

THE ROLE OF HUMAN CAPITAL IN INCREASING PRODUCTIVITY AND GROWTH FOR MSMEs: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) have a very strategic role in the global economy as the backbone of the economy that contributes significantly to economic growth, improving the quality of human capital is a key factor in encouraging productivity and economic growth, including in the MSME sector. This research aims to identify, evaluate, and systematically synthesize empirical and conceptual findings related to the role of human capital in increasing the productivity and growth of MSMEs. This study examines the role of human capital in increasing productivity and growth for MSMEs using the Systematic Literature Review (SLR) approach. A total of 30 indexed and peer-reviewed scientific articles published in the period 2020 to 2026 were systematically analyzed by following the PRISMA guidelines. This study focuses on four main human capital instruments, namely Resource Based View, Dynamic Capability, and Value Co-Creation as fundamental elements in increasing productivity and growth for MSMEs. The results of the synthesis show that most of the studies identified a positive relationship around 80% of the studies analyzed identified a positive relationship between the application of human capital in increasing productivity and growth of MSMEs, both directly and through the role of mediation and moderation variables. However, not all studies show consistent results. The other 20% of articles showed non-positive results, which included insignificant, conditional, mixed, or negative findings.

Keywords: *Human Capital, Resource Based View, Dynamic Capability, Value Co-Creation, UMKM*

1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a very strategic role in the global economy as the backbone of the economy that contributes significantly to economic growth, job creation, and national development. Globally, MSMEs cover most business units and make a significant contribution to the absorption of labor and gross domestic product (Abongue et al., 2025). In the context of increasingly intensive global economic integration, improving the quality of human resources (*human capital*) is a key factor in encouraging productivity and economic growth, including in the MSME sector (Hu & Wang, 2025).

In recent decades, the global economy has been marked by various external shocks that increase uncertainty and have an impact on declining investment activity. This condition directly affects the behavior of business actors, especially MSMEs, who tend to be more

careful in making business decisions. Although MSMEs are recognized as the main drivers of regional economic growth and job creators, access to financing remains a major obstacle in determining the ability of business expansion. Post-crisis, not all MSMEs are in a condition that is ready to grow, as some are still facing cash flow pressures and debt burdens, as well as showing uneven growth patterns between regions (Cowling et al., 2025).

Limited resources are the main structural obstacles for MSMEs, especially in terms of financial capital, technological capabilities, and the quality of human capital. This condition encourages business actors to utilize external resources such as digital platforms, but at the same time creates dependency that has the potential to hinder internal capacity building. Empirical phenomena show that many MSMEs have not been able to optimize the role of human capital in increasing productivity and business growth. Meanwhile, the previous literature was still dominated by a focus on large companies and more emphasized the role of technology as a *enabler*, without comprehensively examining the dynamics of internal capabilities based on human capital (Zhang et al., 2025). In the context of economic development that increasingly emphasizes the quality of growth, the role of human capital is becoming increasingly crucial, especially in relation to public services, innovation, and adaptive capacity to external changes. Global pressures such as climate change, technological disruption, and economic uncertainty increase the need for adaptive and resilient human capital. Research shows that strengthening human capital not only contributes to increased productivity, but also to business resilience in the face of external risks (Prayitno et al., 2025; Song et al., 2025)

In addition, digital transformation has changed the economic structure and business model of MSMEs, where knowledge-based and data-based assets are key factors in increasing operational efficiency and business growth. However, reality shows that many MSMEs still face limitations in developing internal human capital-based capabilities, both in terms of skills, knowledge, and institutional support. This causes the contribution of MSMEs to productivity and economic growth to be suboptimal, even though their role is very significant in the economic structure (Chen, 2024; Giordino et al., 2025). Micro, Small, and Medium Enterprises (MSMEs) as the main pillars of the global economy face challenges in achieving sustainable growth due to limited resources and complexity in balancing the exploitation of existing capabilities with the exploration of new opportunities, where empirical phenomena show that knowledge management and the role of internal actors such as owners and labor are key factors in driving business performance and growth (Hannevig & Bertheussen, 2024).

Human capital, especially in the perspective of green human capital, is increasingly recognized as a strategic factor in improving organizational performance through strengthening environmental awareness and sustainable innovation (Pratiwi et al., 2025). Human capital is an important determinant in economic growth that is formed through a process of accumulation across generations, where investment in education comes not only

from individuals and parents but is also influenced by the wider family environment (Baldi et al., 2025). Human capital as a factor of production that includes knowledge, skills, and cognitive abilities is increasingly seen as the main driver of organizational performance and growth, but the phenomenon shows that although its contribution to productivity and efficiency has been widely discussed in the perspective of macro and large companies, the role of human capital at the organizational level—especially in improving the performance and growth of entities such as MSMEs—has not been comprehensively explored. Because previous research has tended to focus on traditional governance mechanisms and ignore the strategic role of employees as internal actors in improving organizational performance (Hou & Liu, 2025). Innovative human capital is increasingly seen as a strategic factor in driving innovation, efficiency, and organizational resilience through its role as a driver of knowledge and technology transfer, but empirical phenomena show that its effectiveness is greatly influenced by external factors such as government policy support, regional differences, and the institutional environment (Zhou et al., 2025).

