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The Role of Human Capital and Social Capital in Improving the Performance of Small and Medium Enterprises (SMEs)

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Abstract:

Small and Medium Enterprises (SMEs) are an essential pillar in driving the regional economy, including in Central Java Province. Behind their significant contribution, SMEs still face serious challenges, ranging from low productivity to limited competitiveness. This study aims to examine how the roles of Human Capital and Social Capital contribute to improving SME performance, using a descriptive qualitative approach without involving statistical analysis. Through a descriptive qualitative approach, this study explores contextually how SME actors interpret, develop, and implement the use of human resources and social networks in their business activities. The information obtained shows that the capacity of human resources among SME actors is generally formed through experience, but has not been systematically managed. Meanwhile, Social Capital, as reflected in relationships among actors, customers, and surrounding communities, remains spontaneous and has not yet been utilized as a collective force to support business growth. Limited access to training, technology, and mentoring also weakens the use of both capitals in business operations. This study recommends empowerment strategies that target the strengthening of individual competencies alongside the development of productive business social networks to encourage sustainable improvements in SME performance. Furthermore, the results of this study are expected to provide insights for the formulation of more adaptive and contextual policies, in line with the characteristics of local SMEs that serve as the backbone of the people's economy in Central Java.

Keywords: SMEs performance; human capital; social capital; enterprise empowerment

INTRODUCTION

In a competitive environment, the innovative capabilities of SMEs have become one of the main strategies for survival and growth compared to large-scale companies (Donbesuur et al., 2020). Various studies have emphasized that SMEs are key economic actors that contribute directly to economic growth, job creation, and the improvement of community welfare (Khan et al., 2020; Wei et al., 2023). In general, SMEs are positioned as the main foundation in the economic system due to their widespread presence across various sectors and regions, making them inclusive and decentralized agents of economic

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development (Burhan et al., 2022). This role not only reflects the economic function of SMEs as contributors to Gross Domestic Product (GDP) but also as social nodes that connect local resources with market needs and open up broad avenues for community participation (Eggers et al., 2013).

Small and Medium Enterprises (SMEs) have a fundamental role in the structure of both national and regional economies. In Central Java Province, SMEs serve as one of the main pillars of the local economy. Based on data from the Central Java Statistics Agency (BPS), there are more than three million SME units spread across various strategic sectors, ranging from agriculture, trade, manufacturing, to services. The role of SMEs is not only limited to economic aspects but also touches on social dimensions through job creation, poverty alleviation, and the preservation of local culture through distinctive products such as batik, handicrafts, and traditional food processing.

The importance of SMEs in Central Java is also reflected in their contribution to the Gross Regional Domestic Product (GRDP), with a proportion exceeding 60% of the region's total added value. However, this substantial contribution is not yet aligned with the optimization of productivity and competitiveness demonstrated by SME actors. A strategic report from the Central Java Office of Cooperatives and SMEs highlights a number of structural obstacles that hinder the strengthening of SMEs, including the low implementation of modern business management, limited partnership networks, minimal product innovation, and a lack of understanding in financial management and digital marketing.

The classification of SMEs is explicitly regulated in Government Regulation Number 7 of 2021. In this regulation, small enterprises are defined as business units with an annual turnover between IDR 2 billion and IDR 15 billion. This segment becomes the main focus of this study because it represents entities that are in a growth transition phase. Based on the data from the Central Java Office of Cooperatives and SMEs for 2022–2023, out of a total of 1,506,206 recorded business units, as many as 1,252 units are classified as small enterprises, while the majority are micro enterprises. The following data visualization proportionally illustrates the distribution of business units based on the categorization of the central government:

Table 1.3. Data on the Number of Micro Enterprises according to Government Regulation Number 7 of 2021 Central Java Province (Data Collection 2022 and 2023)

Regency/City	Mikro (<2M)	Small (2-15M)	Medium (15-50M)	Total
Kab. Cilacap	63.183	14	4	63.203
Kab. Banyumas	88.878	20	52	88.949
Kab. Purbalingga	65.538	20	4	65.567
Kab. Banjarnegara	35.297	1	2	35.301
Kab. Kebumen	50.319	1	1	50.322
Kab. Purworejo	54.829	20	4	54.858
Kab. Wonosobo	25.707	28	3	25.741

