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Online and offline social capital for better social and business performance: The mediating role of digital innovation

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Abstract

Aim/purpose – This study aims to analyze the effect of offline and online social capital on social performance and business performance in SMEs, specifically, the mediating effect of digital innovation on the relationship between offline and online social capital on social performance and business performance in SMEs.

Design/methodology/approach – This research is a quantitative study of the population of fashion SMEs fostered by SOEs in West Java, Indonesia. The sampling technique was selected using a purposive sampling method with the criteria of SMEs: (1) have been fostered for at least 3 years; (2) have adopted social media for business purposes; and (3) are creative SMEs that focus on fashion. The sample in this study was 258 SMEs in West Java Province located in Cirebon and Bandung. Furthermore, the collected data were analyzed using a structural equation model with SmartPLS.

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Findings – The results of the analysis show that offline social capital has a positive effect on digital innovation, social performance, and SMEs' business performance. Furthermore, online social capital has a positive effect on digital innovation, social performance and business performance of SMEs. This study also found that digital innovation can mediate the effect of offline and online social capital on SMEs' social performance and business performance.

Research implications/limitations – This study analyzes SMEs' performance in the fashion sector and under government guidance. The findings recommend that SMEs increase offline and online social capital when conducting business. Furthermore, SMEs are also expected to be able to carry out digital innovation continuously.

Originality/value/contribution – This study describes online and offline social capital in SMEs in the fashion sector and under government guidance.

Keywords: business performance, digital innovation, offline social capital, online social capital, social performance.

JEL Classification: M3, O1, O3.

1. Introduction

Small and medium enterprises (SMEs) face various challenges in maintaining their performance and sustainability, and one of the key issues is limited access to capital (Charaia et al., 2021; Rao et al., 2023). The capital is in the financial context where SME funding is still minimal, requiring government or banks' assistance (Lin et al., 2020; Suharli et al., 2024). However, there are other solutions for SMEs to sustain and maintain their performance or obtain funding from other sources besides the government, namely social capital (Abdulkadir et al., 2022; Yuliarmi et al., 2021). Social capital refers to networks, relationships, and social norms that encourage cooperation and mutual trust among individuals and groups (Abdulkadir et al., 2022). Social capital is a valuable asset for SMEs that can help them overcome various business challenges, access critical resources, discover new opportunities, and improve their competitiveness.

Along with the development of technology, social capital is now divided into two types: offline and online. Both online and offline forms of social capital are essential for SMEs. Online social capital allows SMEs to reach a broader market and access information and resources efficiently (Boohene et al., 2020; Lee & Hallak, 2020). On the one hand, offline social capital helps build strong relationships and gain deeper trust within the local community. By optimally utilizing both types of social capital, SMEs can improve their competitiveness and business growth (Lee & Hallak, 2020; Zhao et al., 2023a). With extensive relationships and connections, SMEs can encourage social performance. By utilizing

social capital effectively, SMEs can more successfully fulfill their social responsibilities and positively impact the communities and environment around them (Tran & Adomako, 2021). On the other hand, social capital plays an important role in improving the social performance of SMEs by building trust, increasing access to resources, encouraging collaboration, engaging communities, developing internal capacity, and facilitating social innovation (Khan et al., 2021).

Not limited to improving social performance, social capital can also improve business performance (Olamide & Ogbechie, 2021; Yani et al., 2020; Zhang et al., 2020). Social networks provide access to information and knowledge to help SMEs make business decisions (Olamide & Ogbechie, 2021). SMEs can obtain up-to-date information on market trends, consumer preferences, and industry developments through social networks (Yani et al., 2020). However, interactions with other business owners, mentors, and industry professionals can help SMEs adopt best business practices and strategies that have proven effective (Zhang et al., 2020).

Yani et al. (2020) emphasized that social capital is one of the foundations and important capital in improving SME business performance. Likewise, Olamide and Ogbechie (2021) did more specific research on women who run SMEs and found that in this context, social capital is one of the main factors in improving SME business performance. Purwati et al. (2021) added that the role of social capital on SME business performance must be accompanied by innovation and digitalization. Social networks provide a platform for sharing ideas and getting new inspiration that can be applied in business.

In this era, businesses can survive if they continue to innovate (Wang & Li, 2023; Zhao et al., 2023b). Some literature found that innovation can also be enhanced through social capital (Malik et al., 2024; Ji et al., 2022). Strong social networks provide access to knowledge and skills necessary for digital innovation (Malik et al., 2024). SMEs can learn from others' experiences and expertise in digital technologies through online communities, forums, and discussion groups. Social networks can also help SMEs access training, webinars, and workshops that teach digital skills and the latest technology trends (Ji et al., 2022).

