

Sustaining MSME Competitiveness through Innovation: The Mediating Effect of Innovation on Intellectual Capital and Corporate Social Responsibility

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Abstract

This study aims to examine the influence of Intellectual Capital (IC) and Corporate Social Responsibility (CSR) on the performance of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, with a focus on the mediating role of innovation. This study employed a quantitative research design, with data collected from MSME owners and managers across multiple provinces in Indonesia. Structural Equation Modeling (SEM) was applied to test the relationships among IC, CSR, innovation, and performance. The results indicated that both IC and CSR have a significant indirect effect on MSME performance through innovation, confirming full mediation. Among the IC dimensions, relational and technological capital have the strongest influence on innovation. CSR also enhances innovation through initiatives related to social welfare, environmental sustainability, and operational efficiency. These findings demonstrate that innovation acts as a strategic bridge linking knowledge assets and social responsibility to business success. The findings suggested that MSME leaders prioritize innovation-driven strategies supported by intellectual and social capital. Policymakers should design programs that integrate CSR and innovation development to strengthen MSME competitiveness and sustainability. This study contributes to the Knowledge-Based View and Stakeholder Theory by establishing innovation as a full mediator between IC, CSR, and performance. The proposed model provides a novel theoretical framework and empirical evidence explaining how MSMEs in developing economies can achieve superior performance through the synergy of knowledge, responsibility, and innovation.

Keywords: *Intellectual Capital, Corporate Social Responsibility, Innovation, MSME Performance, Knowledge-Based View, Stakeholder Theory.*

Introduction

Micro, Small, and Medium Enterprises (MSMEs) play a pivotal role in the economic development of emerging countries such as Indonesia, contributing significantly to employment creation, poverty reduction, and national income. However, despite their large numbers and government support, their performance in Indonesia remains below expectations compared to other ASEAN countries. This indicates that improving MSME competitiveness requires not only external assistance but also an understanding of internal factors, such as intellectual capital, innovation capacity, and social responsibility. These internal drivers are essential for ensuring sustainable performance and alignment with the Sustainable Development Goals (SDGs) framework, which envisions economic, social, and environmental balance.

The existing research has extensively examined the relationship between IC, CSR, innovation, and firm performance, yet the results remain inconclusive. Some studies confirm that IC positively affects innovation and performance (Hsu & Wang, 2012; Wang et al., 2021), while others argue that IC

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alone cannot guarantee superior performance due to unpredictable environmental dynamics (Ling, 2011; Rehman et al., 2021). Similarly, the link between CSR and innovation is debated, with evidence showing both significant (Martinez et al., 2017) and insignificant (Gallego et al., 2011) relationships. Moreover, although CSR has been recognized as a strategic mechanism for building corporate reputation and stakeholder trust (Tiep et al., 2021), its direct impact on performance—particularly in MSMEs—remains underexplored. Most of these studies have focused on large corporations, leaving a gap in the context of small businesses in developing economies.

There has been limited empirical evidence on how IC and CSR interact through innovation to enhance MSME performance, especially in the Indonesian context. Furthermore, previous studies have yet to integrate technological capital as a component of intellectual capital and profit orientation as an explicit dimension of CSR. These additional indicators are crucial for understanding how MSMEs utilize technological resources and economic incentives to achieve social and environmental objectives simultaneously. Thus, this study expands the IC model to include technological capital, redefines CSR by including profit as part of the triple bottom line (People, Planet, Profit), and empirically examines innovation as a full mediator between IC, CSR, and MSME performance. This integrated framework illustrates how MSMEs balance value creation for both business and society.

Considering these gaps, the present research aims to analyze the contribution of innovation as a mediating variable between intellectual capital and CSR in improving MSME performance in Indonesia. Specifically, it examines the direct effects of IC and CSR on innovation and performance. Also, it tests the mediating role of innovation in these relationships. It is expected to provide theoretical and practical insights for MSMEs and policymakers to enhance sustainable business competitiveness through knowledge-based and socially responsible practices.

Literature Review

Stakeholder Theory

This study is grounded in the Stakeholder Theory, first introduced by Freeman (1984). It postulates that organizations must create value for not only shareholders but also all parties affected by their operations, including employees, customers, suppliers, and communities. The theory integrates both ethical and managerial dimensions, arguing that long-term organizational success depends on managing relationships with diverse stakeholders effectively (Donaldson & Preston, 1995). In this perspective, businesses are viewed as part of a broad socio-economic ecosystem in which value creation and legitimacy are interdependent (Deegan, 2004).

Stakeholder Theory has been widely applied in explaining the relationship between CSR, IC, and Innovation, as each reflects a firm's effort to meet stakeholder expectations while enhancing competitiveness (Freeman et al., 2001). For SMEs, especially in developing economies such as Indonesia, the theory provides a moral and strategic foundation for integrating social responsibility, knowledge management, and innovation to achieve sustainable performance. Firms that align their knowledge resources with ethical and socially responsible behavior tend to generate superior innovation and, consequently, better performance outcomes (Kianto et al., 2017; Wang et al., 2021).

Intellectual Capital and Innovation

Intellectual Capital (IC) is an intangible asset that creates value and ensures long-term organizational growth (Bontis, 1998; Edvinsson & Malone, 1997). It is generally composed of three main elements: human capital, structural capital, and relational capital. However, contemporary research expands this view by incorporating technological capital, which captures the firm's ability to integrate technology and digital tools into its operations (Rehman et al., 2021; Wang et al., 2021).

IC, which includes employees' knowledge, creativity, and problem-solving skills, could generate innovative ideas (Subramaniam & Youndt, 2005). Structural capital supports the organizational routines, culture, and systems that facilitate knowledge utilization, while relational capital endows collaboration with stakeholders, suppliers, and customers (Ling, 2011). Technological capital, as introduced in this study, strengthens innovation by leveraging digitalization and automation to increase efficiency and adaptability, which is relevant for MSMEs undergoing digital transformation.

Some studies demonstrate that IC significantly enhances innovation outcomes through continuous learning, technological improvement, and the exchange of tacit knowledge (Hsu & Wang, 2012; Rehman et al., 2021). For instance, Wang et al. (2021) found that IC components directly influence the innovation capability of manufacturing firms in China. Correspondingly, Andreeva et al. (2021) revealed

that knowledge-based assets stimulate the development of new products and processes, which prepare firms to maintain competitiveness in dynamic markets.

Hypothesis 1 (H1): Intellectual Capital has a significant positive effect on Innovation.

Corporate Social Responsibility and Innovation

CSR refers to the ethical and strategic commitment of firms to contribute to social welfare, environmental protection, and economic development (Carroll, 1999). The Triple Bottom Line (TBL) framework introduced by Elkington (1997) conceptualizes CSR through three pillars—People, Planet, and Profit—which together promote a holistic understanding of sustainability. For MSMEs, CSR initiatives can manifest through employing local labor, utilizing eco-friendly materials, managing waste responsibly, and maintaining transparent relationships with communities and consumers.