Kab. Magelang	64.798	14	4	64.818
Kab. Boyolali	17.848	6	0	17.855
Kab. Klaten	34.350	13	7	34.369
Kab. Sukoharjo	39.521	30	14	39.570
Kab. Wonogiri	35.100	13	5	35.118
Kab. Karanganyar	21.305	16	12	21.335
Kab. Sragen	40.873	11	2	40.887
Kab. Grobogan	58.400	1	4	58.405
Kab. Blora	23.920	12	3	23.934
Kab. Rembang	51.037	17	11	51.067
Kab. Pati	62.103	12	2	62.119
Kab. Kudus	23.028	6	0	23.036
Kab. Jepara	37.817	3	0	37.821
Kab. Demak	59.896	19	7	59.922
Kab. Semarang	25.287	4	0	25.291
Kab. Temanggung	33.735	12	4	33.752
Kab. Kendal	44.716	8	2	44.726
Kab. Batang	46.088	14	0	46.102
Kab. Pekalongan	31.942	2	1	31.946
Kab. Pemalang	71.673	10	6	71.689
Kab. Tegal	57.998	5	2	58.009
Kab. Brebes	50.382	3	7	50.420
Kota magelang	16.657	176	19	16.857
Kota surakarta	21.607	-	0	21.608
Kota salatiga	25.423	314	40	25.780
Kota semarang	53.439	6	1	53.446
Kota pekalongan	48.340	380	50	48.774
Kota tegal	23.597	11	0	23.609
Total	**1.504.699**	**1252**	**255**	**1.506.206**

Source: Office of Cooperatives and SMEs, Central Java Province, 2023

This empirical fact reinforces the urgency for strategic interventions focused on the development of human resources and social relations. The two main forms of capital that serve as the foundation for strengthening SMEs are Human Capital and Social Capital. Human Capital includes the capacity, skills, knowledge, and competencies of business actors in operating and developing their business activities. Meanwhile, Social Capital reflects networks of trust, shared norms, and social relationships that enable productive collaboration between business actors and external stakeholders such as business partners, government, and the community.

In the context of Social Exchange Theory, social interactions based on mutually beneficial principles can facilitate the exchange of resources that are not only material but also immaterial, such as information, psychosocial support, and trust. This study is grounded in that framework to explain how Human Capital and Social Capital contribute to improving the performance of SMEs in Central Java. This approach is relevant given the dynamic and uncertain business environment faced by SMEs, which requires a high capacity for adaptation.

Through an understanding of these two strategic elements, it is expected that the results of this study will contribute theoretically to the development of literature on SME empowerment, as well as provide practical implications for policymakers and business actors in designing empowerment strategies based on resources and social relations. The focus on SMEs with an annual turnover of IDR 2–15 billion is important because this group has significant acceleration potential if supported by targeted and evidence-based strengthening strategies.

LITERATURE REVIEW

Human Capital and Social Capital are two strategic elements consistently recognized as key determinants in improving the performance of Small and Medium Enterprises (SMEs). Human Capital refers to the accumulation of knowledge, skills, and individual capabilities that directly affect organizational productivity and effectiveness (Becker, 1993). In the SME context, Human Capital plays a crucial role in decision-making, adaptation to market changes, and innovative capabilities. (Hayton, 2003) emphasizes that the strategic management of human capital contributes positively to organizational performance, particularly in business scales that rely directly on the leadership capacity of the business owner.

Social Capital, on the other hand, highlights the importance of social networks, trust, and reciprocal norms that facilitate collective action in the business context (Putnam, 2000). Research by (Abduljawad, 2019; Rieckmann et al., 2018; Rijal, 2024) shows that strong social capital acts as a connector of information and resources among actors within the innovation ecosystem, enabling SMEs to access markets, technologies, and institutional support more effectively. In situations of uncertainty and resource constraints, Social Capital becomes a vital bridge for SMEs to build cross-sector collaboration.

