highly dependent on the quality of relationships and the level of trust among stakeholders. When trust and reciprocity are strong, MSMEs are more willing to share resources and engage in joint ventures or partnerships that stimulate creative problem-solving. Conversely, weak or fragmented social networks can limit innovation by restricting information flow and collaboration opportunities. Therefore, the effectiveness of social capital as a driver of innovation lies in its ability to transform relational and cognitive dimensions into tangible performance outcomes. This reinforces the argument that innovation acts as a crucial bridge through which social capital contributes to the sustainable performance of MSMEs.

*H6: Social Capital and MSME Performance Are Mediated by Innovation*

### **Intellectual Capital and MSME Performance Are Mediated by Innovation**

Ozgun's (2022) research states that intellectual capital can improve performance. This is supported by Rideg (2023) who discovered a positive correlation between innovation and intellectual capital. According to Rustiarini et al. (2022), Ji & Suwandej, (2024) intellectual capital has a favorable impact on both financial success and green innovation.

Similarly, Aljuboori et al. (2022) argue that intellectual capital enhances an organization's innovative capacity by fostering the creation, integration, and application of knowledge across different business functions. MSMEs that invest in developing their intellectual assets—particularly in employee expertise, technological competence, and relational capital—are more capable of generating innovative products and services that strengthen their market competitiveness. This intellectual resource also supports strategic agility, allowing MSMEs to respond swiftly to environmental changes and emerging business opportunities. Consequently, intellectual capital not only contributes to immediate performance improvement but also ensures long-term organizational resilience and adaptability.

In addition, Ji and Suwandej (2024) emphasize that the interaction between intellectual capital and innovation extends beyond economic benefits, influencing sustainability and environmental performance. Firms that effectively manage their intellectual capital tend to implement eco-innovations and green business practices that align with global sustainability goals. This dual impact—enhancing financial outcomes while promoting environmental responsibility—demonstrates the multidimensional value of intellectual capital. Hence, intellectual capital serves as both a foundation and a catalyst for innovation-driven performance, reinforcing its essential role in achieving competitive advantage and sustainable growth among MSMEs.

The sustainability and financial performance of SMEs are positively impacted by green innovation.

*H7: Innovation as mediator intellectual capital on MSME performance.*

### **Managerial Ability Moderates Social Capital on MSME Performance**

The relationship between managerial ability and social capital and performance was established by Zhou (2020), who proved that managerial ability moderates social capital on performance. Another finding by Vijayakumar & Chandrasekar (2022) found that the association between MSME performance and social capital might be moderated by managerial skill. According to Faturachman (2023), managerial skill improves the correlation between performance and social capital.

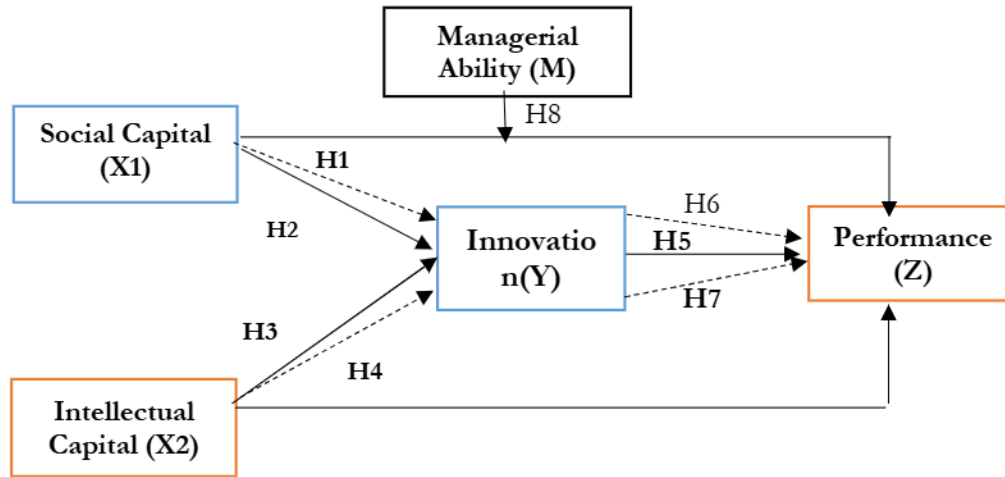
In line with these findings, Hao (2024) and Hasan & Alam (2025) emphasized that managerial ability serves as a critical capability that determines how effectively MSMEs can utilize their social relationships to generate performance outcomes. Managers with strong analytical, financial, and leadership skills are better equipped to transform social capital—such as trust and networks—into productive collaborations, access to resources, and innovative initiatives. Without adequate managerial ability, the potential of social capital often remains underutilized, as MSMEs may struggle to coordinate partnerships, manage information flows, or convert social ties into strategic advantages. Thus, managerial ability acts as a bridge that connects relational assets to tangible business results, amplifying the overall impact of social capital on performance.

Furthermore, Rasoulkhan (2024) and Sewpersadh (2025) argue that managerial ability not only moderates the influence of social capital but also functions as a direct determinant of MSME success. Competent managers can make better strategic decisions, allocate resources efficiently, and implement digital transformation initiatives that enhance productivity and innovation. Managerial skills in communication, problem-solving, and technology

adoption further strengthen the adaptability of MSMEs to external market changes. Therefore, managerial ability is both a complementary and independent factor that enhances the effectiveness of social capital, driving superior business performance and long-term competitiveness.