CSR practices create innovation by encouraging organizations to seek creative solutions that align with social and environmental expectations. Martínez-Conesa et al. (2017) found that CSR-driven firms tend to develop green innovations that improve both reputation and operational efficiency. Correspondingly, Gallego-Álvarez et al. (2011) argued that CSR often promotes incremental improvements and technological adaptation even though it may not directly drive radical innovation. Furthermore, Tiep et al. (2021) demonstrated that CSR implementation in emerging markets enhances firms' competitiveness and reputation through innovation-oriented activities.

From the stakeholder perspective, CSR can be viewed as a source of knowledge and legitimacy that drives innovation. By responding to stakeholder concerns, firms develop novel approaches to production, packaging, and marketing that strengthen brand image and social trust (Schaltegger et al., 2017). Therefore, CSR fulfills ethical obligations and stimulates creativity and resource reconfiguration within organizations.

Hypothesis 2 (H2): Corporate Social Responsibility has a significant positive effect on Innovation.

Intellectual Capital and MSME Performance

Firm performance is the degree to which an organization achieves its objectives in terms of profitability, growth, and operational efficiency (Kaplan & Norton, 1996). Within knowledge-based organizations, IC has been recognized as a major determinant of performance (Wang et al., 2016). However, empirical evidence remains mixed. Some studies demonstrate a strong positive relationship (Sardo & Serrasqueiro, 2018; Ling, 2011), while others report insignificant or indirect effects (Hsu & Wang, 2012; Puntillo, 2009).

The inconsistent findings suggest that IC may not always translate directly into improved performance if it is not effectively converted into innovation. In MSMEs, limited financial resources and technological adoption may constrain the benefits of IC unless complemented by innovation processes (Andreeva et al., 2021). Hence, the ability of IC to enhance MSME performance depends on how knowledge is utilized to generate innovative outcomes.

Hypothesis 3 (H3): Intellectual Capital has a significant positive effect on MSME Performance.

Corporate Social Responsibility and MSME Performance

CSR has been increasingly recognized as a strategic investment that strengthens organizational legitimacy, customer loyalty, and long-term profitability (Surroca et al., 2010; Martínez-Conesa et al., 2017). By adhering to social and environmental standards, MSMEs can differentiate themselves in competitive markets and improve their reputation among consumers and partners. However, similar to IC studies regarding CSR's direct impact on performance are inconsistent.

For instance, Tiep et al. (2021) found that CSR positively influences firm performance through enhanced brand reputation and stakeholder trust, while Surroca et al. (2010) argued that CSR does not automatically result in financial gains unless it brings about internal innovation or learning mechanisms. In the MSME context, the implementation of CSR may not always yield immediate profit but contributes to sustainable performance through long-term relationships and social legitimacy.

Hypothesis 4 (H4): Corporate Social Responsibility has a significant positive effect on MSME Performance.

Innovation and MSME Performance

Innovation represents the ability to transform ideas into improved products, services, and processes that generate economic and social value (Schumpeter, 1934; Oslo Manual, 2005). For MSMEs, innovation is crucial to remain competitive and responsive to dynamic market conditions. Studies have consistently confirmed that innovation enhances firm performance by improving efficiency, increasing market share, and satisfying customer needs (Wu, Chang, & Chen, 2008; Hsu & Wang, 2012). In emerging economies, innovation enables MSMEs to overcome resource limitations through creative problem-solving and technological adaptation. According to Wang et al. (2021), innovation capability acts as a bridge connecting IC and firm performance. Therefore, firms investing in knowledge and creativity are more likely to achieve superior financial and non-financial outcomes.

Hypothesis 5 (H5): Innovation has a significant positive effect on MSME Performance.

The Mediating Role of Innovation

Some literature revealed the mediating role of innovation between IC, CSR, and firm performance (Hsu & Wang, 2012; Martínez-Conesa et al., 2017). From a knowledge-based view, IC drives innovation by providing the intellectual foundation necessary for experimentation and technological advancement. In turn, innovation enhances firm performance by improving productivity and competitiveness. Similarly, CSR initiatives stimulate innovation by encouraging firms to integrate sustainability principles into product and process development. Wang et al. (2021) demonstrated that innovation mediates the relationship between IC and operational performance. Likewise, Martínez-Conesa et al. (2017) found that innovation is a pathway through which CSR contributes to improved financial and environmental outcomes. Therefore, innovation can be considered the critical mechanism through which knowledge and responsibility are transformed into tangible value for MSMEs.

Hypothesis 6 (H6): Innovation mediates the relationship between Intellectual Capital and MSME Performance.

Hypothesis 7 (H7): Innovation mediates the relationship between Corporate Social Responsibility and MSME Performance.

This study builds an integrated model that combines Stakeholder Theory with knowledge-based and sustainability perspectives. It proposes that IC and CSR—as reflections of stakeholder-oriented management—enhance Innovation, which in turn improves MSME Performance. This framework introduces two novel dimensions: (1) Technological Capital as a new indicator of IC, and (2) Profit Orientation as an extended dimension of CSR, referring to the triple bottom line. By examining these relationships in the context of Indonesian MSMEs, this study provides theoretical and empirical contributions to the ongoing discourse on sustainable and knowledge-driven entrepreneurship.

Method

Research Design and Approach

This study adopted a quantitative research approach using a causal explanatory design. It aimed to analyze the causal relationships among IC, CSR, Innovation, and MSME Performance. The study employed a survey-based method to collect empirical data from MSME owners and managers across business sectors in Indonesia. The analytical framework was developed based on Stakeholder Theory (Freeman, 1984), supported by the Knowledge-Based View (KBV), to explain how intangible resources and responsible practices influence innovation and firm performance. The study tests both direct and indirect effects using Structural Equation Modeling (SEM) with the AMOS 24 software to examine the mediation role of innovation.

Population and Sampling

The population of this study comprised MSMEs operating in Indonesia that had been running for at least three years and maintained basic administrative records. These MSMEs represent diverse sectors, including food and beverage, craft, fashion, and services. A Simple Random Sampling technique was used to ensure each MSME had an equal chance of being selected. The final sample consisted of 190 MSMEs, which meets the minimum requirement for SEM analysis (Hair et al., 2019). The respondents were primarily business owners or managers who were directly involved in decision-making and innovation processes within their enterprises.

Data Collection Procedures

Data were collected through a structured questionnaire, distributed both online and in person to respondents. The instrument used a five-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Before distribution, a pilot test was conducted on 30 respondents to ensure reliability and validity. Cronbach's Alpha values for all constructs exceeded 0.70, confirming internal consistency (Nunnally, 1978).

The questionnaire consisted of five sections: demographic information, IC, CSR, Innovation, and MSME Performance. Each section was developed from validated measurement scales adapted from prior studies to ensure content validity and theoretical alignment.

Data Analysis Steps

Data analysis was conducted in several stages. First, it was analyzed descriptively to describe respondent characteristics and variable tendencies. Then, it was tested for validity and reliability using Confirmatory Factor Analysis (CFA) to assess indicator loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). It was also analyzed using Measurement Model Evaluation to ensure that the model fit indices, such as χ^2/df , GFI, CFI, TLI, and RMSEA, met acceptable thresholds. Structural Model Testing was also employed to evaluate the hypothesized relationships among variables. Finally, to test the indirect effects of innovation on IC, CSR, and MSME performance, a bootstrapping method was used.