The combination of Human Capital and Social Capital creates a solid foundation for SMEs in generating sustainable added value. (Santa et al., 2022) emphasizes that human and social capital simultaneously enhance the adaptive and innovative capacities of enterprises, particularly in dynamic environments. However, several studies, such as (Ogunyomi & Bruning, 2016) and (Iqbal et al., 2023), note that the influence of these two forms of capital is not always consistent, depending on cultural, geographical, and organizational characteristics. The existing literature indicates a need to re-explore the relationship between Human Capital and Social Capital and SME performance within specific local contexts, such as in Central Java. This study aims to fill that gap using a social exchange theory-based approach, which can explain the relational mechanisms in building the competitive advantage of SMEs.

METHOD

This research employs a qualitative descriptive approach. The sampling technique used in this study is purposive sampling. In this context, the sample consists of SME owners or managers who have been operating for a minimum of three years, have an annual turnover of IDR 2 to 15 billion, and are domiciled in Central Java. The research locations are focused on several cities and regencies in Central Java Province with a high concentration and dynamic presence of SMEs, including Semarang City, Jepara Regency, Pekalongan City, Solo City, Kudus City, and Temanggung Regency. The selection of these locations is based on considerations of the heterogeneity of local economic characteristics, the diversity of SME business sectors, and the availability of active business communities.

Data were collected using several techniques, namely in-depth interviews and limited participatory observation. This study does not aim to produce statistical generalizations of the population, but rather to gain an in-depth understanding of specific contexts and to explore the meanings behind the practices carried out by SME actors. Through this methodological approach, the study is expected to provide a contextual and rich understanding of the role of human capital and social capital in enhancing SME performance in Central Java.
The variables used in the study are operationalized as follows: (1) Human capital is defined as the accumulation of knowledge, skills, experience, and individual competencies possessed by employees, which directly contribute to performance improvement and value creation within the organization. (2) Social capital is defined as networks of social relationships, norms, and trust that facilitate coordination and cooperation among individuals or groups to achieve common goals. (3) SME performance is operationalized as the business's success in achieving predetermined targets by efficiently utilizing available resources, based on established business objectives—both in financial and non-financial dimensions—and in terms of adaptability to market changes. Through this methodological approach, the study is expected to provide a contextual and nuanced understanding of the role of human capital and social capital in driving SME performance in Central Java. The results are expected to be not only academically relevant but also serve as a foundation for the formulation of empowerment strategies and adaptive policies for the future development of local SMEs.

RESULTS

This study reveals a number of important dynamics regarding the role of human capital and social capital in the activities of Small and Medium Enterprises (SMEs) in Central Java Province, based on an analysis of 304 respondents. The majority of respondents (94.4%) were business owners, indicating a highly personal and centralized ownership structure. The most dominant business sector was manufacturing (46.0%), followed by trade (37.0%) and services (16.4%). These data reinforce the fact that small-scale manufacturing in Central Java plays a significant role in the structure of the local economy. In terms of business duration, nearly 70% of SMEs had been operating for more than five years, with 39.5% running for over a decade—signifying business resilience despite capacity limitations.

The main findings indicate that SME actors in this region have recognized the importance of developing human resource capacity as the foundation for business growth. However, the management of human capital is still conducted informally and is not yet institutionally structured. Information gathered from primary data shows that most human resource capacity is developed through work experience, direct field learning, and continuous involvement in business processes—rather than through systematic and planned training systems.

From the sample data, it was found that the majority of SME actors have a high school/vocational school educational background (56.3%), followed by university graduates (32.2%) and diploma holders (11.5%). This relatively low level of formal education is reflected in the human resource development approach taken by business owners. Employees tend to acquire skills through hands-on work experience, with minimal formal training and the absence of a clear coaching system. Although business actors acknowledge the importance of improving worker competencies, they generally lack access to or institutional capacity to conduct regular training. Some exceptions were observed in more labor-intensive sectors such as manufacturing, where internal technical training efforts and production knowledge updates were implemented by business owners. Business actors in this sector reported that although limited, training initiatives contributed to work efficiency and reduced production errors.

