




Intellectual capital, green innovation, and financial performance: The mediating role of sustainability

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ABSTRACT

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This research aims to find out how internal resources, intellectual capital, and green innovation in West Java's creative industries can improve small businesses financial performance. Besides, this research also examines the sustainability of small businesses in mediating the effect of intellectual capital and green innovation on financial performance. The research sample consists of 335 respondents who are owners and creative industry workers in West Java, Indonesia. The data were collected using a questionnaire and analyzed using Structural Equation Modeling (SEM). The results indicate that Intellectual Capital (IC) and green innovation improve financial performance and sustainability. This research establishes a mediator role for sustainability in the interaction between intellectual capital, green innovation, and financial success. This study demonstrates the significance of sustainability in helping small businesses achieve high financial performance. This study highlights the significance of integrating sustainability practices inside the small business sector to optimize revenues through the utilization of internal resources, including intellectual capital and green technologies. This study offers practical implications for small businesses in Indonesia, suggesting that sustainability should be implemented to improve financial performance.

Contribution/Originality: This research uses SEM AMOS to demonstrate the indirect influence of intellectual capital and green innovation strategies on the financial performance of small enterprises in Indonesia.

1. INTRODUCTION

Small and medium-sized enterprises (SMEs) can prosper in today's business environment with the support of intellectual capital (Khalique, Hina, Ramayah, & Shaari, 2020). Global competition is driving firms, particularly SMEs, to achieve amazing results. As a result, businesses must identify and manage performance elements in a more effective and efficient manner. Furthermore, Khalique et al. (2020) explained that by understanding their resources and business competencies, small enterprises can improve their performance.

Intellectual capital (IC) is viewed as a factor involved in producing goods and services and adding value for businesses that can provide a competitive advantage and improve SME' performance (Khalique et al., 2020; Xu, Shang, Yu, & Liu, 2019). As such, further understanding is required to examine the relationship between intellectual capital and company performance, particularly the financial performance of small businesses. Previous

studies have conducted research regarding the relationship between IC and financial performance in big companies (Asiaei, Barani, Bontis, & Arabahmadi, 2020; Klimontowicz & Majewska, 2022; Xu & Li, 2022), and there is still a small amount of research conducted in the small business sector (Rokhman & Setiawan, 2023; Wayan, Sriary, & Yuria, 2022). Findings show that IC significantly impacts company performance, both financial and non-financial, both directly and indirectly (Ahmed, Guozhu, Mubarik, Khan, & Khan, 2020; Kengatharan, 2019; Wang, Cai, Liang, Wang, & Xiang, 2021). Rokhman and Setiawan (2023) explained that IC is an accumulation of all intangible assets that small and medium enterprises use to produce goods and services that provide added value to the company. However, several studies have found that IC has no significant effect on company performance (Dženopoljac, Janošević, & Bontis, 2016; Hashim, Osman, & Alhabshi, 2015). To fill this gap, this research offers sustainability as a mediator in the relationship between IC and financial performance. Sustainability is closely related to IC, where knowledge management can drive a company's sustainability (Vale, Miranda, Azevedo, & Tavares, 2022). In addition, sustainability is viewed as one of the factors that can improve financial performance in the long term (Das & Rangarajan, 2020).

Small, medium, and large enterprises experience pressure from the environment, so they focus on green innovation issues. Green innovation helps organizations improve environmental and financial performance (Khan, Anwar, Li, & Khattak, 2021; Kraus, Rehman, & García, 2020; Qi, Jia, & Zou, 2021). However, due to obstacles, small and medium enterprises are still reluctant to adopt green innovation in their companies (Santoro, Ferraris, Giacosa, & Giovando, 2018). Previous research findings have described a significant relationship between green innovation and financial performance (Singh, Del Giudice, Chiappetta Jabbour, Latan, & Sohal, 2022; Xie, Huo, & Zou, 2019; Zheng, Khurram, & Chen, 2022). Green innovation provides companies with market opportunities, corporate image enhancement, and competitive advantages that can increase customer loyalty and company reputation and improve financial performance (Dangelico, Pujari, & Pontrandolfo, 2017; De Burgos-Jiménez, Vázquez-Brust, Plaza-Úbeda, & Dijkshoorn, 2013; Singh et al., 2022). On the other hand, there are findings that companies that implement green innovation do not experience an increase in financial performance compared to companies that do not (Aguilera-Caracuel & Ortiz-De-Mandojana, 2013). In their research, De Azevedo Rezende, Bansi, Alves, and Galina (2019) found no relationship between green innovation and financial performance in the short term, but the relationship can be seen in the coming years (long term). To fill this gap, this research includes sustainability as a mediator in the relationship between green innovation and financial performance. Green innovation contributes to environmental sustainability by making products environmentally friendly (Li et al., 2020), providing added value, and improving financial performance (Singh et al., 2022).