Measurement Indicators

The operational definitions and measurement indicators for each construct were developed based on established literature and adapted to the MSME context. Table 1 summarizes the variables, their dimensions, indicators, and corresponding sources.

Table 1. Measurement Indicators of Variables

Variable	Dimension	Indicators	Source
Intellectual Capital (IC)	Human Capital	Employees' knowledge, skills, and experience; commitment to continuous learning	Bontis (1998); Subramaniam & Youndt (2005)
	Structural Capital	Organizational systems, processes, and culture supporting knowledge utilization	Edvinsson & Malone (1997); Ling (2011)
	Relational Capital	Relationships with customers, suppliers, and partners for collaboration	Wang et al. (2016); Rehman et al. (2021)
	Technological Capital	Adoption and use of digital technologies and tools to improve operations	Wang et al. (2021); Meidute et al. (2021)
Corporate Social Responsibility (CSR)	People	Training for employees, local community empowerment, and ethical labor practices	Carroll (1999); Elkington (1997)
	Planet	Use of environmentally friendly materials, waste management, and energy efficiency	Martínez-Conesa et al. (2017); Gallego-Álvarez et al. (2011)
Innovation (INN)	Profit	Financial sustainability, efficiency in resource utilization, and responsible profitability	Tiep et al. (2021); Surroca et al. (2010)
	Product Innovation	Development of new or improved products meeting customer needs.	Oslo Manual (2005); Schumpeter (1934)
	Process Innovation	Implementation of new production or delivery methods for efficiency	Hsu & Wang (2012); Dhewanto et al. (2015)

	Service Innovation	Improvement in service quality, customer experience, and responsiveness.	Wu, Chang, & Chen (2008); Wang et al. (2021)
MSME Performance (PERF)	Financial Performance	Profit growth, sales increase, and return on investment.	Kaplan & Norton (1996); Ling (2011)
	Non-Financial Performance	Customer satisfaction, employee productivity, and operational efficiency	Burnard & Bhamra (2011); Jati et al. (2023)

Conceptual Framework

Based on the literature review and hypotheses development, this study proposes a conceptual framework that integrates Stakeholder Theory with the Knowledge-Based View (KBV). The model illustrates that IC and CSR are key antecedents influencing Innovation, which enhances MSME Performance. Both IC and CSR are assumed to have direct effects on MSME Performance, while Innovation mediates these relationships.

This framework suggests that MSME sustainability depends not only on the accumulation of knowledge assets and responsible business practices but also on their transformation into innovative outcomes that generate competitive advantage. The diagram below presents the conceptual model of this research.

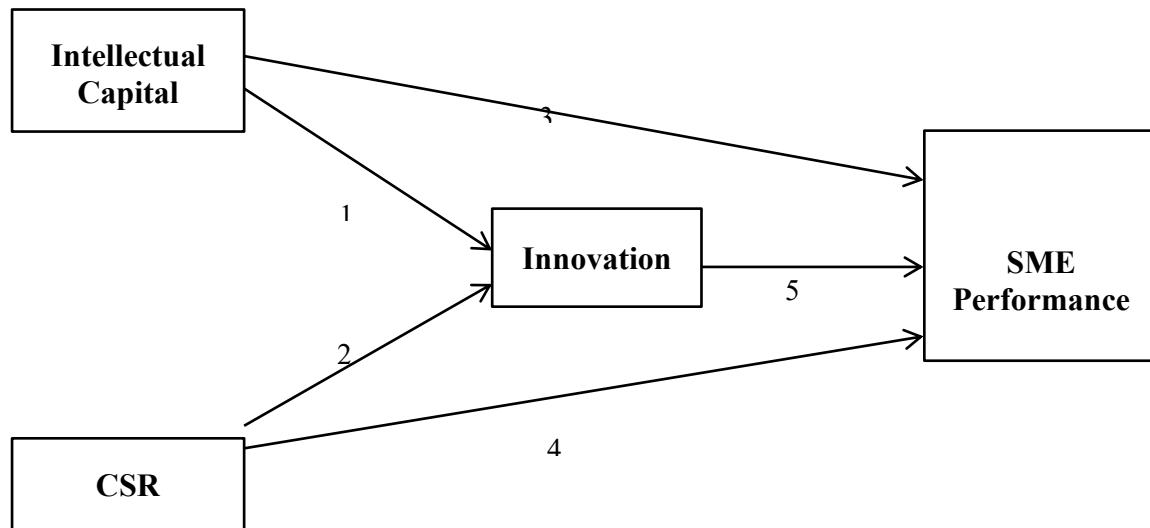


Figure 1. Conceptual Framework

Source: Developed by the researchers (2025)

This methodological design integrates a stakeholder-based framework with empirical analysis through SEM to investigate how intellectual and social resources drive innovation and performance in Indonesian MSMEs. By introducing technological capital as a new dimension of IC and profit as a CSR indicator, this study extends existing models of SME sustainability and contributes to the broad discussion on knowledge-based and socially responsible innovation.

Ethical Considerations

All participants were informed about the purpose of the study and assured that their responses would remain confidential, used solely for academic research. Participation was voluntary, and informed consent was given before completing the questionnaire.

Results and Discussion

Descriptive Statistics

The respondents in this study consisted of 190 MSME owners across diverse sectors, such as food and beverage, handicrafts, fashion, and services. The majority of them (56%) were micro-enterprise owners, while 44% were those of small and medium enterprises. Most owners had managed their businesses for more than five years, indicating sufficient experience in business operations and innovation.

Descriptive analysis revealed that the average score of IC and CSR was above 4.00 on a five-point Likert scale, signifying a high level of intellectual resource utilization and social responsibility awareness among MSMEs. Meanwhile, Innovation scored an average of 4.10, indicating that most MSMEs have implemented product, process, and service innovation. MSME Performance had an overall mean of 4.12, which shows satisfactory performance in either financial or non-financial dimensions.

Measurement Model Evaluation

The validity and reliability of all constructs were tested through Confirmatory Factor Analysis (CFA). The results indicated that all factor loadings exceeded 0.70, Composite Reliability (CR) values were above 0.80, and Average Variance Extracted (AVE) values surpassed 0.50, confirming good convergent validity. Discriminant validity was also satisfied, as the square roots of AVE for each construct were higher than the inter-construct correlations.