On the other hand, innovation also reflects an aspect of human capital that remains underutilized. Some digital SMEs in cities like Semarang demonstrated success in responding to market changes through the development of online-based products and services. This success was closely related to the creation of internal learning environments initiated by business owners, as well as their willingness to experiment with new approaches. Furthermore, work experience and educational background of business owners also played a significant role in strategic decision-making. SMEs with experienced workers showed higher adaptive capacity, including in strategy formulation, risk mitigation, and business continuity during external pressures such as the COVID-19 pandemic. During the pandemic, SMEs with trained and flexible workers were able to transform more quickly—adopting digital channels, conducting operational efficiencies, and maintaining customer loyalty.

However, this potential does not stand alone. Social capital is also a critical component in SME sustainability. This study found that social relationships between business actors, customers, and local communities were generally formed organically, but had not been mobilized as a structured collective force. Interactions among SMEs mostly occurred in the context of spontaneity, geographic proximity, or personal relationships, and were not yet framed as strategic collaborations that could collectively enhance competitiveness.

Most respondents stated that they were not part of an active and productive business community. Existing communities were generally nominal, with no regular activities and lacking institutional functions for collaboration building, knowledge sharing, or joint market access. Social capital, which should be mobilized to strengthen bargaining positions and create shared efficiencies, has not been fully utilized. This affirms the importance of institutional design that can facilitate relationships among business actors—not merely as transactional connections, but also as cooperative partnerships.

DISCUSSION

This research reveals a paradoxical reality: on one hand, SME actors in Central Java demonstrate a relatively high level of awareness regarding the importance of human capital development and the strengthening of social relationships as the foundation for business growth. On the other hand, the institutional capacity and managerial systems necessary to realize such awareness remain inadequate. This gap between perception and implementation suggests that the core challenge faced by SMEs is not merely a lack of financial capital, but rather a limited ability to build institutional capital that can sustainably support the utilization of human and social capital. The main weakness, therefore, lies not in awareness, but in the absence of systems and empowerment ecosystems capable of reinforcing capacity development in a sustainable manner.

In the context of human capital, SME actors generally continue to rely on experience-based learning or reactive learning by doing approaches. While this model produces basic operational resilience, it falls short in supporting business growth acceleration amid disruptive changes. As emphasized by Hayton (2003), human resource management that lacks a systematic foundation tends to generate organizations that are fragile when facing environmental pressures, as managerial decisions are often based on intuition rather than structured information. Field observations confirm this, as most SME actors lack routine training systems, human resource performance indicators, or competency mapping frameworks.

Conversely, a minority of SMEs—especially in the manufacturing and digital sectors—that have developed internal learning structures demonstrate relatively higher adaptability. These businesses are able to adjust their production processes, introduce new products, and even pivot to digital channels during the pandemic. This supports the findings of Dwikat et al. (2023) and Abredu et al. (2023), who argue that SMEs are more likely to thrive when a learning culture is embedded within the organization. This indicates that strengthening human resources goes beyond training; it also requires the commitment of business owners to establish organized work systems and to foster continuous learning processes within their operations. This discussion reinforces existing literature which finds that well-structured and sustainably managed human capital contributes to greater efficiency, innovation, and organizational resilience (Hayton, 2003; Iqbal et al., 2023).

Limited access to training and technology represents a more structural barrier. SME actors are not only unable to access training opportunities but also lack systematic information channels to identify what support exists. In many cases, information about government programs or donor institutions fails to reach business actors, or if it does, the program design is often irrelevant to actual needs. This illustrates the presence of an asymmetric knowledge problem in the SME empowerment ecosystem, where program providers and beneficiaries do not share a common understanding. The solution lies not simply in increasing the number of programs, but in building intermediary systems that can bridge the real needs of SME actors with flexible and adaptive policy designs.

Shifting to the issue of social capital, field conditions indicate that although social relationships among SME actors do exist, they are spontaneous and have yet to evolve into structured collective forces. In the context of Central Java SMEs, social interactions tend to be informal and transactional, rather than forming strategic, long-term collaborations. These relationships are often short-term and functional—such as price information sharing or distribution cooperation—and largely occur due to spontaneity, geographical proximity, or personal ties. They have yet to develop into interconnected business networks that support more complex forms of production or joint risk mitigation strategies that would enhance collective competitiveness.