Existing research highlights the positive relationship between social capital and performance (Alghababsheh & Galleary, 2021; Nuryanto et al., 2020; Tran & Adomako, 2021). many studies have not differentiated between offline and online social capital's distinct effects on social and business performance (Boohene et al., 2020; Lee & Hallak, 2020; Zhao et al., 2023). However, some literature rarely examines social and business performance separately. Additionally,

there is limited literature on the role of digital innovation in mediating these relationships. Digital innovation, which involves the integration of digital technologies into products, services, and processes, is becoming increasingly essential for SMEs to remain competitive (Ji et al., 2022; Malik et al., 2024). Despite the recognized importance of digital transformation, few studies have explored how offline and online social capital contribute to digital innovation and, in turn, influence social and business performance in SMEs.

This study seeks to address these gaps by investigating the effects of offline and online social capital on the social and business performance of SMEs, with a focus on the mediating role of digital innovation. Specifically, the study will answer the following research questions:

1. How does offline social capital affect the social performance and business performance of SMEs?
2. How does online social capital affect the social performance and business performance of SMEs?
3. To what extent does digital innovation mediate the relationship between offline social capital and the performance of SMEs?
4. To what extent does digital innovation mediate the relationship between online social capital and the performance of SMEs?

This research aims to provide a comprehensive analysis of how offline and online social capital can contribute to the success and sustainability of SMEs, particularly in the context of digital innovation. By examining the dual impact of social capital and the mediating role of innovation, this study offers valuable insights for SME owners, policymakers, and researchers seeking to improve business practices in the digital era.

This paper is structured as follows: The introduction provides an overview of the research background, objectives, and significance. The subsequent section reviews relevant literature on social capital, digital innovation, and their relationships with social and business performance. The methodology section describes the research design through a quantitative approach, sampling criteria, and data analysis techniques using structural equation modeling with partial least squares. This is followed by the results and discussion sections, which present the key findings and their implications. Finally, the conclusion summarizes the main contributions, limitations, and recommendations for future research.

2. Literature review

2.1. Social capital theory

Social capital theory serves as the foundation for this study by providing a lens through which the effects of online and offline social networks on SME performance can be analyzed. Initially conceptualized by Bourdieu (1986) and later expanded by Coleman (1988) and Putnam (1995), social capital refers to the resources embedded within social networks, relationships, and norms that facilitate collective action and mutual benefit. It emphasizes the importance of trust, reciprocity, and shared values in fostering collaboration and resource exchange.

In the context of SMEs, social capital is a critical enabler of both social and business performance. Offline social capital is rooted in traditional, face-to-face networks, such as community ties, professional associations, and familial connections. These networks provide SMEs with localized resources, credibility, and trust, which are essential for business development and stakeholder engagement (He et al., 2020; Johan et al., 2022).

Online social capital, however, is derived from digital platforms, including social media networks, forums, and digital communities. With technology's increasing importance in business operations, online social capital has become a valuable resource for SMEs, enabling them to access a broader range of knowledge, markets, and collaborative opportunities beyond geographical boundaries (Fisher & Reuber, 2011; Lee & Hallak, 2020).

The dual nature of social capital – offline and online – is particularly significant in this study as it highlights how SMEs leverage traditional and digital resources to achieve performance outcomes. While offline social capital fosters trust and cooperation, online social capital enables the rapid dissemination of information and the formation of diverse, non-local connections, which are crucial for innovation and growth (Kasavana et al., 2010; Zhao et al., 2023a).

This study also adopts social capital theory to examine the role of digital innovation as a mediating mechanism. Social capital facilitates the exchange of knowledge and collaboration, enabling SMEs to adopt innovative digital practices (Hamburg, 2020; Nambisan et al., 2017). By integrating digital innovation into their operations, SMEs can enhance both their social and business performance. Thus, this theory provides a theoretical basis for understanding how offline and online social capital influence SME performance through the mediating role of digital innovation.

2.2. Social capital and social performance

Social capital is owned by an individual or organization in the form of a network, good relationship, or social image that can support organizational performance or individual achievement (Tran & Adomako, 2021). Social capital is particularly valuable for SMEs as it supports their efforts to build trust, strengthen community engagement, and fulfill social responsibilities. In this context, social performance refers to how businesses positively contribute to their communities, promote social welfare, and uphold social responsibilities. Through strong social networks, SMEs can build customer trust, foster loyalty, and enhance their reputation as socially responsible organizations (Nuryanto et al., 2020; Tran & Adomako, 2021).