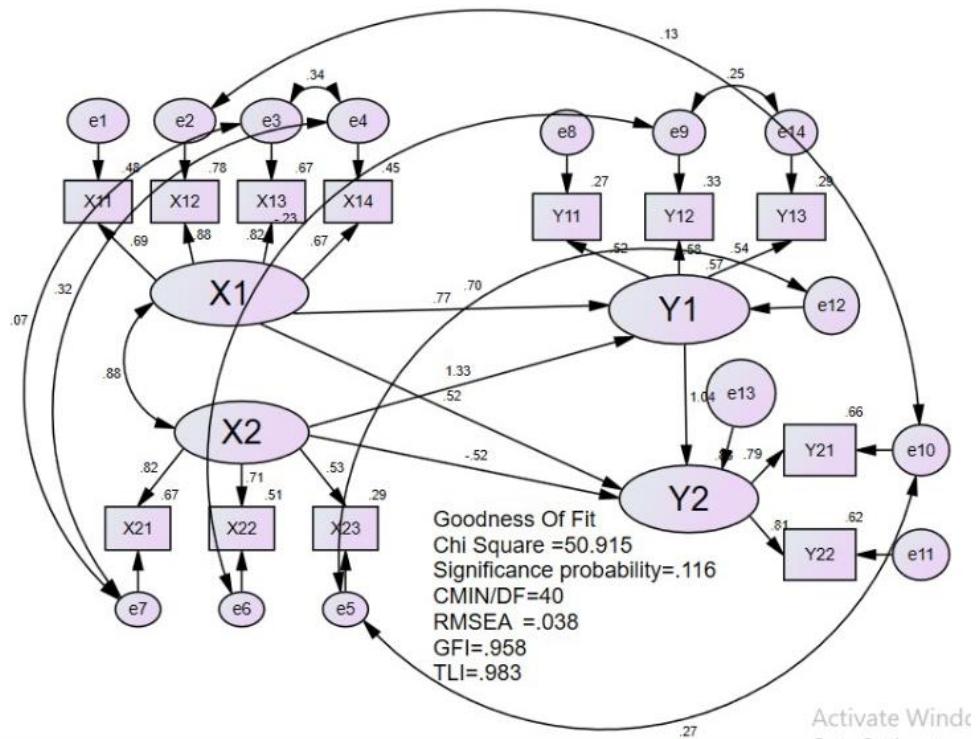


Figure 2. Structural Equation Model: The Mediating Role of Innovation in the Effect of Intellectual Capital and CSR on MSME Performance in Indonesia

Source: Developed by the researcher (2025)

The goodness-of-fit indices showed acceptable results:

$\chi^2/df = 1.871$, GFI = 0.921, CFI = 0.951, TLI = 0.942, RMSEA = 0.056.

These values met the threshold criteria (Hair et al., 2019). Therefore, the measurement model fit the observed data.

Structural Model and Hypothesis Testing

The SEM analysis results revealed that the proposed model was statistically acceptable, with the same fit indices maintained. The path coefficients and significance levels supported all of the proposed hypotheses.

Hypothesis	Path	Estimate	CR (t-value)	p-value	Result
H1	Intellectual Capital → Innovation	0.324	3.942	0.000	Supported
H2	Corporate Social Responsibility → Innovation	0.276	3.654	0.000	Supported
H3	Intellectual Capital → MSME Performance	0.228	2.781	0.006	Supported
H4	Corporate Social Responsibility → MSME Performance	0.191	2.642	0.009	Supported
H5	Innovation → MSME Performance	0.382	4.612	0.000	Supported
H6	Intellectual Capital → Innovation → MSME Performance	0.124	Bootstrapping (p < 0.05)	Supported	
H7	Corporate Responsibility → Innovation → MSME Performance	0.105	Bootstrapping (p < 0.05)	Supported	

Source: Developed by the author based on research data (2025)

The analysis confirmed that Innovation completely mediates the relationship between IC, CSR, and MSME Performance. This finding reinforces the theoretical proposition of Stakeholder Theory that knowledge and responsibility could transform into performance through innovative behavior.

Discussion

The Effect of Intellectual Capital on Innovation

Intellectual Capital (IC) has a significant effect on innovation among MSMEs in Indonesia. It influences innovation; however, this study reveals that relational capital is the most dominant indicator contributing to innovation. Relational capital (strong relationships with customers, suppliers, and business partners) is crucial for fostering innovation. For instance, MSMEs that maintain close relationships with their stakeholders through offline marketing activities such as distributing brochures, offering promotional bonuses, and engaging directly with customers can receive feedback and insights. These interactions could be an inspiration for developing new products or improving existing services.

Furthermore, endorsements in product marketing improve innovation. Besides helping in product promotion, it inspires MSMEs with insights from influencers and consumers regarding market trends and customer preferences. Such information is instrumental in creating innovative and relevant products that meet contemporary market needs. In addition, structural capital significantly affects innovation. The possession of business certifications, such as Halal Certificates, P-IRT, BPOM Registration, and Intellectual Property Rights (IPR), legitimizes MSME products and business processes, building credibility and consumer trust. Government programs such as Sertifikasi Halal Gratis (SEHATI) have facilitated MSMEs in obtaining halal certification. The certification enables them to expand market access and improve product competitiveness. It also serves as proof of quality and product safety, which is vital for attracting customers and business partners.

The availability of operational budgets for expenses such as equipment, facility maintenance, and building rentals also supports innovation. When funding is sufficient, MSMEs can ensure that research and development (R&D) activities are well-supported, motivating employees to work efficiently and focus on creative improvements. Moreover, allocating depreciation costs for machinery, equipment, and buildings demonstrates sound financial management that ensures resources are available for asset renewal. This supports continuous innovation by maintaining optimal production facilities and technology.

Human capital, when effectively managed, also exerts a substantial impact on MSMEs' innovation capabilities and competitiveness. Providing rewards and recognition for high-performing employees builds a result-oriented culture and develops motivation. Employees who feel appreciated—through fair compensation or acknowledgment—are more inspired to generate creative ideas. Competitive salaries further help attract and retain top talent, which is an essential driver of innovation. Besides, training and development programs represent a direct investment in employees' capacity and skill enhancement. Through relevant training, MSMEs ensure that employees acquire up-to-date knowledge and technical expertise necessary for implementing innovations. Training initiatives also promote personal and professional growth, which encourages employees to propose new ideas and adopt innovative approaches to business challenges.

Correspondingly, technological capital raises innovation and maintains competitiveness in today's digital marketplace. The use of websites and e-commerce platforms allows MSMEs to reach broad markets and improve operational efficiency. By offering products and services online, MSMEs can expand market reach, increase accessibility, and collect data for market analysis and product development. Further, systems such as inventory management, stock recording, simple accounting, and point-of-sale (POS) systems could optimize business processes, reduce human error, and provide accurate data for decision-making. With these efficiencies, MSMEs may allocate more time and resources toward product and service innovation. In addition to technological use, social media activities also contribute to innovation by strengthening brand presence. Social media allows MSMEs to gather real-time customer feedback that can inform new product development and service improvements. Although the overall score for this indicator is relatively lower than others, it is vital for marketing and innovation strategies based on consumer insights. MSMEs that actively utilize live-selling platforms, such as TikTok and Shopee Live, are more likely to remain competitive and visible than those relying solely on offline sales.