Although human capital is recognized as a key determinant in economic growth and organizational performance, empirical phenomena point to inequality in the distribution and utilization of human resources, which has an impact on low productivity and business growth. In addition, the results of previous studies show inconsistencies in the influence of human capital on performance, indicating that these relationships are complex and influenced by various contextual factors. Previous research has also tended to emphasize structural and institutional aspects without integrating the role of human capital as the main mechanism in economic transformation (Farooq et al., 2025). The transformation of the global economy driven by technological innovation shows that increased productivity and business growth are strongly influenced by the quality of human capital, but empirical phenomena show that there is an inequality in human resource capacity and technology adoption that has an impact on low productivity performance (Bajja et al., 2025). Although the economic literature confirms that human capital is a key factor in driving productivity and business growth, empirical phenomena suggest that inequality in the distribution of resources and economic power can hinder investment in education and reduce productivity and industrial growth, while previous research has placed more emphasis on institutional and structural aspects without comprehensively integrating the role of human capital as a mechanism main in explaining economic performance and business transformation (Malein, 2025). business dynamics that are increasingly uncertain, MSMEs are required to continue to develop competitive advantages despite facing limited financial resources and human capital (Putri et al., 2025).

Digital-based economic transformation, human capital is recognized as a strategic factor that is able to increase efficiency, innovation, and business productivity performance, but empirical phenomena show that there is an inequality in the use of human resources that

causes development benefits—including productivity and business growth—to be uneven, while previous research still tends to focus on technology and infrastructure aspects without comprehensively examining the role of human moderation capital in optimizing economic performance and business transformation, especially in the MSME sector (Tian et al., 2025). Human capital as an accumulation of knowledge, skills, and competencies of the workforce is a strategic resource that plays an important role in improving organizational performance and productivity, but empirical phenomena show that there are variations and inconsistencies in the influence of human resource management practices on performance in various contexts, while previous research is still dominated by internal organizational approaches and tends to ignore the role of human capital at the macro as a contextual factor that affects the effectiveness of performance improvement, thus leaving relevant research gaps to be studied further, especially in the context of the development and growth of MSMEs (Zhai et al., 2025). global competition, human capital development in MSMEs is a strategic factor to encourage productivity and business growth, but the phenomenon shows that limited resources and dependence on individual owner/manager competencies still dominate the decision-making process (Mammadov & Wald, 2025).

Based on the inconsistency of empirical findings in various previous studies on the role of human capital in the productivity and growth of MSMEs, this study considers it important to conduct a comprehensive review through the *Systematic Literature Review* (SLR) approach. Various studies show mixed results, both those that affirm the significant influence of human capital on business performance, and those that find weak or indirect relationships, indicating that there is a complexity of relationships that have not been fully explained in the literature.

This research aims to identify, evaluate, and systematically synthesize empirical and conceptual findings related to the role of human capital in increasing the productivity and growth of MSMEs. In particular, this study explores how various dimensions of human capital—such as education, skills, experience, and digital capabilities—contribute to business performance, both directly and through mediation mechanisms such as innovation and moderation such as technological capabilities.

The SLR approach was chosen because it allows for the preparation of a systematic, transparent, and replicable literature review, resulting in a more comprehensive and evidence-based synthesis of knowledge. In addition, this method also allows the identification of relationship patterns, research trends, and gaps in the literature that are still open for further research. Thus, the results of this research are expected to make a significant contribution, both in the development of human capital theory in the context of MSMEs and in providing practical implications for the formulation of human resource-based business development policies and strategies