The absence of productive business networks limits the potential for synergy and weakens collective capacity to respond to external pressures. Yet as noted by Ardito et al. (2021), collaborative social structures increase the likelihood of continuous innovation and more creative decision-making. The lack of active and productive social institutions among SMEs also hinders the emergence of knowledge-sharing cultures and the confidence to innovate. Existing SME communities are often symbolic or administrative in nature and fail to serve as strategic spaces for managing trust, solving shared problems, or negotiating interests with external actors such as government bodies or financial institutions.

The urgency of empowerment strategies emerges as a key point of convergence between the empirical findings and the theoretical framework of this study. SME empowerment must be reconstructed as a systemic process comprising two key dimensions: first, strengthening individual capacity through training, mentoring, and locally-relevant learning; and second, building productive social business networks through communities based on location, sector, or business interest. These two dimensions cannot operate in isolation; they must be supported by coherent institutional policies and inclusive enabling infrastructures.

CONCLUSION

This study concludes that the human resource capacity of MSME actors in Central Java Province is generally formed through direct work experience, but has not yet been managed within a formal and structured system. Human capital developed through daily practice does create a basic level of business resilience, but it is still insufficient to support the transformation needed amid dynamic market competition. On the other hand, social capital, reflected in the relationships among actors, customers, and the surrounding community, has indeed grown organically, but it remains spontaneous, unorganized, and has not yet been optimally utilized as a collective force capable of driving business growth.

This reality leads to the conclusion that both types of capital have not been systematically managed. This condition is exacerbated by limited access to training, technology, and business mentoring, which ultimately weakens the potential utilization of both forms of capital in daily operational activities. This study recommends the need for a simultaneous empowerment strategy, which not only targets the strengthening of individual competencies through needs-based training, but also builds productive, collaborative, and long-term oriented business social networks.

Implication

The findings of this study provide several important implications. From a policy perspective, there is a need for a redesign of MSME empowerment programs by both central and local governments—from a bureaucratic, report-based approach toward a collaborative, needs-based approach. Local governments can play a role as ecosystem facilitators by providing access to training, information channels, and encouraging the formation of active local business forums. Training programs must also begin to consider the diversity of MSME actors, ranging from business sectors, levels of education, to technological readiness.

Implications in practice and implementation require efforts from training institutions, universities, and MSME support organizations to develop flexible, modular, and applicable training models. Sector- and region-based mentoring becomes a key factor to ensure that capacity-building programs are not generic. In addition, the development of business communities and clusters based on interest or commodities should be encouraged as a social capital platform capable of strengthening synergy, resource sharing, and addressing scale-related business challenges collectively.

Limitation and Future Direction

Although this study successfully provides a contextual overview of the dynamics of human capital and social capital within the MSME ecosystem in Central Java, there are several limitations that must be acknowledged. First, the descriptive qualitative approach used limits the statistical generalization of the results. The research focus on specific regions and the limited number of informants also constrains the breadth of the findings. Second, this study has not yet analyzed sectoral or geographical variations in depth, thus it has not accurately identified the differences in dynamics between sectors or regions in utilizing these two types of capital. Third, a comparison has not yet been made between MSMEs that receive interventions or assistance and those that do not, which could in fact strengthen the validity of findings regarding the impact of support systems.

As a continuation of this research, there are several research agendas worth developing to expand and deepen the understanding of MSME empowerment based on human and social capital. First, large-scale survey-based quantitative studies can be conducted to statistically examine the relationship between these two types of capital and business performance variables such as income growth, market expansion, or innovation adoption. Second, comparative studies across provinces can provide broader insights into contextual factors and policies that influence the effectiveness of human capital and social capital management. Third, a mixed methods approach (qualitative and quantitative) has strong potential to be used in analyzing the role of institutions in building the MSME empowerment ecosystem, including in identifying the most effective mentoring strategies. A focus on the intermediation model between business actors and support institutions (government, NGOs, universities) can also serve as a topic for in-depth research.

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