Studies have reviewed sustainability in the SME sector but have not paid attention to its impact on small business financial performance (Bartolacci, Caputo, & Soverchia, 2020). This statement provides an opportunity for this research to deepen the role of sustainability in small businesses, especially in the relationship between intellectual capital, green innovation, and financial performance. Therefore, this study aims to determine the effect of sustainability as a mediator on intellectual capital, green innovation, and the financial performance of small businesses in West Java, Indonesia.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Resources-Based View (RBV) Theory

The RBV theory argues that organizations can achieve sustainable competitive advantage through capabilities or resources that are valued, rare, inimitable, irreplaceable, and non-switchable (Shahla Asadi et al., 2020; Nayak, Bhattacharyya, & Krishnamoorthy, 2023). Based on the RBV perspective, green innovation is an intangible resource that is significant for companies. Green innovation enables organizations to develop and enhance organizational, environmental, and social sustainability and corporate competitive advantage in the long term (Shahla Asadi et al.,

2020). Therefore, the researchers used this theory to build the relationship between intellectual capital, green innovation, sustainability, and financial performance.

2.2. Intellectual Capital and Financial Performance

Intellectual capital (IC) is an intangible resource that, in conjunction with tangible resources, can help companies gain a sustained competitive advantage (Weqar & Haque, 2022). Previous literature has examined the impact of IC on firm performance (Bataineh, Abbadi, Alabood, & Alkurdi, 2022; Odat & Bsoul, 2022; Rokhman & Setiawan, 2023; Torre, Tommasetti, & Maione, 2021; Wayan et al., 2022; Xu & Li, 2022; Yousaf, 2022). Financial performance is the extent to which financial targets have been achieved and how the company is challenged to produce effective results (Daraba, Wirawan, Salam, Faisal, & Wright, 2021). Research conducted by Torre et al. (2021) shows that IC has a positive effect on financial performance. In their research, Xu and Li (2022) explained that IC could improve company performance in the Chinese manufacturing sector. Overall, they explain that profit is influenced by physical capital, human capital, and structural capital. Meanwhile, profitability and productivity are influenced by physical capital, human capital, structural capital, and relational capital. In small and medium enterprises (SMEs), all IC dimensions were found to have a significant positive effect on the growth of SMEs in the service and manufacturing sectors (Sardo & Serrasqueiro, 2019). Based on these findings, we propose a hypothesis as follows:

H₁: Intellectual capital has a positive effect on the financial performance of small businesses.

2.3. Green Innovation and Financial Performance

Green innovation is defined as introducing new, improved products, services, processes, organizational changes, or marketing solutions that significantly reduce the use of natural resources and the emission of toxic substances throughout their life cycle (Miedzinski, Doranova, Castel, Jones, Zoboli, & Charter, 2013; Skordoulis et al., 2022). Innovation is regarded as one of the factors affecting competitiveness and profitability (Wang, Li, Li, & Wang, 2021; Zheng et al., 2022). Research on the relationship between green innovation and financial performance has been conducted in big companies (Chouaibi, Chouaibi, & Rossi, 2022; Duque-Grisales, Aguilera-Caracuel, Guerrero-Villegas, & García-Sánchez, 2020; Zheng et al., 2022), while only a few have been conducted in the SME sector (Khan, Arif, Sahar, Ali, & Abbasi, 2022; Zheng et al., 2022). Companies that believe in green innovation tend to use recycled materials for product development because recycled materials are inexpensive and environmentally friendly (Singh et al., 2022). Thus, it can help organizations reduce the negative impact of high operating costs on profitability and the environment (Zhang & Wang, 2014). Therefore, based on the previous studies, we develop the following hypotheses:

H₂: Green Innovation has a positive effect on the financial performance of small businesses.