Along with technological developments, social capital is divided into two types, namely offline social capital and online social capital. Both forms of social capital allow SMEs to access resources, foster collaboration, and respond effectively to external demands. While offline social capital fosters deep trust and relationships within local communities (Boohene et al., 2020; Lee & Hallak, 2020), online social capital provides SMEs with opportunities to expand their networks and leverage digital platforms for growth (Lee & Hallak, 2020; Zhao et al., 2023a). By effectively utilizing these dimensions, SMEs can improve their social performance and contribute more meaningfully to their stakeholders (Zhao et al., 2023b).

Empirical studies affirm the positive link between social capital and social performance, highlighting how trust, resource-sharing, and collaboration contribute to SMEs' success in addressing societal and community needs (Alghababshah & Gallear, 2021; Nuryanto et al., 2020; Tran & Adomako, 2021). Moreover, social capital enables SMEs to innovate socially and economically, ensuring they remain relevant and impactful in their communities (Tran & Adomako, 2021). In addition, social capital plays an important role in improving the social performance of SMEs by building trust, increasing access to resources, encouraging collaboration, engaging communities, developing internal capacity, and facilitating social innovation (Khan et al., 2021).

Despite the extensive research on social capital, recent studies have not sufficiently examined its dual forms – offline and online – in the context of SMEs. Existing works such as Wang et al. (2022) focus on larger corporations or specific outcomes such as CSR activities. Meanwhile, Saxton and Guo (2020) only analyzed online social capital in organizations without analyzing offline social

capital. This study builds upon social capital theory to explore the impact of social capital on SMEs' social performance. Therefore, this study seeks to fill the research gap and provide novelty by analyzing SMEs' online and offline social capital. Based on these foundations, the study proposes the following hypotheses:

H1: Offline social capital has a positive effect on social performance.

H2: Online social capital has a positive effect on social performance.

2.3. Social capital and business performance

Social capital theory suggests that social networks, trust, and relationships provide access to resources and opportunities that drive organizational and individual success (Bourdieu, 1986; Putnam, 1993). For SMEs, social capital plays a critical role in enhancing business performance by facilitating the acquisition of market knowledge, fostering innovation, and improving relationships with stakeholders (Olamide & Ogbechie, 2021; Yani et al., 2020; Zhang et al., 2020). Social networks enable SMEs to access vital information and insights, such as market trends, customer preferences, and industry developments, which are crucial for effective decision-making (Olamide & Ogbechie, 2021). By building relationships with other business owners, mentors, and professionals, SMEs can adopt best practices and proven strategies that contribute to better business outcomes (Zhang et al., 2020). Social capital also provides platforms for sharing ideas, exchanging experiences, and gaining inspiration, which can drive innovation and adaptability, especially in the face of dynamic market changes (Purwati et al., 2021).

Recent studies provide further insights into the dual forms of social capital. For instance, Lee and Hallak (2020) found that both online and offline social capital positively influence tourism SMEs' performance in New Zealand, with online social capital having a slightly stronger impact. Similarly, Silva et al. (2020) explored the role of online and offline social capital in entrepreneurial ventures, while Heidari et al. (2023) examined their effects on individual performance. However, there remains a gap in research addressing the combined and distinct roles of online and offline social capital in SMEs, particularly in the Indonesian context.

This research seeks to provide novelty by analyzing online and offline social capital in SMEs in Indonesia and specifically analyzing its effect on SME business performance. It also seeks to provide a nuanced understanding of the

mechanisms through which social capital contributes to SME growth and competitive advantage. So, the hypothesis is formulated as follows:

H3: Offline social capital has a positive effect on business performance.

H4: Online social capital has a positive effect on business performance.

2.4. Social capital and digital innovation

Digital innovation refers to adopting and applying digital technologies to improve business processes, products, services, and customer experiences (Ramdani et al., 2022). It encompasses various activities, such as digital marketing, supply chain management, financial transactions, and the use of social media for customer engagement (Shee et al., 2023; Wang, 2021). In the SME context, digital innovation is essential for enhancing competitiveness, expanding market reach, and achieving operational efficiency. It allows SMEs to respond to market demands, take advantage of emerging opportunities, and position themselves in an increasingly digital economy (Hund et al., 2021; Zhao et al., 2023b).