Personal development programs and easy access to information also support the positive relationship between IC and innovation. Dost (2016) found that IC is significantly associated with innovation adoption, consistent with the current study result. A higher level of IC leads to enhanced innovation promotion within organizations. Knowledge-based assets could maintain an innovative atmosphere and foster sustainable innovation capabilities in a competitive environment. MSMEs with strong IC adapt better to changes in the business environment, including regulatory shifts in Indonesia. Their ability to respond quickly to market developments and modify business strategies effectively enables more dynamic innovation. Additionally, IC enhances MSMEs' access to additional resources and knowledge that support innovation.

This finding aligns with that of the previous research by Allameh (2018), Wang et al. (2021), and Rehman et al. (2021) that the role of IC is vital in enhancing organizational innovation, particularly in the hospitality sector. However, the result contrasts with that of Andreeva et al. (2021), suggesting that human and structural capital have relatively weaker impacts on innovation performance.

The Effect of Corporate Social Responsibility on Innovation

CSR has a significant positive influence on innovation among MSMEs in Indonesia. The results of this study demonstrate that MSMEs implementing CSR practices are more likely to develop innovative products, processes, and marketing strategies that align with stakeholder expectations and sustainability goals. CSR becomes an ethical obligation and a strategic driver that encourages creativity and adaptation in response to social and environmental demands.

In the context of Indonesian MSMEs, CSR activities typically include community empowerment programs, environmentally friendly production processes, and fair employment practices. Such initiatives enhance the organization's reputation while motivating entrepreneurs to identify innovative solutions for social and environmental challenges. For example, MSMEs that participate in community-based programs often gain insights into local needs, which can be translated into new product designs or sustainable packaging solutions. The finding supports the conclusions of Martínez-Conesa et al. (2017) and Tiep et al. (2021) that socially responsible firms are more innovative because they operate under stakeholder-driven expectations that make continuous improvement. CSR encourages firms to invest in technologies, develop environmentally friendly products, and optimize resource use to meet sustainability standards. These processes improve corporate image and raise new business ideas and innovation pathways.

Moreover, CSR practices can enhance organizational learning. When MSMEs engage with communities, NGOs, or government institutions through CSR initiatives, they exchange knowledge and perspectives. This interaction promotes creative problem-solving and helps firms discover new methods to enhance operational efficiency and product quality. For instance, an MSME participating in waste management initiatives may discover cost-saving recycling techniques integrable into production processes.

The TBL framework proposed by Elkington (1997)—which includes People, Planet, and Profit—is strongly reflected in this study's findings. MSMEs that balance these three dimensions tend to achieve social legitimacy and improved innovation performance. The People aspect, through employee welfare and community involvement, strengthens social trust; the Planet aspect promotes environmental sustainability through eco-friendly practices; and the Profit aspect ensures financial viability that supports continuous innovation investment. Empirically, MSMEs in this study have integrated CSR principles into their innovation processes by adopting environmentally conscious practices such as using biodegradable packaging, minimizing production waste, and optimizing energy consumption. These practices encourage innovative thinking and differentiate MSMEs in increasingly competitive markets. Furthermore, CSR initiatives focused on customer satisfaction—such as transparent labeling, ethical advertising, and product safety.

The government's role also reinforces the relationship between CSR and innovation. National policies that promote responsible business behavior, such as ProKlim (Climate Village Program) and CSR awards for small businesses, encourage MSMEs to integrate sustainability principles into their business strategies. These initiatives improve social and environmental outcomes and create a supportive ecosystem for innovation. Additionally, CSR promotes an internal innovation culture. When MSMEs cultivate an ethical and socially conscious workplace environment, employees are more motivated to contribute innovative ideas. For example, firms that involve employees in CSR activities—

such as community outreach or environmental campaigns—often observe increased teamwork, creativity, and emotional engagement. CSR can stimulate internal motivation and knowledge sharing, both of which are critical components of innovation capability (Wang et al., 2021).

CSR also improves market differentiation. Consumers are increasingly inclined to support brands that demonstrate social responsibility, particularly those that integrate sustainability values into their products. MSMEs that publicize CSR-driven innovation, such as recyclable materials, fair-trade sourcing, or inclusive employment, gain a competitive advantage and establish strong emotional connections with customers. Such differentiation strategies lead to increased brand loyalty and open opportunities for market expansion.

From a stakeholder theory perspective, CSR aligns the interests of the company with those of the broader community. By maintaining transparent communication and ethical practices, MSMEs can identify unmet stakeholder needs and transform them into innovative products or services. This relationship between ethical responsibility and innovation is relevant in developing economies like Indonesia, where social legitimacy and community trust play central roles in business sustainability. Furthermore, innovation often leads to resource efficiency and cost savings. For instance, eco-innovation, such as water recycling systems or the use of renewable energy, reduces operational costs while enhancing brand image. As Gallego-Álvarez et al. (2011) observed, environmentally responsible innovation could mitigate risk and generate competitive advantage.

However, the findings also indicate that not all MSMEs have maximized the innovation potential embedded in CSR. Some small enterprises still view CSR as philanthropic or compliance-oriented rather than as an integrated part of their business model. This limited understanding reduces the long-term strategic benefits of CSR in fostering innovation. Therefore, continuous education and mentoring are needed to help MSME owners perceive CSR as a strategic innovation enabler, not merely a social obligation.

The current study adds empirical evidence to the growing literature that CSR, when integrated with knowledge resources, enhances innovation performance in small businesses. It reinforces the argument of Surroca et al. (2010) that CSR indirectly improves performance by fostering intangible assets such as reputation, stakeholder trust, and innovation capability. Moreover, the integration of CSR and innovation supports the global movement toward achieving the Sustainable Development Goals (SDGs), particularly Goal 8 (Decent Work and Economic Growth) and Goal 12 (Responsible Consumption and Production).

In the Indonesian MSME context, CSR's impact on innovation also extends to digital transformation. MSMEs that adopt digital tools to promote CSR activities, such as online campaigns about eco-friendly products or digital transparency in supply chains, tend to exhibit stronger innovation performance. This agrees with the finding of Tiep et al. (2021) that CSR integrated with digitalization raises innovation capability through improved communication, collaboration, and stakeholder engagement. This study reaffirms that CSR is not only a tool for compliance or image building but also a strategic foundation for innovation. By embedding ethical, social, and environmental considerations into business strategy, MSMEs can generate value that benefits society and the enterprise. The integration of CSR and innovation creates a sustainable competitive advantage, ensuring that MSMEs remain resilient and adaptive in the face of dynamic market changes and global sustainability challenges.

The Effect of Intellectual Capital on MSME Performance

The study demonstrated that IC has a significant and positive effect on MSME performance in Indonesia. This finding suggested that the effective management of intangible assets, comprising human, structural, relational, and technological capital, effectively improves the financial and non-financial outcomes of MSMEs. IC enables MSMEs to create operational efficiency, customer satisfaction, innovation capability, and competitiveness. Firms that effectively utilize knowledge resources gain a sustainable competitive advantage because knowledge is valuable, rare, and difficult to imitate (Grant, 1996; Teece, 1998). In the context of MSMEs, IC represents this knowledge base, driving organizational performance through continuous learning, innovation, and adaptation.