2.4. Sustainability and Financial Performance

Small and medium enterprises, in general, regard sustainability as a means to balance social, economic, and environmental demands (Das & Rangarajan, 2020). Sustainability is defined as the intersection of three dimensions: economy, environment, and society (Asadi, Hussin, & Dahlan, 2017). Previous research has investigated the relationship between sustainability and overall company performance. However, most research was conducted in large enterprises or SMEs in developed countries (Abdi, Li, & Càmara-Turull, 2022; Folger-Laronde, Pashang, Feor, & ElAlfy, 2022; Okafor, Adeleye, & Adusei, 2021). Meanwhile, research on sustainability in SMEs in developing countries has yet to be widely conducted (Das & Rangarajan, 2020). Several studies on sustainability in the SME sector focus on different issues and ignore the impact of company initiatives on financial performance (Bartolacci et al., 2020). This statement is supported by Yun, Zhao, Park, and Shi (2020), who investigated open

innovation and open business models on Alibaba. The research explains how Alibaba can grow from an SME to a large company through innovations to maintain corporate sustainability.

Previous research (Eccles, Ioannou, & Serafeim, 2014) proved that companies with a high level of sustainability are significantly superior in the long term compared to similar companies. Similar studies have also proven a positive relationship between sustainability and financial performance. Das and Rangarajan (2020) researched 200 Indian SMEs to look at collaborative synergies and government policy initiatives that impact the sustainability performance of small and medium enterprises. The research found that improving sustainability performance can encourage sustainable business growth. These results indicate that the sustainability performance of SMEs has a positive effect on company growth. Thus, we propose the next hypothesis as follows:

H₅: Sustainability has a positive effect on the financial performance of small businesses.

2.5. Intellectual Capital and Sustainability

IC is known to promote companies based on sustainable and smart development, which align with the Sustainable Development Goals (SDGs) (Alvino, Di Vaio, Hassan, & Palladino, 2021). Research shows that the development of the potential of IC is related to the concept of sustainable long-term corporate value. IC, combined with other elements of innovation, can improve the process of delivering information, which will positively affect environmental and social performance (Vale et al., 2022). IC is one of the keys to promoting sustainability, which is a combination of various issues related to social, cultural, economic, and environmental well-being (Silva & Ferreira, 2018; Tapia-Fonllem, Fraijo-Sing, Corral-Verdugo, & Ortiz Valdez, 2017). Previous studies have also proven a positive relationship between IC and sustainability (De Matos, Leitão, & Alves, 2020; Gross-Gołacka, Kusterka-Jefmanska, & Jefmanski, 2020; Vale et al., 2022; Yong, Yusliza, Ramayah, Farooq, & Tanveer, 2022). Previous studies (Yong et al., 2022) revealed that relational capital, part of IC, can improve sustainability (economic, environmental, and social performance). Other studies have also found a positive relationship between IC and sustainability development (Gross-Gołacka et al., 2020). Their research explains that there are different levels of influence between IC dimensions and sustainability in SMEs in Poland. Thus, we propose the hypothesis as follows:

H₆: Intellectual capital has a positive effect on the sustainability of small businesses.

2.6. Green Innovation and Sustainability

Green innovation is not only about improving the environment but also extends to the development of processes, products, services, organizations, technology, and marketing to achieve environmental benefits by reducing the negative environmental impacts of tourism activities (Shahla Asadi et al., 2020; Oltra & Saint, 2009). Studies have tried to analyze the relationship between green innovation and sustainability (Shahla Asadi et al., 2020; Elzek, Gaafar, & Abdelsamie, 2021; Li et al., 2020).

Previous research conducted by Li et al. (2020) aimed to analyze green innovation in the business sustainability of the energy-intensive industrial sector in China. Their findings show that green innovation has a positive influence on sustainability. Ullah, Ahmad, Rehman, and Fawad (2021) researched green innovation and sustainability in the SME sector in Pakistan. Their research revealed that green innovation positively affects Sustainable Development Goals (SDGs), community development, and environmental activities. Therefore, based on previous studies, we develop a hypothesis as follows:

H₇: Green innovation has a positive effect on the sustainability of small businesses