However, implementing digital innovation poses unique challenges for SMEs, including limited financial resources, knowledge, and expertise (Shee et al., 2023; Ramdani et al., 2022). Overcoming these barriers often requires external support, which can be facilitated through social capital. As explained by social capital theory, social capital provides access to networks, trust, and cooperative relationships that enable SMEs to acquire the resources and skills necessary for digital innovation (Yao & Yang, 2022). By leveraging social capital, SMEs can form partnerships with private sector actors, government programs, and other organizations that provide training, funding, and technological support.

Empirical studies highlight the role of social capital in driving innovation, mainly digital innovation. For example, Malik et al. (2024) and Ji et al. (2022) found that strong social networks provide access to the knowledge, expertise, and technological resources required for digital transformation. Through online platforms, communities, and discussion forums, SMEs can exchange ideas, learn from peers, and participate in training programs that enhance digital capabilities (Ji et al., 2022). Furthermore, social networks reduce the risk of failure in digital innovation by fostering trust, collaboration, and mutual support among stakeholders (Games et al., 2023).

Research by Jafari and Moharrami (2019) conceptualized social capital in digital contexts, highlighting the critical role of online social capital in enabling businesses to innovate digitally. Similarly, Yao and Yang (2022) emphasized

that offline social capital, including community engagement and local partnerships, creates opportunities for SMEs to integrate digital technologies into their operations. Despite these findings, there remains limited empirical research analyzing the distinctions between online and offline social capital in driving digital innovation, especially in the SME sector. Therefore, the hypotheses are proposed as follows:

H5: Offline social capital has a positive effect on digital innovation.

H6: Online social capital has a positive effect on digital innovation.

2.5. The mediating role of digital innovation

Digital innovation is essential for SMEs to remain competitive in today's dynamic markets. By leveraging their social capital, SMEs can access critical information, knowledge, and resources to adopt digital technologies such as e-commerce, customer relationship management (CRM), and data analytics. These technologies improve operational efficiency, expand market reach, and enhance customer experiences, resulting in better business and social performance (Hund et al., 2021; Wang, 2021).

Social capital acts as a critical enabler of digital innovation, providing SMEs with networks that facilitate collaboration and access to expertise and resources needed for technological adoption. Strong social networks allow SMEs to learn from other businesses, participate in training opportunities, and stay informed about emerging technologies (Ji et al., 2022; Malik et al., 2024). Additionally, these networks can help SMEs overcome common barriers to digital innovation, such as limited knowledge, experience, or funding, by fostering partnerships and collaborations with other stakeholders, including government and private organizations (Shee et al., 2023; Yao & Yang, 2022).

Digital innovation enhances business performance and strengthens social performance by enabling SMEs to engage more effectively with their communities and address social challenges. For instance, digital tools can help businesses improve their environmental and social impact through more efficient resource management and targeted community programs (Akther et al., 2024; Meng et al., 2022). This dual role highlights the transformative potential of digital innovation as a mediator that links social capital to both business and social outcomes.

While previous studies have examined the role of social capital in fostering innovation (Ji et al., 2022; Malik et al., 2024) and the direct effects of digital innovation on performance (Yasa et al., 2019; Zhe & Hamid, 2019), limited research has explored its mediating role in the relationship between social capital and SME performance. Based on these explanations, the following hypotheses are formulated:

H7: Digital innovation mediates the effect of offline social capital on social performance.

H8: Digital innovation mediates the effect of online social capital on social performance.

H9: Digital innovation mediates the effect of offline social capital on business performance.

H10: Digital innovation mediates the effect of online social capital on business performance.

3. Research methodology

This study employs a quantitative research design using structural equation modeling (SEM) with SmartPLS software to analyze the relationships between the variables. The population consists of all SOE-assisted fashion SMEs in West Java, Indonesia. Fashion SMEs in West Java were selected as the research team observed a significant need for training and mentoring related to business incubation and digitalization among these SMEs. These businesses face challenges in adapting to the demands of the digital environment, risking potential collapse if they fail to adapt.

The sampling method used in this study was purposive sampling, with the following criteria for SMEs: (1) have been mentored for at least three years; (2) have adopted social media for business purposes such as for digital marketing, raising brand awareness, doing market research, etc.; and (3) are creative SMEs that focus on fashion. 300 online questionnaires were distributed to SME owners and managers via Google Forms between December 2023 and February 2024. Of these, 258 responses were deemed valid for analysis, resulting in a response rate of 86%. The sample covers fashion SMEs in Bandung and Cirebon, which were selected because these areas are known for their large concentrations of fashion SMEs and their reputations as creative cities.