The following theory was established:

**H8:** *Managerial ability moderates social capital on MSME performance*



**Figure 2.** Conceptual Framework Image  
 Source: Results of previous research

- H1:** Social capital has a significant positive effect on MSME performance.
- H2:** Social capital has a significant positive effect on innovation.
- H3:** Intellectual capital has a significant positive effect on innovation.
- H4:** Innovation has a significant positive effect on MSME performance.
- H5:** Managerial ability moderates the relationship between social capital and MSME performance.
- H6:** Managerial ability moderates the relationship between innovation and MSME performance.
- H7:** Innovation mediates the relationship between social capital and MSME performance.
- H8:** Innovation mediates the relationship between intellectual capital and MSME performance.

## RESEARCH METHODS

### Design of Research

Because it explains the causal relationship between variables and aims to test the hypothesis of how much social capital promotes MSME innovation and performance, this research design employs an explanatory approach. Moreover, there is a connection between MSME success, innovation, and intellectual capital. A mitigating factor between social capital and MSME performance is managerial ability. The individual, specifically ultra-micro food and beverage entrepreneurs with decision-making duties, serves as the study's unit of analysis. Purposive sampling was the sample strategy employed, choosing respondents according to predetermined standards, such as those who have been in managerial roles for at least a year and have direct involvement in operational planning and control. Path analysis was used to analyze the data.

Because it explains the causal relationship between variables and aims to test the hypothesis of how much social capital promotes MSME innovation and performance, this research design employs an explanatory approach (Aisjah et al., 2024; Ojokuku, 2024). Moreover, there is a strong connection between MSME success, innovation, and intellectual capital (Sohu, 2024; Prasad & Mondal, 2025). A mitigating factor between social capital and MSME performance is managerial ability, as suggested by Vijayakumar and Chandrasekar (2022) and Faturachman (2023).

The individual, specifically ultra-micro food and beverage entrepreneurs with decision-making duties, serves as the study's unit of analysis. Purposive sampling was the sample strategy employed, choosing respondents according to predetermined standards, such as those who have been in managerial roles for at least a year and have direct involvement in operational planning and control. Path analysis was used to analyze the data (Shahbaz & Ahmad, 2024).

### Population-Sample

Based on available data, the population in this study was 209,714 respondents, representing all units of analysis relevant to the research topic. Due to the huge population size, sampling was necessary. The sample was selected to ensure the research could be conducted more effectively and efficiently while still producing valid and reliable findings. The sample was calculated using the Taro Yamane formula (Sekaran dan Bougie, 2016).

### Sampling Technique

Purposive sampling was used in this study, with the sampling method determined by the researcher. In this study, the sample characteristics were (1) micro-entrepreneurs at the lowest level, namely ultra-micro restaurant company owners, and (2) ultra-micro restaurant business owners with a maximum investment of IDR 20 million.

This study employed a purposive sampling technique, wherein the selection of respondents was based on specific characteristics determined by the researcher to ensure relevance to the study objectives. The population consisted of micro-entrepreneurs operating in the culinary sector, particularly within the category of ultra-micro restaurant enterprises.

The inclusion criteria for the sample were as follows: (1) individuals who own and manage ultra-micro restaurant businesses at the smallest operational scale, and (2) entrepreneurs with a maximum total business investment of IDR 20 million, in accordance with the classification established by Indonesia's Ministry of Cooperatives and MSMEs. This approach ensured that participants possessed direct managerial responsibility and experiential knowledge relevant to business operations, innovation, and performance.

### Data Collection Technique

The study utilized both primary and secondary data sources to obtain comprehensive and reliable information. Primary data were collected through a structured questionnaire survey administered to respondents who met the sampling criteria. The questionnaire was designed to measure the constructs of social capital, intellectual capital, innovation, managerial ability, and MSME performance using validated indicators adapted from prior studies. Secondary data were obtained from reputable institutional sources, including the Ministry of Finance of the Republic of Indonesia, the Office of Cooperatives and MSMEs, and Bank Indonesia, to supplement and contextualize the primary findings. This multi-source data collection approach enhanced the validity and robustness of the study's empirical results.

### Data Analysis Technique

The PLS-SEM method was chosen because it is appropriate for research aimed at testing causal relationships between complex latent variables and is capable of analyzing relatively small samples and non-normal data distributions. According to (J. F. Hair et al., 2014), PLS is a variance-based multivariate analysis technique widely used in management, marketing, and social science research. This technique was chosen because the research focuses not only on testing theoretical models but also on predicting relationships between variables, making PLS considered more flexible than covariance-based SEM methods. Furthermore, PLS provides model analysis with both reflective and formative indicators relevant to research constructs such as social capital, intellectual capital, innovation, managerial ability, and MSME performance.