2.7. Intellectual Capital, Green Innovation, Sustainability, and Financial Performance

Intellectual capital in the SME context has received more attention from researchers because of its role in the financial performance of SMEs. Previous studies have found that intellectual capital significantly affects financial performance (Sardo & Serrasqueiro, 2019; Torre et al., 2021; Xu & Li, 2022). The better the intellectual capital the

company has, the higher the opportunity to improve financial performance (Yousaf, 2022). IC is known to encourage the development of social and environmental initiatives, which ultimately contribute to SME sustainability and financial performance (Khan et al., 2021). Companies that maximize the role of IC will actively develop and carry out environmentally friendly activities effectively, indirectly increasing their competitive advantage and business performance (Khan et al., 2021; Wayan et al., 2022). Given that previous research has discovered an indirect association between intellectual capital and financial performance (Kengatharan, 2019; Wang et al., 2021), this research proposes sustainability as a mediator. Previous research has demonstrated that intellectual capital has a considerable impact on sustainability (Gross-Gołacka et al., 2020; Vale et al., 2022; Yong et al., 2022). Thus, we propose the following hypothesis:

H₁: Sustainability mediates the relationship between intellectual capital and financial performance.

Previous research has revealed that green innovation contributes to business sustainability as it positively affects a company's financial, social, and environmental outcomes (Aguilera-Caracuel & Ortiz-De-Mandojana, 2013). This type of innovation incorporates technological improvements that save energy, prevent pollution, or enable the recycling of waste that can impact a company's sustainability (Lin, Cheah, Azali, Ho, & Yip, 2019). Literature reveals an indirect relationship between green innovation and financial performance (Hsu, Quang-Thanh, Chien, Li, & Mohsin, 2021). Well-implemented green innovation is a strategic step that has been proven to increase sustainability (Shahla Asadi et al., 2020; Elzek et al., 2021; Li et al., 2020), which can then improve financial performance (Das & Rangarajan, 2020; Yun et al., 2020). Thus, we propose sustainability as a variable that mediates the relationship between green innovation and financial performance. The final hypothesis that we propose is as follows:

H₂: Sustainability mediates the relationship between green innovation and financial performance.

Based on the literature, theoretical review, and developed hypotheses, we propose the research model shown in Figure 1.

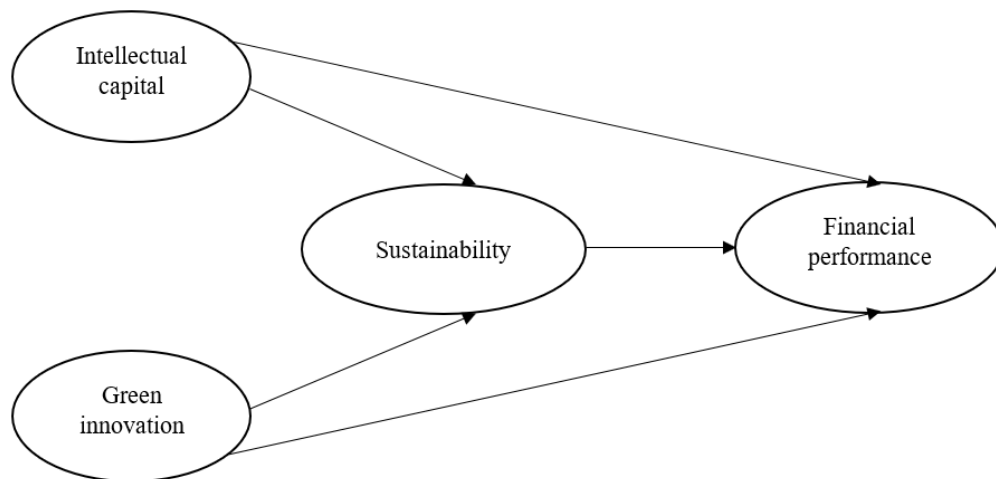


Figure 1. Proposed conceptual framework.

3. METHODOLOGY

3.1. Sample and Collection

The sample for this research is the owners and workers of small businesses in the creative industry category in West Java. West Java was chosen because West Java's creative economy is the third largest contributor to *gross domestic product* (GDP) in Indonesia after Yogyakarta and Bali. However, more research on West Java's creative industries still needs to be done. Because of its rapid growth and need to offer something extra or stand out from the competition, this sector was selected. Most creative economy businesses in West Java come from the handicraft

sector, which requires business innovations. As a result, this research argues that it is crucial to assess intellectual capital, green innovation, sustainability, and financial performance in West Java's creative industries.