The questionnaire measured the perceptions of SME owners or managers regarding the studied variables. Offline and online social capital was measured using items adapted from Lee and Hallak (2020), digital innovation was measured using items adapted from Shah et al. (2023), and social and business performance was measured using items adapted from Muafi and Hadi (2023). For instance, one item measuring online social capital asked respondents to rate their agreement with the statement, "I use social media to build and maintain relationships with business partners." A Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used.

Although the sample size of 258 is appropriate for SEM analysis using SmartPLS, it falls near the minimum threshold for robust analysis of complex models. As such, potential limitations related to sample size are acknowledged, including the potential for reduced generalizability and statistical power. Additionally, purposive sampling may introduce bias, as the sample is limited to SMEs meeting specific criteria. These limitations should be considered when interpreting the results.

4. Research results

4.1. Respondent characteristics

Respondents in this study were fashion SMEs assisted by SOEs in West Java, Indonesia. The sample collection results found 258 respondents as the research sample. The characteristics of respondents in the study are divided into several characteristics, including the length of SME coaching, social media adopted for business, and the business sector run.

Table 1. Respondent characteristics

	Characteristics	Number	Percentage
Length of coaching	< 3 years	0	0%
	3-10 years	199	77%
	> 10 years	59	23%
Social media platform	Shopee	23	9%
	TikTok	60	23%
	Tokopedia	16	6%
	More than 1 platform	164	64%
Sector	Fashion	258	100%
Operational period	1-10 years	163	61%
	11-20 years	90	38%
	> 20 years	5	2%
Number of employees	< 5 employees	75	29%
	5-15 employees	120	47%
	> 15 employees	63	24%
Annual revenue	< USD 6,500/year	100	39%
	USD 6,500-32,500/year	120	47%
	> USD 32,500/year	38	15%

Table 1 shows that 77% of SMEs have received coaching for 3-10 years, with 23% having been coached for more than 10 years and none for less than 3 years. Regarding social media usage, the majority of SMEs use more than one platform, such as Shopee, TikTok, and Facebook, for their business activities. All

respondents are in the fashion sector. Regarding operational age, 61% of SMEs have been in business for 1-10 years, 38% for 11-20 years, and 2% for over 20 years. When it comes to scale, 47% of SMEs employ 5-15 workers, while 29% employ fewer than 5, and 24% have more than 15 employees. In terms of annual revenue, 47% of SMEs report earnings between USD 6,500-32,500, 39% earn less than USD 6,500, and 15% exceed USD 32,500.

4.2. Outer model analysis

This research used structural equation model analysis with SmartPLS. The first stage in PLS analysis was outer model analysis. Outer model analysis aims to test the quality of data and measurements in the research model. It can be conducted with several tests, including convergent validity, construct validity, construct reliability, and discriminant validity. The first analysis is convergent validity to test the validity of research indicators. Convergent validity refers to the loading factor value on each research indicator with the criteria for the loading factor value > 0.5 or, ideally, > 0.7 (Hair et al., 2017).

Table 2. Loading factors in each indicator

Item	Outer loadings	Validity
BP1	0.866	Valid
BP2	0.850	Valid
BP3	0.794	Valid
BP4	0.596	Valid
DI1	0.881	Valid
DI2	0.789	Valid
DI3	0.856	Valid
DI4	0.845	Valid
MSF1	0.851	Valid
MSF2	0.820	Valid
MSF3	0.802	Valid
MSF4	0.849	Valid
MSF5	0.821	Valid
MSF6	0.812	Valid
MSN1	0.865	Valid
MSN2	0.844	Valid
MSN3	0.847	Valid
MSN4	0.867	Valid
SP1	0.844	Valid
SP2	0.721	Valid
SP3	0.654	Valid

Note: BP – business performance, DI – digital innovation, MSF – offline social capital, MSN – online social capital, SP – social performance.

Table 2 shows that all indicators in this study have factor loading values ranging from 0.596 to 0.881. Therefore, all indicators have a loading factor value > 0.5 so that they have met the threshold for the loading factor value. It can be concluded that all indicators meet convergent validity. Furthermore, after the indicator is declared valid, each construct in this study is required to meet construct validity with the criteria for AVE value > 0.5 and construct reliability with the criteria for composite reliability value > 0.7 .

Table 3. AVE and composite reliability

Variable	Composite reliability (rho_c)	Average variance extracted (AVE)
Business performance	0.862	0.615
Digital innovation	0.908	0.711
Offline social capital	0.928	0.682
Online social capital	0.916	0.733
Social performance	0.786	0.553

The analysis results in Table 3 show that the Average Variance Extracted (AVE) value for all variables in this study met the construct validity criteria, namely > 0.5 . Furthermore, the composite reliability value in this study also met the construct reliability standard, which is > 0.7 . Thus, all variables in this study can be categorized as valid and reliable.