## RESEARCH RESULT

### Profile of Research Participation

**Table 3.** Food and Beverage Sector MSMEs' Demographic Features (N = 204)

| No | Demographic Aspects | Category                   | Number (n) | Percentage (%) |
|----|---------------------|----------------------------|------------|----------------|
| 1  | Age                 | < 25                       | 60         | 29,4           |
|    |                     | 26 – 35                    | 83         | 40,7           |
|    |                     | 36 – 45                    | 36         | 17,6           |
|    |                     | > 45                       | 25         | 12,3           |
|    |                     | Total                      | 204        | 100            |
| 2  | Education           | No Education               | 4          | 2,0            |
|    |                     | Grade school               | 16         | 7,9            |
|    |                     | Middle School              | 39         | 19,1           |
|    |                     | Senior high school         | 90         | 44,1           |
|    |                     | Diploma 3                  | 8          | 3,9            |
|    |                     | Bachelor's/Master's Degree | 47         | 23,0           |
|    | Total               | 204                        | 100        |                |
| 3  | Business Age        | < 4                        | 69         | 33,8           |

|   |                |                                |     |      |
|---|----------------|--------------------------------|-----|------|
|   |                | 4 – 8                          | 93  | 45,6 |
|   |                | > 8                            | 41  | 20,1 |
|   |                | Total                          | 204 | 100  |
| 4 | Capital Amount | < IDR 5.millions               | 57  | 27,9 |
|   |                | IDR 5.1milions – 9.9 milions   | 78  | 38,2 |
|   |                | IDR 10.millions – 14.9 milions | 42  | 20,6 |
|   |                | IDR 15.milion – 20.millions    | 27  | 13,2 |
|   |                | Total                          | 204 | 100  |

Source: Processed 2025 research results

Table 4.1 above explains why the majority of food and beverage MSMEs are under 25 (29.4 %) and in the 26–35 age range (40.7%). This condition illustrates that business owners are in the ideal productive age range to adapt to market changes and capitalize on innovation opportunities. A high school or vocational high school degree was held by the majority of respondents (44.1%), followed by a bachelor's or master's degree (23.1 %) and junior high school (19.1%). This finding indicates that most business owners have a secondary or higher education, which supports more rational business management and an openness to technological innovation and new ideas (intellectual capital). Among MSMEs, the majority have been in business for 4–8 years (45.6%), less than 4 years (33.8%), and more than 8 years (20.1%). This data indicates that more than two-thirds of business owners have extensive experience in managing food and beverage businesses, which has the potential to enhance innovation capabilities and business sustainability. In terms of capital, the majority of business owners have capital in the range of Rp 5,100,000 – 9,900,000 (38.2%), followed by Rp 10,000,000 – 14,900,000 (20.6%), and less than Rp 5,000,000 (27.9%). This suggests that most MSMEs are small businesses with comparatively little capital, but they still have room to expand because of their high levels of productivity and innovation in operating their companies.

**Table 4.** Crosstab Age of Business Actors × Age of Business

| Age of Business Actors | < 4 years | 4 – 8 years | > 8 years | Total | Percentage (%) |
|------------------------|-----------|-------------|-----------|-------|----------------|
| < 25 years             | 35        | 22          | 3         | 60    | 100            |
| 26 – 35 years          | 27        | 47          | 9         | 83    | 100            |
| 36 – 45 years          | 5         | 17          | 13        | 36    | 100            |
| > 45 years             | 2         | 7           | 16        | 25    | 100            |
| Total                  | 69        | 93          | 41        | 204   | 100            |

Source: Processed 2025 research results

Most entrepreneurs aged 26–35 have businesses that have been running for more than 4 years, with 9 of them operating for more than 8 years. Meanwhile, younger entrepreneurs (under 25) mostly have new businesses (under 4 years). This pattern indicates that the more mature an entrepreneur is, the more experience they have managing their business.

**Table 5.** Crosstab of Last Education × Total Capital

| Last education      | < Rp 5.000.000 | Rp 5.100.000 – 9.900.000 | Rp 10.000.000 – 14.900.000 | Rp 15.000.000 – 20.000.000 | Total | Percentage (%) |
|---------------------|----------------|--------------------------|----------------------------|----------------------------|-------|----------------|
| No Education        | 4              | 0                        | 0                          | 0                          | 4     | 100            |
| Elementary          | 4              | 5                        | 2                          | 4                          | 16    | 100            |
| Middle School       | 20             | 11                       | 6                          | 2                          | 39    | 100            |
| Senior high school  | 25             | 41                       | 18                         | 6                          | 90    | 100            |
| Diploma 3           | 0              | 5                        | 3                          | 0                          | 8     | 100            |
| Bachelor's/Master's | 4              | 15                       | 13                         | 15                         | 47    | 100            |
| Total               | 57             | 78                       | 42                         | 27                         | 204   | 100            |

Source: Processed 2025 research results

The table above shows that entrepreneurs with high school/vocational high school education dominate across all capital categories, particularly those with capital between IDR 5,100,000 and IDR 9,900,000. High-level entrepreneurs, on the other hand, are more likely to fall into the middle- to upper-capital category (IDR 15–20 million), suggesting that education level and the capacity to manage and grow business capital are positively correlated. Research data shows that four out of 204 respondents with an elementary school education successfully accumulated business capital of between IDR 15 million and IDR 20 million, while only 15 respondents with a bachelor's degree or master's degree (out of the same number of 204 respondents) achieved the same result.

This presents a paradox that challenges the traditional view of the linear relationship between formal education and economic success. Proportionally, the bachelor's degree or master's degree group demonstrated a higher success rate (7.35% compared to 1.96% for the elementary school group). However, the fact that a group of individuals with only basic education achieved capital accumulation equivalent to their peers with bachelor's/master's degrees demands an accurate and comprehensive analysis, particularly regarding the role of non-cognitive factors and practical experience in entrepreneurial success.