Data was collected through online questionnaires by sending a Google Forms link via private message to prospective respondents who are owners and workers in the creative industries in West Java. A total of 350 questionnaires were sent, and 335 responses were returned during the data collection period from October 2022 to January 2023. The percentage of returned questionnaires was 95.71%. The responses obtained are then used for data processing.

3.2. Variable Definition and Measurement

The questionnaire was given via Google Forms, presented in Indonesian, and has undergone a sentence adjustment process to fit the research context. In most cases, small businesses are private or small unregistered public companies, so researchers capture the financial performance of small businesses using respondents' perceptions of financial parameters selected on a five- or seven-point Likert scale that can be considered significant financial performance indicators (Das & Rangarajan, 2020; Tang & Tang, 2016). This research uses 4 statement items (Lee, 2021; Tumba, Onodugo, Akpan, & Babarinde, 2022) to measure financial performance as the dependent variable with a five-point Likert scale. Examples of the items are "In terms of sales, my financial performance is much better than competitors" and "In terms of return on investment, my financial performance is much better than competitors."

The independent variables of this research are intellectual capital, green innovation, and sustainability. Intellectual capital in this study was developed from previous research (Aljuboori, Singh, Haddad, Al-Ramahi, & Ali, 2021) consisting of 5 statement items, for example, "Our workers are highly skilled and experienced" and "Our company responds to changes very quickly." Meanwhile, to describe green innovation, we develop the items from previous research (Jun, Ali, Bhutto, Hussain, & Khan, 2021), which consist of 4 statements, for example, "We select materials that consume less energy in product development" and "We evaluate that products are easy to reuse, recycle, and biodegrade in product development." To measure sustainability, we use 5 statement items developed from previous research (Cantele & Zardini, 2018), for example, "We implement a production system to reduce harmful emissions" and "We adopt a production process to reduce and recycle waste." All statement items are measured using a five-point Likert scale, which describes disagreement at point 1.

3.3. Data Analysis Method

This study uses structural equation modeling (SEM) to test the research hypothesis. Before testing the hypothesis, we conducted validity and reliability tests to see whether the research instrument data met the model testing requirements (Yudiatmaja et al., 2022). Validity and reliability tests are assessed based on the criteria that the significant p-value must be less than 0.05 (Hair, Ringle, & Sarstedt, 2013). The reliability test is conducted and assessed based on a Cronbach's alpha value of more than 0.07. Hypothesis testing is conducted using SEM analysis. The data is then analyzed for viability of the research model using a variety of measurement indices, including chi-square/degrees of freedom (χ^2/df), fit index (GFI), adjusted fit index (AGFI), Tucker Lewis index (TLI), and root-mean-square error of approximation (RMSEA). The Baron and Kenny (1986) technique was used to test mediating variables.

4. RESULTS

4.1. Characteristics of Respondents

This research was conducted in West Java, Indonesia. The data obtained contained 335 responses. Most respondents were male (51.64%), with the age of the majority of respondents ranging from 31 to 40 years (40.00%). More than half of the respondents have educational levels equivalent to high school and undergraduate (54.03%),

with around 5 to 10 years of business experience (68.36%). The majority of businesses owned by respondents are aged between 5 to 10 years (61.49%) and in the handicraft sector (51.64%). Respondent characteristics are presented in more detail in Table 1.

Table 1. Demographic profile of respondents.

Demographics	Categories	Frequency	Percentage
Sex	Male	173	51.64
	Female	163	48.66
Age	< 20 years old	15	4.48
	20 - 30 years old	105	31.34
	31 - 40 years old	134	40.00
	41 - 50 years old	62	18.51
	> 50 years old	19	5.67
Level of education	Primary school	56	16.72
	Junior high school	87	25.97
	Senior high school	103	30.75
	Undergraduate	78	23.28
	Postgraduate	11	3.28
Business experience	< 5 years	49	14.63
	5 - 10 years	229	68.36
	> 10 years	57	17.01
Firm age	< 5 years	80	23.88
	5 - 10 years	206	61.49
	> 10 years	49	14.63
Business sector	Fashion	98	29.25
	Handicraft	173	51.64
	Others	64	19.10

4.2. Measurement Model Assessment

Confirmatory factor analysis (CFA) is important to ensure the validity and reliability of data using convergent validity, discriminant validity, and internal consistency. The average variance extracted (AVE) and standardized factor loadings (SFL) for each item were used to check for convergent validity. Based on the CFA results in Table 2, it can be seen that the AVE value is above 0.5 and the construct reliability (CR) value is above 0.7 for each variable, as suggested by Hair, Black, Babin, and Anderson (2010).