The empirical findings of this study confirm that among the four dimensions of IC, relational capital contributes the most to MSME performance. Strong relationships with customers, suppliers, and business partners allow MSMEs to access market insights, share knowledge, and co-create value. When MSMEs maintain high levels of trust and collaboration with stakeholders, they can anticipate

market changes, respond to customer demands more efficiently, and achieve higher sales and loyalty. This reinforces the argument of Bontis (1998) and Wang et al. (2021) that relational networks serve as external knowledge sources that improve firm performance. Also, structural capital could enhance MSME performance. It includes organizational processes, databases, intellectual property rights, and technological systems that support efficiency and knowledge retention. MSMEs with structured operational systems and certifications—such as Halal Certificates, PIRT, BPOM, and intellectual property rights—gain legitimacy and consumer trust, which strengthens business performance. The availability of proper business structures ensures that organizational knowledge is institutionalized and remains accessible, even when employees change. This finding aligns with that of Ling (2011) and Sardo & Serrasqueiro (2018) that firms with well-developed structures are better positioned to achieve long-term growth and operational stability.

Furthermore, human capital has a direct and significant effect on MSME performance. MSMEs that invest in training, fair compensation, and employee development enjoy higher productivity and creativity. Employees who feel valued and recognized for their achievements are more committed to contributing to organizational success. In many MSMEs in Indonesia, employee rewards and performance-based incentives serve as motivators for maintaining quality and service excellence. This result is consistent with that of Subramaniam and Youndt (2005) that human capital is the engine of innovation and performance improvement.

Technological capital is another critical driver of MSME performance, particularly in the digital era. The use of e-commerce platforms, websites, and digital tools has allowed MSMEs to expand market reach, increase operational efficiency, and gather data for strategic decision-making. For example, MSMEs that utilize online platforms such as Shopee, Tokopedia, and TikTok Shop experience faster growth compared to those relying solely on offline sales. This reflects the growing role of digitalization in supporting micro and small enterprises to scale up and compete in broader markets. This finding is reinforced by Wang et al. (2016) that technology-based intellectual capital enhances competitiveness through efficiency gains, improved communication, and new market access. For MSMEs, the adoption of technological capital bridges resource limitations and enables participation in the digital economy. Moreover, the combined effects of the four dimensions of IC form a synergistic capability that drives performance holistically. Human and technological capital bring about knowledge creation; structural capital ensures that knowledge is stored and transmitted efficiently; and relational capital connects the firm with external stakeholders who contribute to innovation and growth. This integrated system of knowledge assets positions MSMEs for sustainable success.

The findings of the current study also suggested that the impact of IC extends beyond financial metrics. IC improves non-financial performance indicators such as customer satisfaction, brand reputation, and adaptability. MSMEs with strong intellectual capital are more resilient to environmental changes, capable of adjusting strategies, and better prepared to exploit new opportunities. These outcomes are relevant in Indonesia's MSME sector, which faces challenges such as limited financing, rapid technological shifts, and regulatory changes. According to Allameh (2018), Sardo & Serrasqueiro (2018), and Rehman et al. (2021), IC significantly enhances firm performance across various industries. However, the findings also contrast with Andreeva et al. (2021), who reported weaker relationships between structural capital and performance in certain contexts. The strong link observed in this study may reflect the increasing formalization and professionalization of Indonesian MSMEs, many of which have improved their administrative systems and certifications.

From a practical perspective, MSME owners and managers should focus on managing intellectual capital strategically by enhancing employee skills through continuous learning and knowledge-sharing programs, building networks with customers, suppliers, and institutions to create knowledge exchange, strengthening organizational structures through standard operating procedures, certifications, and knowledge systems, and investing in digital tools and platforms that support business operations and data-driven decision-making. By integrating these efforts, MSMEs can convert intangible knowledge assets into tangible performance outcomes. The strategic management of intellectual capital ensures that MSMEs remain competitive, innovative, and resilient in the evolving business landscape.

The Effect of Corporate Social Responsibility on MSME Performance

The findings of this study demonstrated that CSR has a significant and positive effect on the performance of MSMEs in Indonesia. This result indicated that MSMEs that engage in socially responsible practices, such as maintaining ethical behavior, caring for the environment, and contributing to community welfare, achieve higher performance both financially and non-financially. CSR helps

MSMEs strengthen their reputation, build stakeholder trust, and improve their market competitiveness. From the perspective of Stakeholder Theory (Freeman, 1984), CSR serves as a strategic tool for aligning the interests of the organization with those of its stakeholders. In the MSME context, these stakeholders include customers, employees, suppliers, communities, and local governments. By fulfilling social and environmental responsibilities, MSMEs promote goodwill and cooperation, which enhances their operational efficiency and customer loyalty. As a result, CSR contributes not only to a positive public image but also to sustainable business growth.

Empirically, the results show that MSMEs with consistent CSR activities—such as supporting local communities, managing waste responsibly, and ensuring fair employment practices—tend to experience greater customer satisfaction and higher sales growth. These practices enhance brand reputation and help MSMEs make a differentiation in a competitive market. For example, many MSMEs that have implemented eco-friendly initiatives or engaged in community-based marketing have reported strong customer engagement and repeat purchase intentions.

The TBL framework proposed by Elkington (1997) is strongly supported by this study. MSMEs that effectively balance the three dimensions, People, Planet, and Profit, are more likely to achieve sustainable success. The People dimension, reflected in fair wages and employee welfare, enhances motivation and productivity. The Planet dimension, with environmentally conscious operations, improves efficiency and brand trust. The Profit dimension, meanwhile, ensures that social and environmental efforts translate into long-term financial viability.

Furthermore, CSR improves firm performance by building intangible assets such as reputation, trust, and innovation capability (Surroca et al., 2010). In Indonesian MSMEs, CSR initiatives, such as adopting halal certification, ensuring product safety, or implementing environmentally friendly packaging, help businesses gain legitimacy and strengthen customer confidence. This legitimacy becomes a competitive advantage in markets as ethical and safety standards are increasingly valued by consumers. Another important aspect revealed is that CSR enhances employee performance and organizational commitment, which subsequently improves MSME productivity. MSMEs that recognize employee welfare, provide skill development programs, and ensure safe working conditions benefit from higher morale and lower turnover. Employees who feel valued and secure are more willing to contribute ideas and efforts that drive business growth. This supports Carroll's (1999) model of CSR, which positions ethical, legal, and philanthropic responsibilities as essential components of organizational excellence. Moreover, CSR practices foster customer loyalty and broaden access to new markets. As consumer awareness of ethical consumption grows, products from socially responsible MSMEs are preferred. MSMEs that emphasize social value often attract partnerships with corporations. This aligns with the findings of Galbreath (2010) that CSR positively affects market performance and customer retention.