The subsequent analysis is discriminant validity, which aims to test whether the indicators in this study have accurately measured their respective variables. Discriminant validity in this study is tested using the Fornell–Larcker Criterion and the Heterotrait–Monotrait Ratio (HTMT). The Fornell–Larcker Criterion refers to the AVE root of each construct. The square root of the AVE indicates good discriminant validity for each construct greater than the correlation between constructs in the model.

Table 4. Fornell–Larcker criterion

Variable	BP	DI	MSF	MSN	SP
Business performance	0.784				
Digital innovation	0.764	0.843			
Offline social capital	0.780	0.861	0.826		
Online social capital	0.753	0.838	0.818	0.856	
Social performance	0.722	0.657	0.658	0.645	0.744

Table 4 shows the value of the Fornell–Larcker Criterion to test discriminant validity. The results show that all research variables have a value (root AVE) higher than the correlation between variables. Therefore, based on Table 4, this study has met discriminant validity.

In addition, HTMT measures the ratio of the average correlation between indicators of different constructs (heterotrait-heteromethod) to the average correlation between indicators within the same construct (monotrait-heteromethod). In other words, HTMT indicates how well the constructs in the model are truly unique and not overly correlated with one another.

Table 5. HTMT result

Variable	Business performance	Digital innovation	Offline social capital	Online social capital
Business performance				
Digital innovation	0.090			
Offline social capital	0.119	0.501		
Online social capital	0.076	0.631	0.701	
Social performance	0.073	0.695	0.752	0.791

The HTMT test requires a value of $HTMT < 0.85$. If the HTMT value is less than 0.85, discriminant validity is acceptable. Table 5 shows HTMT values below 0.85. Thus, based on Table 6, this study has met the requirements for discriminant validity.

The subsequent analysis was common method bias (CMB). The CMB test aims to avoid errors in measurement or data testing caused by using a common data collection method. CMB is detected through the full collinearity assessment approach by examining the Variance Inflation Factor (VIF) values (Kock, 2015). The VIF value must be below the threshold of 3.3, which indicates that the model is free from CMB (Kock, 2015; Sarstedt et al., 2020).

Table 6. VIF result

Indicators	VIF
1	2
BP1	2.072
BP2	2.078
BP3	1.622
BP4	1.260
DI1	2.494
DI2	1.727
DI3	2.181
DI4	2.043
MSF1	2.538
MSF2	2.190
MSF3	2.068
MSF4	2.482
MSF5	2.180
MSF6	2.113
MSN1	2.317

Table 6 cont.

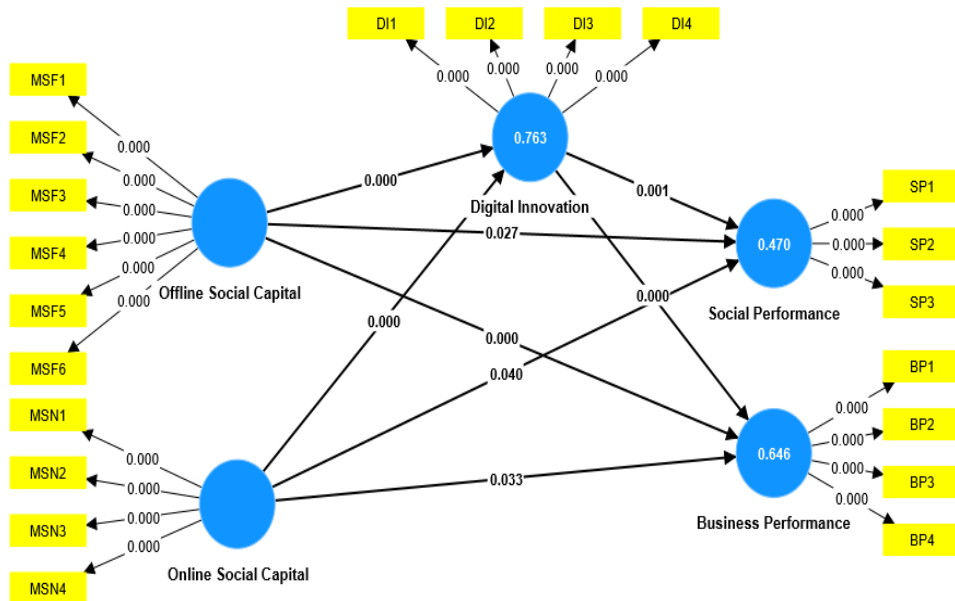
<i>1</i>	<i>2</i>
MSN2	2.081
MSN3	2.115
MSN4	2.294
SP1	1.303
SP2	1.211
SP3	1.151

Based on the analysis results of the Variance Inflation Factor (VIF) values presented, all indicators have VIF values lower than the threshold of 3.3, as recommended by Kock (2015) and Sarstedt et al. (2020). This indicates that the model is free from CMB, meaning there is no indication that measurement errors are caused by using the same data collection method.