Success in business capital accumulation, especially in the micro and small business sector, is not solely contingent upon formal education; it is influenced by a distinctive amalgamation of self-directed life experiences, entrepreneurial traits, practical risk management, and varying wealth accumulation strategies. Higher formal education is often assumed to be a key determinant of social and financial mobility. Individuals with bachelor's and master's degrees are equipped with theoretical knowledge, analytical skills, access to professional networks, and an understanding of financial management that should facilitate them in planning businesses or managing investments. When data shows that the highly educated group produced only 15 successful individuals (only 7.35% of the total group), this suggests limitations in the application of formal knowledge in the real business environment, particularly in the MSME sector.

## RESULTS OF THE SMART PLS ANALYSIS

This study's data analysis employed the method with the help of SmartPLS software, which seeks to directly and indirectly examine the correlations between latent variables. This approach was selected because it does not have rigorous normality assumptions and can analyze complex models with comparatively small sample sets. Exploratory research that aims to anticipate associations between constructs can also benefit from the application of PLS. The two primary components of the PLS model's analysis stages are the inner and outer model evaluations.

### External Model

**Table 6.** Validity and Reliability

| Variable             | Cronbach' Alpha. | Composite Reliability. | Average Variance Extracted |
|----------------------|------------------|------------------------|----------------------------|
| Social Capital       | 0,895            | 0,934                  | 0,826                      |
| Intellectual Capital | 0,879            | 0,925                  | 0,805                      |
| Innovation           | 0,889            | 0,924                  | 0,753                      |
| Managerial Ability   | 0,896            | 0,951                  | 0,906                      |
| Sme Performance      | 0,869            | 0,920                  | 0,794                      |
| Moderating 1         | 1,000            | 1,000                  | 1,000                      |

Source: 2025 research results

Indicators have a strong correlation and reliably explain the concept. Additionally, all variables' Average Variance Extracted (AVE) values satisfy the suggested standards, which are greater than 0.50. The highest AVE value is found for the managerial ability variable (0.906), meaning that 90.6% of the indicator can be used to explain variance. This indicates that the indicators in the managerial ability variable have very high convergent validity. The lowest AVE value was found for the Innovation variable (0.753), but it was still well above the minimum limit, thus meeting the validity criteria. Meanwhile, Moderating Effect 1 achieved a perfect score (1.000) for all three parameters, indicating that this interaction variable was automatically generated by the PLS model as a multiplication variable (interaction term) and was not measured by a reflective indicator; thus, its value remained constant during model testing.

**Table 7.** Discriminant Validity

| Relationship Between Variables | (Y)    | (X2)   | (M)    | Moderating Effect 1 | (Z)   | (X1)  |
|--------------------------------|--------|--------|--------|---------------------|-------|-------|
| Innovation (Y)                 | 0,868  |        |        |                     |       |       |
| Intellectual Capital (X2)      | 0,886  | 0,897  |        |                     |       |       |
| Managerial Ability (M)         | 0,898  | 0,846  | 0,952  |                     |       |       |
| Moderating Effect 1            | -0,812 | -0,781 | -0,845 | 1,000               |       |       |
| Sme Performance (Z)            | 0,863  | 0,964  | 0,903  | -0,806              | 0,891 |       |
| Social Capital(X1)             | 0,947  | 0,860  | 0,955  | -0,850              | 0,870 | 0,909 |

Source: Processed 2025 research results

Based on the calculation results, all AVE values for each variable (social capital, intellectual capital, innovation, managerial ability, and MSME performance) are higher than the correlation values between the constructs. This indicates that each construct has a good ability to explain the variance of its respective indicators and does not overlap with other constructs. All indicator loading values are above 0.70, and no indicator has a higher value than

any other construct. This finding confirms previous results that each indicator only reflects its intended construct, thus ensuring that the measurement model in this study has good discriminant validity.

**Table 8.** Collinearity Statistics (VIF)

| INDICATORS                                  | VIF   |
|---|-------|
| M1  | 2,941 |
| M2  | 2,941 |
| Social Capital(X1) * Managerial Ability (M) | 1,000 |
| X1.1  | 2,620 |
| X1.2  | 2,539 |
| X1.3  | 3,648 |
| X2.1  | 2,339 |
| X2.2  | 2,302 |
| X2.3  | 3,178 |
| Y1  | 4,028 |
| Y2  | 2,345 |
| Y3  | 2,754 |
| Y4  | 2,298 |
| Z1  | 2,238 |
| Z2  | 3,498 |
| Z3  | 2,317 |

Source: Processed 2025 research results

Collinearity or multicollinearity tests are conducted to ensure there is no high correlation between the indicator variables used in the research model. The VIF stands for Variance Inflation Factor. A VIF score above 5.00 suggests a possibly strong linear relationship between the indicators, which could lower the accuracy of the model's estimates, whereas a value below 5.00 shows no interfering multicollinearity (J. Hair, 2023). Considering the outcomes of the data processing in Table 4.3, all VIF values for the research indicators range from 1.000 to 4.028, meaning all values are below the tolerance limit of 5.00. This indicates that there is no multicollinearity among the variable indicators in this research model. Each indicator can be considered independent and does not distort the relationship between the latent variables.

**Structural Model Analysis**

**Determination Coefficient (R-Square)**

The value indicates how much of the variation in endogenous variables can be clarified by the exogenous variables.