The government's encouragement of responsible business behavior strengthens CSR's impact on MSME performance. Programs such as Sertifikat Halal Gratis (SEHATI) and sustainability-based awards motivate MSMEs to comply with standards and enhance product credibility. These programs expand MSME participation in formal supply chains and export markets. As MSMEs integrate these CSR standards into operations, they become more competitive and financially sustainable. Besides, CSR also enhances long-term resilience. MSMEs that prioritize environmental management and community development are better equipped to withstand external shocks, such as economic crises or regulatory changes. By cultivating stakeholder relationships and maintaining social legitimacy, these MSMEs ensure business continuity and adaptability.

The positive relationship between CSR and performance can also be explained through the Creating Shared Value (CSV) framework proposed by Porter and Kramer (2011). This framework suggests that companies can achieve economic success by addressing social problems relevant to their business. MSMEs that integrate CSR into their core operations, such as sourcing locally, promoting fair trade, or developing eco-innovations, create mutual benefits for both business and society. In this study, such initiatives have been shown to strengthen brand equity and improve business performance. However, the study also reveals that not all MSMEs have fully optimized their CSR practices. Some still perceive CSR as a voluntary or philanthropic activity rather than a strategic management function. This limited understanding can restrict the potential benefits of CSR in improving competitiveness. Therefore, education, mentoring, and policy support are required to help MSME owners view CSR as a strategic investment that improves profitability and social impact.

The present findings are consistent with Wang et al. (2021), Martínez-Conesa et al. (2017), and Tiep et al. (2021) that CSR initiatives support organizational performance by stimulating innovation, strengthening relationships with stakeholders, and improving reputation. They also affirm the empirical evidence from developing economies that CSR is not a cost burden but rather an opportunity to enhance differentiation and market performance. From a managerial perspective, MSME leaders should institutionalize CSR within business strategy by embedding social and environmental goals into organizational missions and policies, developing community-based programs that support the enterprise's products or services, implementing transparent communication and ethical business practices to build stakeholder trust, and collaborating with government and private institutions to access CSR-related incentives and partnerships. By adopting such strategies, MSMEs can transform CSR from compliance-driven activities into a competitive advantage that drives sustainable performance.

The Effect of Innovation on MSME Performance

Innovation is also a determinant variable in enhancing the performance of SMEs in Indonesia. The findings of this study indicate that innovation exerts a significant and positive influence on MSME performance. It enables MSMEs to achieve sustainable growth amid the volatile business environment. Innovation is reflected through several key dimensions: product innovation, process innovation, marketing innovation, and organizational innovation. Among these, product and marketing innovation emerged as the strongest contributors to MSME performance. Product innovation allows MSMEs to introduce new or improved offerings that cater to evolving consumer preferences, while marketing innovation expands market reach and enhances customer engagement through creative communication strategies.

Empirical results reveal that MSMEs engaging in consistent innovation experience higher levels of profitability, sales growth, and customer satisfaction. For instance, MSMEs that develop new product variations or adjust packaging to reflect current trends tend to attract new market segments and increase customer retention. Similarly, digital marketing strategies, such as live selling on platforms like TikTok or Shopee, help MSMEs strengthen their market presence and compete effectively with larger firms. This finding corresponds to that of Schumpeter's (1934) theory of creative destruction, which posits that innovation is the central force driving economic transformation and firm competitiveness. Innovation allows MSMEs to replace outdated products and processes with more efficient and value-creating alternatives. Likewise, Wu, Chang, and Chen (2008) and Wang et al. (2021) found that innovation enhances performance by improving operational efficiency, differentiation, and market responsiveness.

Innovation also strengthens internal capabilities by fostering a culture of learning and adaptability. When MSMEs adopt a continuous innovation mindset, employees are encouraged to engage in problem-solving, experimentation, and idea generation. This cultural shift promotes higher productivity, better quality control, and more efficient use of resources. Furthermore, innovation promotes collaboration among employees and across departments, enabling knowledge sharing and cross-functional creativity.

From a resource-based view (RBV) perspective, innovation represents a dynamic capability that enables firms to reconfigure their resources to adapt to environmental changes (Teece et al., 1997). For MSMEs, this dynamic capability translates into flexibility in product development, responsiveness to customer feedback, and agility in managing production and marketing. The present findings confirm that MSMEs possessing innovative capabilities are better equipped to seize market opportunities and mitigate business risks. Moreover, innovation builds MSME resilience, particularly during external disruptions such as the COVID-19 pandemic or supply chain crises. MSMEs that adopted digital tools, introduced online sales channels, or diversified product portfolios were able to sustain operations and even identify new growth opportunities. This goes in line with that of Ngo and O'Cass (2012) that innovation-oriented firms exhibit superior adaptive performance under uncertain environments.

Beyond economic outcomes, innovation also contributes to social and environmental performance. Many MSMEs in Indonesia have developed innovations in sustainable products, such as eco-friendly packaging, organic ingredients, and waste-reduction processes. These practices not only reduce environmental impact but also enhance brand reputation and attract environmentally conscious consumers. Such innovation-driven sustainability supports the broad objectives of the SDGs. The finding also noted that innovation is not a standalone activity but a strategic mediator linking other organizational resources, such as IC and CSR, to performance. Innovation transforms knowledge, relationships, and ethical practices into tangible results that improve market position and customer

loyalty. MSMEs that successfully integrate these elements demonstrate high operational effectiveness and competitive advantage. This mediating effect is consistent with the work of Hsu and Wang (2012) and Andreeva et al. (2021), who asserted that innovation acts as a bridge between intangible resources and firm outcomes. It provides the mechanism through which intellectual and social assets are converted into financial performance and sustainable growth. In the context of Indonesian MSMEs, innovation serves as the practical expression of these intangible assets, manifested through new business models and technological adoption. Innovation also has a strong connection with market orientation. MSMEs that closely monitor market trends and consumer behavior are more likely to innovate. For example, customer feedback gathered through social media interactions allows MSMEs to identify pain points and rapidly adjust products to meet market needs. This responsiveness improves customer satisfaction and leads to repeat purchases.

However, the study also found challenges faced by MSMEs in sustaining innovation. Limited access to funding, inadequate technological infrastructure, and insufficient R&D investment remain key barriers. Additionally, some MSME owners possess limited managerial knowledge regarding innovation management and commercialization. Addressing these barriers requires government intervention and support through training programs, funding schemes, and partnerships with universities and research institutions.

From a managerial implication perspective, the study suggests that MSME leaders should prioritize the creation of an innovation-friendly environment by allocating resources for continuous R&D and technology upgrades, empowering employees through capacity-building and incentive systems that reward creative ideas, leveraging digital platforms, and establishing partnerships with suppliers, distributors, and knowledge institutions to strengthen innovation ecosystems. Furthermore, the integration of innovation into business strategy ensures long-term sustainability. MSMEs that embed innovation in every operational aspect, from production to marketing, can maintain competitiveness even under resource constraints. Innovation enables MSMEs to move beyond survival toward growth-oriented performance, strengthening their contribution to regional and national economies.