4.3. Inner model analysis

Inner model analysis is a test to analyze the relationship between variables in research. Inner model analysis includes testing the coefficient of determination and path analysis to test the hypothesis. The inner model testing procedure uses bootstrap in SmartPLS with the output, as shown in Figure 1. The first analysis is the coefficient of determination. The coefficient of determination refers to the R² value in the study. It was found that the R² value of the digital innovation variable was 0.763 or 76.3%, which indicated that the digital innovation variable had an influence of 76.3% from other variables in the model. Furthermore, the social performance variable found an R² value of 47%, so the variable was influenced by 47% of other variables. The business performance variable was impacted by other variables in the model by 64.6%. Overall, this study has a good coefficient of determination.

The next analysis was path analysis to test the research hypotheses. This study used significant criteria where the T-statistics value is greater than 1.96, and the p-value is less than 0.05 at the 5% significance level. The parameter coefficient showed the direction of the influence by examining the positive or negative original sample and the magnitude of the independent variable's effect on the dependent variable. The results of path analysis testing to test the research hypotheses are shown in Table 7.

Figure 1. Output bootstrap with SmartPLS**Table 7.** Path analysis

Path	Original sample	T statistics	P values	Result
Offline social capital → social performance	0.232	1.935	0.027	H1 supported
Online social capital → social performance	0.180	1.749	0.040	H2 supported
Offline social capital → business performance	0.358	3.553	0.000	H3 supported
Online social capital → business performance	0.170	1.841	0.033	H4 supported
Offline social capital → digital innovation	0.563	7.667	0.000	H5 supported
Online social capital → digital innovation	0.332	4.561	0.000	H6 supported

The results indicate that offline and online social capital significantly influence social performance, business performance, and digital innovation. Notably, offline social capital has a stronger influence on social performance (0.232 vs. 0.180) and business performance (0.358 vs. 0.170) than online social capital. Similarly, offline social capital shows a more substantial effect on digital innovation (0.563) than online social capital (0.332). These findings highlight that while both types of social capital contribute positively, offline social capital plays a more dominant role in the context of this study.

This study further analyses the mediating effect of digital innovation. Mediation analysis also uses significance criteria, where T-statistics must exceed 1.96, and the p-value must be less than 0.05 at the 5% significance level. The results of mediation testing are presented in Table 8.

Table 8. Mediation analysis

Path	Original sample	T statistics	P values	Result
Offline social capital → digital innovation → social performance	0.172	3.078	0.001	H7 supported
Offline social capital → digital innovation → business performance	0.176	3.977	0.000	H8 supported
Online social capital → digital innovation → social performance	0.102	2.505	0.006	H9 supported
Online social capital → digital innovation → business performance	0.104	2.802	0.003	H10 supported

The mediation analysis provides additional insights into the role of digital innovation. Digital innovation serves as a critical mechanism that translates social capital – both offline and online – into improved social and business performance. The indirect effect of offline social capital on social performance (0.172) and business performance (0.176) via digital innovation is more pronounced than the indirect effect of online social capital on social performance (0.102) and business performance (0.104). This finding underscores the importance of offline networks in leveraging digital innovation to enhance SME performance.

5. Discussion

SMEs play a crucial role as pillars of the Indonesian economy. Supporting and sustaining their performance is essential for national economic growth. This study proposes social capital, both offline and online, as a key factor in enhancing SME performance. Additionally, digital innovation is highlighted as a crucial mechanism for ensuring the sustainability of SME performance. The results show that offline and online social capital positively influence the social performance of SMEs, supporting H1 and H2. This finding indicates that stronger offline and online social networks enable SMEs to achieve better social performance. Among these, offline social capital has a greater impact on social performance than online social capital, as evidenced by the path analysis results.