**Tabel 9.** R<sup>2</sup>

| Relationship Between Variables | R <sup>2</sup> | R Square Adjusted |
|--------------------------------|----------------|-------------------|
| Innovation (Y)                 | 0,916          | 0,915             |
| Performance of MSME (Z)        | 0,969          | 0,968             |

Source: Processed 2025 research results

The innovation variable (Y) is significantly explained by social capital (X1) and intellectual capital (X2) with a relatively strong R<sup>2</sup> value. The MSME Performance variable (Z) is explained by Innovation (Y) as well as Social Capital (X1), Intellectual Capital (X2), and Managerial Ability (M), with a high explanatory contribution. The R<sup>2</sup> values for each endogenous variable indicate that the constructed structural model has good explanatory power, where the combination of exogenous variables can significantly contribute to improving MSME performance. An R<sup>2</sup> value of 0.67 is considered high, 0.33 is considered medium, and 0.19 is considered low by Hair and colleagues (2021). Therefore, the results of this study place the model's strength in the medium-to-high category, indicating adequate predictive ability.

**Path Significance Test (Bootstrapping)**

To test the hypotheses, a bootstrapping procedure was used to obtain t-statistics and p-values for each relationship between latent variables. The test results show that:

**Table 10.** Direct Effect

| Relationship Variables                      | Original Sample | T Statistics | P Values |
|---|-----------------|--------------|----------|
| Social Capital (X1) -> MSME Performance (Z) | 0,234           | 4,009        | 0,000    |

|   |        |        |       |
|---|--------|--------|-------|
| <i>Social Capital (X1) -&gt; Innovation (Y)</i>             | 0,708  | 19,620 | 0,000 |
| <i>Intellectual Capital (X2) -&gt; MSME Performance (Z)</i> | 0,812  | 24,549 | 0,000 |
| <i>Intellectual Capital (X2) -&gt; Innovation (Y)</i>       | 0,277  | 7,380  | 0,000 |
| <i>Innovation (Y) -&gt; MSME Performance (Z)</i>            | 0,163  | 3,633  | 0,000 |
| <i>Managerial Ability (M) -&gt; MSME Performance (Z)</i>    | 0,564  | 10,366 | 0,000 |
| <i>Moderating Effect 1 -&gt; MSME Performance (Z)</i>       | -0,009 | 1,237  | 0,216 |

Source: Processed 2025 research results

## DISCUSSION

### 1. Social Capital (X1) -> MSME Performance (Z)

With a P-value of 0.000, a T-statistic of 4.009, and an Original Sample value of 0.234, the test results show that social capital has a significant and positive impact on MSME performance. This means that the higher the level of social capital possessed by entrepreneurs, such as trust, networks, and social solidarity, the better the performance of MSMEs.

The study's findings reinforce the argument that social capital serves as an essential intangible asset that facilitates the exchange of resources and knowledge among entrepreneurs. Strong social relationships allow MSME owners to share market information, adopt best business practices, and collectively respond to challenges in dynamic market environments. This aligns with the Resource-Based Theory (RBT), which posits that relational assets such as trust and collaboration can become sources of sustained competitive advantage when effectively utilized. Consequently, MSMEs with higher social capital are more capable of leveraging their networks to access financing, negotiate better supplier contracts, and build customer loyalty, all of which contribute to superior performance outcomes.

Moreover, the significant effect of social capital on performance highlights the role of community-based interactions in strengthening MSME resilience. Entrepreneurs embedded in active networks often receive informal mentoring, technical assistance, and emotional support from peers and local institutions. These social exchanges foster a learning environment that promotes innovation and adaptability, enabling businesses to navigate uncertainties more effectively. In the context of ultra-micro enterprises, where formal institutional support may be limited, social capital acts as a compensatory mechanism that substitutes for financial and infrastructural constraints.

Finally, the results underscore the policy implications for government agencies and MSME development programs. Strengthening social capital through entrepreneurial networking events, business associations, and community-based capacity-building initiatives can significantly enhance MSME competitiveness. Policymakers should prioritize programs that promote trust-based collaboration, digital networking, and cooperative ecosystems among small business owners. By institutionalizing social capital as part of MSME development strategies, Indonesia can foster a more inclusive and sustainable entrepreneurial environment, driving both economic growth and social cohesion.

These findings are consistent with the theories of (Aisjah et al., 2024); Ojokuku, R. M. (2024), Ibeku (2024), Muna (2024), and Welhelmina (2024), which indicate that social networks improve information access, collaboration opportunities, and business sales.

### 2. The Social Capital Effect on Innovation

The analysis findings show that social capital has a significant effect on innovation, with a correlation value :0.708, a T-statistic of 19.620, and a P-value :0.000. These findings indicate that the stronger the social relationships among MSMEs, the greater their ability to innovate, both in product development, processes, and marketing strategies.

These findings further confirm that social interaction, trust, and collaboration among MSMEs create a conducive environment for knowledge sharing and creative idea exchange, which are essential components of innovation. Entrepreneurs who are embedded in strong social networks tend to receive faster feedback, adopt new technologies more readily, and gain inspiration from peer practices. As a result, they are able to develop new products, improve service quality, and implement efficient operational systems. This reinforces the argument by Ozgun (2022) and Rustiarini et al. (2022) that social capital serves as a key driver of innovation, particularly in small-scale enterprises where formal R&D capacity is often limited. Therefore, the existence of cohesive social ties accelerates the innovation process by reducing uncertainty and enhancing trust among collaborators.