Table 2. Reliability and validity analysis.

Construct	Items	SFL	Cronbach's alpha	CR	AVE
Intellectual capital	IC1	0.737	0.900	0.887	0.612
	IC2	0.748			
	IC3	0.765			
	IC4	0.823			
	IC5	0.835			
Green innovation	GI1	0.932	0.909	0.940	0.757
	GI2	0.893			
	GI3	0.778			
	GI4	0.782			
Sustainability	SS1	0.836	0.920	0.918	0.691
	SS2	0.846			
	SS3	0.777			
	SS4	0.871			
	SS5	0.822			
Financial performance	FP1	0.918	0.909	0.899	0.693
	FP2	0.918			
	FP3	0.754			
	FP4	0.720			

The developed model was then tested for applicability using numerous measurement parameters, including chi-square/degrees of freedom (χ^2/df), *Tucker Lewis Index* (TLI), and *root-mean-square error of approximation* (RMSEA). Based on Table 3, it is possible to infer that this research model meets the goodness-of-fit criteria.

Table 3. Goodness of fit measures of the full model.

Parameter	Cut-off value	Result	Interpretation
χ^2/df	< 3.000	1.851	Good fit
GFI	≥ 0.900	0.930	Good fit
NFI	≥ 0.900	0.952	Good fit
TLI	≥ 0.900	0.972	Good fit
RMSEA	≤ 0.080	0.050	Good fit

4.3. Structural Model Assessment

The structural model in this study was tested using SEM with the maximum likelihood prediction technique. Based on the goodness of fit parameters presented in Table 3, it shows a satisfactory fit index. Furthermore, the research hypothesis was calculated using SEM with 5,000 bootstrapped samples and a 95% confidence interval (CI). The hypothesis testing results are presented in Table 4.

Table 4. Hypotheses testing.

Hypotheses	Path	Coefficient	p-value	Result
H1	IC \rightarrow FP	0.335	***	Supported
H2	GI \rightarrow FP	0.151	***	Supported
H3	SS \rightarrow FP	0.408	***	Supported
H4	IC \rightarrow SS	0.729	***	Supported
H5	GI \rightarrow SS	0.130	***	Supported

Note: *** Significance at the level 0.001 ($p < 0.001$); IC, intellectual capital; GI, green innovation; SS, sustainability; FP, financial performance.

Table 4 shows the results of testing the direct influence of intellectual capital, green innovation, and sustainability on small business financial performance. Intellectual capital has a positive and significant effect on financial performance ($\beta = 0.335, p < 0.001$), so the first hypothesis of this study is accepted. Green innovation is known to have a positive and significant effect on financial performance ($\beta = 0.151, p < 0.001$), indicating that H2 is also accepted.

Sustainability has a positive and significant effect on financial performance ($\beta = 0.408, p < 0.001$), which indicates that H3 is accepted. The test result shows that intellectual capital has a positive and significant effect on sustainability ($\beta = 0.729, p < 0.001$), indicating that H4 is accepted. Meanwhile, green innovation is known to have a positive and significant effect on sustainability ($\beta = 0.130, p < 0.001$), which indicates that H5 is accepted.

Table 5 presents the results of testing the indirect influence of intellectual capital and green innovation on small business financial performance. Furthermore, the results show that the relationship between financial literacy and financial performance is mediated by innovative behaviour ($\beta = 0.297, p < 0.001$), thus indicating that H6 is accepted. It can be seen that the relationship between green innovation and financial performance is mediated by sustainability ($\beta = 0.053, p < 0.05$), thus indicating that H7 is accepted.

Table 5. Hypotheses testing of mediator.

Hypothesis	Path	Coefficient	p value	Result
H6	IC \rightarrow SS \rightarrow FP	0.297	***	Supported
H7	GI \rightarrow SS \rightarrow FP	0.053	0.018	Supported

Note: *** Significance at the level 0.001 ($p < 0.001$); significance at the level 0.05 ($p < 0.05$); IC, intellectual capital; GI, green innovation; SS, sustainability; FP, financial performance.