The importance of social capital in improving social performance is well-supported by prior research (Alghababsheh & Gallear, 2021; Nuryanto et al., 2020; Tran & Adomako, 2021). Strong networks and relationships enable SMEs to fulfill their social responsibilities, make a positive impact on their communities, and build trust. Offline social capital, characterized by face-to-face interactions, fosters deeper connections and trust within local communities. Meanwhile,

online social capital extends reach and efficiently improves access to information and resources (Boohene et al., 2020; Lee & Hallak, 2020). By balancing both types of social capital, SMEs can enhance their competitiveness and foster stronger community engagement. This combination enables SMEs to establish collaborative networks, share knowledge, and develop innovative solutions that address both social and business challenges (Khan et al., 2021; Zhao et al., 2023).

The findings also reveal that offline and online social capital positively affect SME business performance, supporting H3 and H4. Offline social capital again exhibits a stronger influence, demonstrating its ongoing relevance even in an increasingly digital world. This suggests that personal, trust-based relationships remain a cornerstone of SME success, complementing the benefits provided by online networks.

Previous research aligns with these findings. Social capital has consistently been identified as a foundational element in improving SME performance (Olamide & Ogbechie, 2021; Yani et al., 2020). Specifically, studies by Zhang et al. (2020) and Purwati et al. (2021) emphasized that social capital, combined with innovation and digitalization, provides SMEs with platforms for sharing ideas, gaining inspiration, and adopting best practices. These insights highlight the dual importance of traditional networks and modern digital strategies in achieving sustainable growth.

This study provides novel insights by identifying digital innovation as a mediator between social capital and SME performance. The mediation analysis shows that digital innovation amplifies the effects of both offline and online social capital on social and business performance. Offline social capital has a greater influence on digital innovation than online social capital, suggesting that trust and established relationships are instrumental in driving innovation efforts.

These findings align with research by Malik et al. (2024) and Ji et al. (2022), which emphasized that strong social networks facilitate access to the knowledge, skills, and resources needed for digital innovation. Online platforms, forums, and webinars provide opportunities for SMEs to learn and adopt new technologies. Moreover, offline relationships ensure the trust and collaboration required to implement these innovations effectively.

By integrating social capital with digital innovation, SMEs can achieve operational efficiencies, enhance productivity, and create greater social and economic value. Digital innovation acts as a dynamic capability that enables SMEs to adapt and thrive in a rapidly changing business environment (Shee et al., 2023; Yao & Yang, 2022).

This research recommends that SMEs increase social capital in their business both offline and online. SMEs can obtain the latest information about market trends, consumer preferences, and industry developments through social networks (Yani et al., 2020). However, interactions with other business owners, mentors, and industry professionals can help SMEs adopt best business practices and strategies that have proven effective (Zhang et al., 2020). Offline social capital can be increased by including relationships or networks with personal, professional, neighborhood, government, and public associations (Lee & Hallak, 2020). Online social capital includes activities and networks on several social media such as Facebook, LinkedIn, Instagram, and Twitter/X (Lee & Hallak, 2020).

6. Conclusions

This study investigates the influence of offline and online social capital on SMEs' social and business performance, with a particular focus on the mediating role of digital innovation. The findings reveal that offline and online social capital positively impact digital innovation, social performance, and business performance. Additionally, digital innovation is shown to mediate the relationship between social capital (both offline and online) and SME performance.

This study contributes to the literature by highlighting the dual importance of offline and online social capital in enhancing SME performance, particularly within the context of digital innovation. For practitioners, the findings underscore the significance of building and maintaining strong social networks, both in-person and online, to drive business success. SMEs should foster offline social capital through personal, professional, neighborhood, government, and public networks. Online social capital can be strengthened through active engagement on platforms such as Facebook, LinkedIn, Instagram, and Twitter/X, which can further facilitate business opportunities.

Additionally, SMEs are encouraged to invest in digital innovation, which can enhance business operations, from product sales to payment systems. Improving digital innovation involves offering digital services, ensuring trust in online transactions, providing easy access to digital platforms, and raising awareness of digital products.

While this study provides valuable insights, its scope is limited to SMEs in the fashion sector in West Java, Indonesia, which may not fully represent SMEs in other industries or regions. The findings, therefore, may not be universally applicable across all countries or sectors. Future research could expand this study to include a broader range of industries and geographical areas to assess

the generalizability of the results. Additionally, further studies could explore the specific mechanisms through which digital innovation influences SME performance in more depth and examine the role of other variables, such as managerial skills or financial capital, in enhancing social capital and innovation.

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Author contributions

Muafi Muafi – 25% (research concept and design, collection and/or assembly of data, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article).

Nuradli Ridzwan Shah Bin Mohd Dali – 25% (research concept and design, data analysis and interpretation, writing the article, critical revision of the article, final approval of the article).

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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