Furthermore, the significant relationship between social capital and innovation underscores the importance of community-based entrepreneurial ecosystems in driving creativity and competitiveness. MSMEs that actively engage with networks such as business forums, cooperatives, and digital communities are more likely to identify emerging trends and market opportunities. In the case of ultra-micro enterprises, these networks act as channels

for exchanging not only business insights but also tacit knowledge that stimulates continuous improvement. Consequently, innovation becomes a social process rather than an individual endeavor—rooted in collective learning and mutual trust. These results emphasize that to cultivate innovation among MSMEs, policy interventions should not focus solely on technology adoption but also on fostering collaborative cultures and strengthening relational capital.

Ozgun (2022), Rehman et al. (2021), and Rustiarini et al. (2022), which confirm that social interaction and trust accelerate knowledge exchange and trigger the creation of innovative ideas within organizations.

### 3. Intellectual Capital's Impact on MSME Performance

A large coefficient value indicates that human resource capabilities, work systems, and business knowledge are the main determinants of performance improvement.

The findings further demonstrate that intellectual capital acts as a strategic asset that strengthens an organization's competitive position through the effective utilization of human resources and organizational knowledge. MSMEs that can convert their employees' expertise and experience into productive capabilities tend to achieve higher efficiency, better decision-making, and stronger adaptability to market changes. This aligns with the view of Yilmaz (2023) and Faturachman et al. (2024), who argue that intellectual capital not only enhances productivity but also sustains long-term knowledge within organizations. Moreover, the positive effect of intellectual capital on MSME performance indicates that businesses with well-managed knowledge systems and dynamic learning cultures can better navigate technological disruptions and seize emerging digital opportunities (Mulyani & Basrowi, 2024a; Uda & Basrowi, 2024; Yusuf et al., 2024).

In addition, the results highlight that knowledge management and innovation orientation play a mediating role in translating intellectual capital into measurable performance outcomes. Intellectual resources such as employee competence, managerial expertise, and accumulated market insights contribute to more innovative products, efficient marketing, and improved financial performance. This is consistent with the studies by Rideg (2023) and Beltramino et al. (2022), which emphasize that innovation acts as a bridge between intellectual capital and firm performance. In the MSME context, the ability to manage intellectual capital effectively allows firms to respond quickly to market fluctuations, develop creative solutions, and sustain competitive advantages even in resource-constrained environments. Thus, strengthening intellectual capital should be viewed as an investment in the long-term sustainability and resilience of MSMEs.

These results support the Resource-Based View theory (Barney, 1991) and research by Sohu (2024); Ali & Castro (2025); Prasad & Mondal (2025); Shahbaz & Ahmad (2024); and Zahid et al. (2024), which explains that intellectual capital influences MSME performance

### 4. Intellectual Capital's Impact on Innovation

A P-value of 0.000, a T-statistic of 7.380, and an Original Sample value of 0.277 indicate that intellectual capital significantly and favorably influences innovation. This implies that MSMEs' capacity to innovate increases with their level of knowledge, competence, and work system expertise. This supports research by Beltramino (2021), Rideg (2023), and Aljuboori (2022), which states that individual knowledge and creativity are the main foundations for developing organizational innovation.

The findings also demonstrate that intellectual capital contributes not only to the creation of new ideas but also to the institutionalization of innovation within MSME operations. Knowledge and expertise accumulated by business owners and employees enable the development of structured innovation systems—ranging from product diversification and process efficiency to digital transformation initiatives. This suggests that MSMEs with strong intellectual capital are better positioned to adopt technological advancements, improve production techniques, and respond to changing consumer demands. As a result, innovation becomes a continuous process rather than a one-time activity, strengthening the firm's adaptability and competitiveness in the long run (Alexandro & Basrowi, 2024; Junaidi et al., 2024; Nuryanto, Basrowi, Quraysin, & Pratiwi, 2024b).

Furthermore, the results reinforce the Resource-Based View (RBV) perspective, which posits that valuable, rare, and inimitable resources—such as intellectual capital—are critical drivers of sustainable competitive advantage. MSMEs that effectively leverage their intellectual assets can convert tacit knowledge into explicit organizational capabilities, leading to consistent innovation outcomes. This finding aligns with the arguments of Yilmaz (2023) and Ji & Suwandej (2024), who contend that intellectual capital acts as an enabling mechanism for creative problem-solving and opportunity recognition. In this context, intellectual capital serves as the intellectual infrastructure that sustains innovation and ensures long-term business growth and resilience.

### 5. Innovation's Effect on MSME Performance

Innovation significantly and favorably affects MSME performance. A T-statistic of 3.633, a P-value of 0.000, and an Original Sample value of 0.163 indicate that innovation greatly enhances business performance through the

creation of new products, process enhancements, and the application of new technologies. These results support the views of Hama and Cavusoglu (2023), Vijayakumar & Chandrasekar (2022), Faturachman (2023), and Beltramo (2021), who assert that innovation is a driving force for economic growth and increased business competitiveness.

**Table 11.** Indirect Effect

|  | Original Sample | T Statistics | P Values |
|--|-----------------|--------------|----------|
| <i>Social Capital</i> -> <i>Innovation</i> -> <i>Sme Performance</i>           | 0,115           | 3,562        | 0,000    |
| <i>Intellectual Capital</i> -> <i>Innovation (Y)</i> -> <i>Sme Performance</i> | 0,045           | 3,434        | 0,001    |

Source: Processed 2025 research results

## 6. Innovation as a Social Capital Mediating Factor for MSME Performance

The path coefficient of 0.115 indicates that social capital positively influences MSME performance by increasing innovation capacity. This means that the stronger the social relationships between MSMEs, such as trust, cooperation, and information exchange, the greater their ability to create new product and business process innovations, ultimately improving business performance. These results align with the views of Kanini (2022), Aljuboori et al. (2022), Khaliq (2022), and Saleh & Koliby (2024), who stated that social networks and trust are important sources of new knowledge creation and innovation within organizations (Ika Sari et al., 2024; Nuryanto, Basrowi, Quraysin, & Pratiwi, 2024a).