The empirical evidence of this study enriches the theoretical discourse on innovation-performance relationships through the role of innovation in the MSMEs of developing economies. Consistent with previous works, such as Jiménez-Jiménez and Sanz-Valle (2011) and Calantone et al. (2002), this study suggested that innovation is a central pillar of organizational success, which drives financial gains and strategic adaptability. In summary, innovation acts as a strategic catalyst that transforms MSME resources into superior performance outcomes. By embracing innovation, MSMEs can increase productivity and enhance market competitiveness. Innovation is not merely a reaction to external pressures but a proactive mechanism that facilitates MSMEs to shape their future in a rapidly changing environment.

The Mediating Role of Innovation

The mediating role of innovation has been proven to significantly bridge the relationship between IC and MSME performance. IC exerts a significant influence on MSME performance through its mediating role. IC, which consists of relational capital, human capital, structural capital, and technological capital, provides the knowledge base and capabilities necessary to create and implement innovation across MSME operations. Technological capital, which includes the use of automated equipment, machinery, websites, and e-commerce platforms, significantly raises innovation. The adoption of new technologies accelerates production processes, improves efficiency, and enables MSMEs to reach broad markets through online visibility. The establishment of websites and e-commerce platforms increases product exposure, facilitates customer transactions, and enhances customer satisfaction. Additionally, the use of automation in operations reduces production costs and increases efficiency.

Structural capital, which encompasses management systems, business processes, and intangible assets such as technology, facilitates the effective and efficient implementation of innovation. Well-developed management systems and continuous investment in new technologies support innovation in products, processes, and services. It strengthens financial stability and operational performance, providing MSMEs with a competitive edge in markets. Relational capital, reflected in strong relationships with customers, suppliers, and business partners, facilitates understanding of customer needs and preferences and accelerates the innovation process through external collaboration. Close relationships with customers create satisfaction and loyalty, while collaboration with suppliers and partners develops innovative products and services. These networks allow MSMEs to exchange ideas, adapt to changes

more quickly, and access new opportunities. Furthermore, human capital (employees' knowledge, skills, and creativity) could generate innovative ideas. Skilled and creative employees improve processes, products, and services, while investments in training and employee development strengthen the firm's ability to innovate. Business innovation, in turn, improves productivity and operational efficiency.

From the "People" dimension of CSR, which concerns employee and community welfare, CSR initiatives bring social responsibilities toward both workers and local communities. For example, providing skill development training for residents could lead to social innovation. Sourcing raw materials from local producers supports innovation in supply chains and production processes while stimulating the local economy. CSR initiatives that empower employees and communities enhance loyalty, motivation, and productivity. A strong social commitment also improves the company's image in the eyes of customers and the public, boosting reputation and sales.

From the "Planet" dimension, CSR promotes environmental sustainability efforts. For instance, safely disposing of production waste and developing recyclable products and packaging encourage MSMEs to seek innovative solutions in waste management and eco-design. The use of energy-efficient equipment, such as LED lighting, pushes MSMEs to innovate toward energy-efficient and environmentally friendly operations. These innovations boost the company's reputation among environmentally conscious consumers. Furthermore, energy-saving initiatives and effective waste management reduce operational costs and improve efficiency.

From the "Profit" dimension, CSR focuses on improving cost efficiency and resource utilization. Practices such as recycling production waste and using eco-friendly materials promote innovation in production processes and material use. Although the adoption of automation remains relatively low among MSMEs, efforts to implement such technology are likely to stimulate process and resource management innovation. These innovations reduce operational costs and increase efficiency, which positively upgrades financial performance. Initiatives promoting sustainability and efficiency can significantly enhance profitability by lowering costs and improving productivity. Finally, CSR stimulates innovation in environmental management, energy efficiency, production processes, and community relations. CSR initiatives encourage MSMEs to pursue innovative solutions that enhance sustainability and operational efficiency. Innovation driven by CSR increases customer satisfaction, operational efficiency, employee loyalty, and corporate reputation—all of which directly contribute to better operational and financial performance. By leveraging CSR to promote innovation, MSMEs can achieve substantial performance improvements.

This finding supports the work of Martínez-Conesa et al. (2017) that CSR influences firm performance through the mediating role of innovation. In this regard, innovation acts as the transformative mechanism that translates CSR efforts into tangible business outcomes, enabling MSMEs to achieve not only profitability but also social and environmental impact. This study reaffirms that innovation links IC and CSR to MSME performance. MSMEs that effectively cultivate intellectual and social resources to drive innovation are better positioned to achieve sustainable competitiveness, financial growth, and social value creation in the modern business landscape.

The novelty of this study lies in the finding that innovation fully mediates the relationship between IC and CSR toward MSME performance. This full mediation indicates that neither IC nor CSR directly enhances performance unless they are effectively transformed into innovation. Innovation thus serves as the primary channel through which knowledge assets and social responsibility are converted into improved operational and financial outcomes.

MSMEs that hold strong relationships with their stakeholders demonstrate superior innovation capability. Practices such as offering customer discounts, engaging in offline and online marketing, obtaining certifications (Halal, S-PIRT, BPOM, and Intellectual Property Rights), adopting relevant technologies, and conducting social activities such as maintaining environmental cleanliness, recycling production waste, and sourcing raw materials from local producers have collectively stimulated innovation. These initiatives enable MSME owners to innovate within production processes. As a result, employees become more creative and customer satisfaction increases.

Conclusion

This study concludes that IC and CSR significantly influence the performance of MSMEs in Indonesia, both directly and indirectly through innovation. The findings confirm that innovation is a full mediator in the relationship between IC, CSR, and MSME performance, indicating that knowledge-based assets and social responsibility increase business outcomes only when effectively translated into innovative actions. This mechanism suggests that innovation is the key strategic capability that converts intangible resources into tangible competitive advantage and sustainable performance. The four dimensions of IC—human, structural, relational, and technological—provide the foundation for innovation. Human capital stimulates creativity and skills that drive new ideas; structural capital ensures organizational systems and processes that support efficient innovation; relational capital strengthens collaboration and market understanding; and technological capital enables the digital transformation that broadens market reach. Together, these dimensions empower MSMEs to adapt and grow within competitive and rapidly changing environments. Correspondingly, CSR contributes to performance by promoting innovation that aligns business objectives with social and environmental responsibilities. CSR practices motivate MSMEs to explore new technologies, materials, and business models that improve efficiency and sustainability. The integration of CSR into business strategy enhances reputation and customer loyalty but also stimulates creative solutions that generate long-term economic and social value.

The findings enrich the KBV and Stakeholder Theory. Therefore, it is evident that innovation is the connecting mechanism between organizational knowledge, social responsibility, and performance. The study contributes theoretically by establishing a comprehensive model in which innovation completely mediates the effects of IC and CSR. Practically, the results imply that MSME leaders should strengthen innovation capacity through investment in technology, human resource development, and stakeholder collaboration. By aligning CSR initiatives with innovation goals and effectively managing intellectual assets, MSMEs can enhance productivity, profitability, and social impact simultaneously. Government and institutional support that encourages knowledge sharing, digitalization, and sustainable innovation will further reinforce MSME resilience and growth. This research confirms that the synergy between IC, CSR, and innovation is fundamental to achieving high MSME performance. Innovation transforms knowledge and ethical values into sustainable economic and social outcomes

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