5. DISCUSSION

This study aims to examine intellectual capital and activities related to green innovation carried out by small businesses and their relationship with financial performance. On the other hand, this research also explores the mediating role of sustainability in this relationship. There are seven interesting research findings to be discussed. The first finding implies that small enterprises with high intellectual capital resources will improve their financial performance. West Java's creative industry efficiently employs the IC to boost business earnings. This finding is consistent with the RBV theory, which argues that IC helps organizations improve their performance and gain a durable competitive advantage (Kianto, Andreeva, & Pavlov, 2013; Xu & Li, 2022).

According to the second study, small enterprises' innovative activities have a greater impact on their financial performance, the greener they are. According to the RBV theory, companies must have strategic resources that are precious, uncommon, incomparable, and irreplaceable (Shahla Asadi et al., 2020). This finding is consistent with those of Aguilera-Caracuel and Ortiz-De-Mandojana (2013) and Singh et al. (2022). The third study demonstrates that small and medium-sized businesses that practice sustainability have higher financial performance. This finding is consistent with prior studies in the SME context, which found that SMEs with sustainability integrated into the company's innovation process improved their financial performance (Bos-Brouwers, 2010; Das & Rangarajan, 2020). Furthermore, it was discovered that management methods that are socially accountable to employees, customers, and society outperform other practices (Bartolacci et al., 2020; Hammann, Habisch, & Pechlaner, 2009).

The fourth result shows that small businesses with high intellectual capital can increase their business sustainability in the long term. Previous research findings indicate that companies need to encourage employee knowledge regarding waste and residue reduction and continuously look for solutions that impact sustainability performance (Vale et al., 2022). On the other hand, efficient systems and procedures, good environmental management policies, and well-established organizational structures enable organizations to implement and achieve better sustainable performance (Yusliza et al., 2020). The fifth study demonstrates that as small enterprises enhance their green innovation efforts, their sustainability improves. This conclusion supports a prior study that found green innovation to be a strong predictor of sustainability (Awan, Sroufe, & Kraslawski, 2019; Ullah et al., 2021). Awan et al. (2019) further stated that green innovation aids businesses in implementing methods that promote environmental and community sustainability.

Our sixth finding confirms the mediating role of sustainability in the relationship between intellectual capital and small business financial performance. Small businesses with high intellectual capital resources will benefit, ultimately improving their financial performance. It supports the view that IC has an indirect relationship with financial performance, which allows several factors to mediate this relationship (Hsu & Wang, 2012; Wang et al., 2021).

In particular, research proves that IC indirectly contributes to financial performance through increased sustainability. Companies that maximize IC will be able to carry out activities that strengthen the company's sustainability (De Matos et al., 2020; Vale et al., 2022) and ultimately contribute to the company's financial performance (Khan et al., 2021; Yusliza et al., 2020).

The seventh finding proves that sustainability mediates the relationship between green innovation and financial performance. This finding indicates a strong relationship between the contribution of green innovation to sustainability and the financial performance of small businesses. Green innovation carried out by creative industry players in West Java, especially in the handicraft sector, focuses on using environmentally friendly raw materials as a selling point to increase their sales. This result reinforces previous findings (Elzek et al., 2021) that green innovation has a significant positive effect on company sustainability, ultimately increasing company profits (Das & Rangarajan, 2020).

6. IMPLICATION, CONCLUSIONS, AND LIMITATION

6.1. Implication

This research's findings show several implications from theoretical and practical perspectives. This study strengthens the resource-based view (RBV) theory by incorporating sustainability in the small business context into the research design. Viewed from a practical perspective, this research shows that small business owners are encouraged to enrich their intellectual capital to support business sustainability, which in turn makes a positive contribution to their business. Furthermore, green innovation helps businesses gain a sustained competitive advantage that would enable them to generate profits.

6.2. Conclusion

The results of this study have provided evidence that intellectual capital and green innovation are positively related to financial performance. This research also supports sustainability as a mediator of the relationship between intellectual capital, green innovation, and financial performance. This study provides theoretical and practical contributions to the development of small business sustainability. Ultimately, small business owners must understand that sustainability is needed to utilize intellectual capital and green innovation.

6.3. Limitation

The collection of cross-sectional data is one of the limitations of this study, so there is a chance that the causal conclusions derived between the constructs under research will be inaccurate (Clugston, 2000). Based on this limitation, further research can be conducted on longitudinal research. The following limitation is the mediating variable used, namely sustainability. Further research can investigate other variables that may mediate the relationship between intellectual capital, green innovation, and financial performance.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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