These findings also demonstrate that innovation functions as a mediating variable that connects social capital and MSME performance. Strong social networks provide MSMEs with access to valuable information, shared experiences, and collaborative opportunities that encourage experimentation and creativity. When social capital is effectively managed, it fosters an environment of mutual learning and trust, enabling entrepreneurs to identify new market opportunities and develop innovative solutions. This dynamic interaction between social relationships and innovation capacity strengthens organizational adaptability and supports continuous performance improvement in competitive markets (Berkat et al., 2025; Fauzi et al., 2025; Uda et al., 2024).

In addition, the positive relationship between social capital, innovation, and performance emphasizes the strategic importance of relational assets in driving business sustainability. As MSMEs rely heavily on interpersonal trust and informal networks, these social ties become a powerful mechanism for knowledge diffusion and opportunity recognition. This perspective is consistent with Rustiarini et al. (2022) and Vijayakumar & Chandrasekar (2022), who highlighted that the combination of social trust and collaborative culture enhances the firm's ability to innovate and achieve superior results. Therefore, cultivating strong and productive social capital is essential for MSMEs aiming to strengthen innovation capabilities and achieve long-term competitive advantage (Nuryanto, Basrowi, Quraysin, & Pratiwi, 2024c; Pratiwi et al., 2025; Purwaningsih et al., 2024).

## 7. Innovation as an Intellectual Capital Mediating Factor for MSME Performance

Capacity to innovate in the creation of goods and services increases with the quality of their intellectual capital management, which includes knowledge, skills, experience, and work methods. This innovation, in turn, can improve business performance, including sales, profits, and customer satisfaction. Intellectual capital serves as a strategic resource that serves as the primary foundation for sustainable innovation (Aljuboori et al., 2022) (Khaliq, 2022) (Saleh & Koliby, 2024b)

This finding highlights that intellectual capital functions as both a driver and enabler of innovation, creating a continuous cycle of improvement within MSMEs. Well-managed intellectual capital not only enhances operational efficiency but also strengthens the organization's ability to identify and exploit new business opportunities. By integrating knowledge sharing, employee learning, and process refinement, MSMEs can translate intellectual resources into innovative products and services that meet evolving market needs. This aligns with the perspectives of Beltramo (2021) and Rideg (2023), who emphasized that knowledge and experience act as dynamic capabilities that allow firms to sustain competitiveness through ongoing innovation and adaptation.

Furthermore, the results reinforce the notion that innovation acts as a mediating mechanism linking intellectual capital and MSME performance. When intellectual capital is effectively utilized, it enhances creativity, problem-solving, and decision-making processes that lead to measurable business outcomes such as higher profitability and customer loyalty. This supports the argument by Ji & Suwandej (2024) and Hama & Cavusoglu (2023) that innovation transforms intangible intellectual assets into tangible economic value. Therefore, strengthening intellectual capital management is essential for MSMEs seeking not only to innovate but also to ensure resilience, growth, and long-term sustainability in increasingly dynamic markets.

### 8. The Effect of Social Capital on MSME Success is Moderated by Managerial Skill.

With a correlation value of 0.564, a T-statistic of 10.366, and a P-value of 0.000, the analysis demonstrates that management competence has a significant impact on MSME success. This research demonstrates that effective business communication, leadership, and decision-making are essential for MSMEs to meet performance goals.

These results align with research by Hama & Cavusoglu (2023), Aljuboori (2022), Rustiarini (2022), Vijayakumar & Chandrasekar (2022), and Faturachman (2023), who emphasized that managerial ability is the main driver of operational effectiveness and the accomplishment of organizational goals. The results of the moderation test indicated that Moderating Effect 1 did not significantly influence MSME performance (Basrowi et al., 2022; Basrowi & Ali, 2023).

These findings suggest that managerial ability acts as an independent and direct determinant of MSME performance, rather than as a moderating variable in the relationship between social capital and performance (Aliyyah et al., 2024; Fauzi, Effendi, & Basrowi, 2024; Mulyani & Basrowi, 2024b). The strength of managerial competence—reflected in skills such as strategic planning, problem-solving, and resource management—directly influences how effectively MSMEs can respond to market challenges. Entrepreneurs with strong managerial abilities tend to make better financial decisions, utilize resources efficiently, and adapt more quickly to environmental changes. This confirms the assertion by Hao (2024) and Hasan & Alam (2025) that managerial skill serves as the backbone of organizational success, especially in small enterprises where leadership and decision-making are concentrated in a few key individuals.

Moreover, the insignificance of the moderating effect indicates that managerial competence functions as a structural capability rather than a contextual enhancer. In other words, while managerial ability strengthens overall performance, it does not necessarily intensify the impact of social or intellectual capital on performance outcomes (Hamdan & Basrowi, 2024; Junedi et al., 2024; Mulyani & Basrowi, 2024b; Nuryanto, Basrowi, Quraysin, Pratiwi, et al., 2024; Sintani et al., 2024). This finding contributes to the refinement of previous theoretical frameworks, suggesting that managerial competence should be conceptualized as a *core internal resource* within the Resource-Based View (RBV) perspective, rather than as an external moderator. This insight opens new research opportunities to examine how managerial learning, digital literacy, and adaptive leadership may further reinforce MSME competitiveness in future studies.

Thus, managerial ability does not significantly moderate the relationship but rather plays a direct role as a stand-alone factor in influencing performance. These results do not support Sinuraya & Mayangsari (2024), (Ratnawati, Rokhman, & Yayuk, 2021); or Ruwanti & Harymawan (2024).

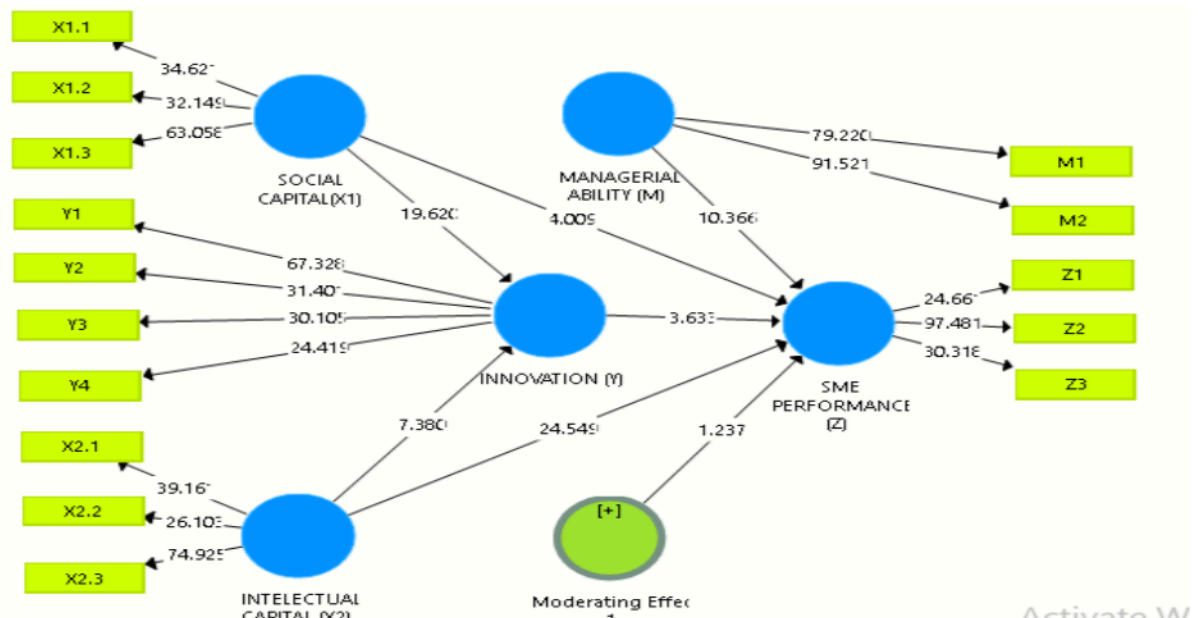


Figure 4.1 Bootstrapping Model  
Source: Processed 2025 research results

The inner model analysis's findings suggest that innovation, intellectual capital, and social capital are critical components in enhancing MSME performance. The success of MSMEs in building trust, managing knowledge, and implementing innovation has been shown to have a significant impact on increasing sales, profits, and the number of customers (Al Masyhari et al., 2024; Fauzi, Effendi, Basrowi, et al., 2024). Furthermore, managerial capabilities have been shown to play a strategic role in strengthening the effectiveness of the application of social capital and intellectual capital to performance. This means that MSMEs with strong leadership, business planning,

and business communication skills will be better able to optimize their resources and innovation potential. The findings of the inner model study show that this research model has a substantial explanatory contribution to MSME performance, significant correlations between variables, and excellent structural feasibility (Hamdan & Basrowi, 2024; Shafrani et al., 2024).

## CONCLUSION

The degree of business performance attained increases with the strength of the social ties between company actors, whether through cooperation, trust, or information sharing. Beneficial social relationships between business actors can encourage the exchange of ideas, knowledge, and experiences, resulting in new innovations. Intellectual capital helps MSMEs adapt to technological and market changes more quickly. The ability of MSMEs to innovate in terms of processes, products, or business strategies increases with their level of intellectual capital. Intellectual capital is a key factor because most small businesses rely on individual creativity and practical experience. Innovation in products, processes, and marketing strategies directly contributes to improved business performance. Managerial skills, including planning, leadership, and business communication, can directly improve MSME performance but do not completely reinforce the link between social capital and MSME performance. This is because the respondents' managerial abilities were comparatively comparable. Innovation serves as a strategic link between outward performance outcomes and internal resource strengths. Social capital enhances performance through ongoing innovation in addition to having a direct effect. Innovation is a strategic channel connecting strong intellectual capital, including human resource skills, internal management systems, and external networks, to improve MSME performance by innovating in creating new products, improving production processes, and adopting new technologies.

## Funding Source

This research was conducted independently by the researcher but received support from the State University of Jakarta, Indonesia in various non-financial forms. The support included access to the internet for data collection and analysis, computer facilities and software for data processing, as well as administrative assistance related to research legality and field data collection permits. All of this support enabled the research to proceed smoothly, even though the study did not receive external funding in the form of grants or sponsorships

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