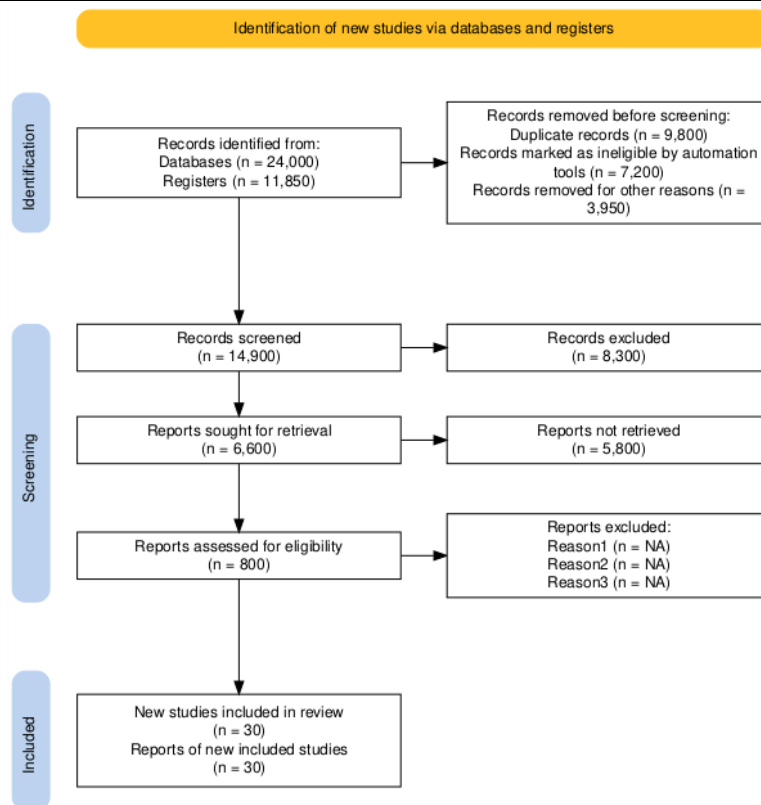
2. RESEARCH METHOD

This study applies the *Systematic Literature Review* (SLR) method guided by the *standard Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA) to trace, select, and analyze relevant studies related to *the Role of Human Capital in Increasing Productivity and Growth of MSMEs* and its implications for MSMEs. The literature sources analyzed came from scientific articles indexed in *Scopus*, *Web of Science* (Wos), *Emerald*, and *SINTA*, which are highly reputable and academically recognized journals.

In line with the literature sources used, this study is dominated by scientific publications indexed by *Scopus*, specifically in the quartiles of Q1 to Q4, while some others come from *Sinta*-accredited national journals ranked 2nd and 3rd. This condition shows that research topics related to *the Role of Human Capital in Increasing Productivity and Growth of MSMEs* and their implications for tax compliance have received attention in reputable journals. To obtain relevant and quality articles, the selection process in this literature study is carried out through several stages as follows

1. Literature searches use specific keywords, namely:
 - a. The relationship between the implementation of *human capital* and MSMEs.
 - b. The relationship between the implementation of *Resource-Based View (RBV)* theory and MSMEs.
 - c. Keterkaitan implementasi *Endogenous Growth, Energy Transition, and Structural Transformation Theory* with MSMEs
 - d. The relationship between the implementation of *Value Co-Creation Theory* and MSMEs.
 - e. The relationship between the implementation of *Dynamic capability* and MSMEs.
2. Review and selection of articles based on title, abstract, year of publication, and relevance of research findings to the variables studied.
3. A thorough examination of the entire article to ensure compliance with the *inclusion criteria* that have been set in this study.

Based on the selection stages, the research data includes 30 journal articles published in the 2020–2026 period. This study sets inclusion criteria that emphasize the focus on the variables of *human capital*, *productivity*, and *growth* as well as their relationship with MSMEs. The literature selection process follows the stages described in the PRISMA framework, where at the initial stage 387 articles were identified, then filtered into 231 articles after going through the initial screening. Furthermore, through further evaluation based on inclusion criteria and methodological feasibility, 30 articles were obtained that were eligible for in-depth analysis and became the main database of this research.



Source: Data Processed, 2026

The distribution of the 30 selected articles reflects the distribution of research from various countries based on the journal index, which is the main indication of the quality and reliability of the literature used as a reference. The percentage of each journal index can be seen in the following table.

Table 1. Journal Index Distribution

Journal Index	Number of Articles	Percentage
Scopus Q1	24	80%
Scopus Q2	5	16,67%
FEEL 2	1	3,33%
Total	30	100%

Source: Data Processed, 2026

Based on the table above, the majority of articles used in this study came from the Scopus Q1 journal as many as 24 articles (80%). This shows that the reference sources used are of very high quality and have an international reputation.

In addition, there are 5 articles (16.67%) from the Scopus Q2 journal that are still classified as literature supporters. Meanwhile, only 1 article (3.33%) came from national journals indexed by SINTA 2, which was used as a complement to the local context.

Thus, it can be concluded that the quality of literature in this study is dominated by high-reputable journals (Q1), thus strengthening the validity and credibility of the research.

Table 2. Country Distribution of Research Articles

Country	Quantity	Percentage
China	9	30.00%
Global	5	16.67%
Indonesia	5	16.67%
Ghana	2	6.67%
Norway	2	6.67%
UK	2	6.67%
Asia	1	3.33%
Middle East	1	3.33%
Russia	1	3.33%
Korea	1	3.33%
Italy	1	3.33%
Bangladesh	1	3.33%
Total	30	100%

Source: Data Processed, 2026

Based on table 2 of the country distribution of research articles, it shows that articles are dominated by the Chinese state with a contribution of 30.00%, almost half of the total articles come from China, which shows a very strong dominance in the field of research studied. This indicates that the development of these research topics is very rapid in China, both in terms of academics and practices, likely supported by economic, technological advances, and government policies that actively encourage research.

On the other hand, research with global coverage occupies the second position with a percentage of 16.67%, which shows that there is an effort to look at the phenomenon more broadly across countries. However, the number is still much smaller than research focusing on one specific country, so the generalization of research results globally is still limited.

Indonesia is in the next position with a contribution of 16.67%. Meanwhile, other countries such as the UK, Ghana, Norway as well as regions or countries such as Asia, East Asia, Russia, Korea, Italy, and Bangladesh each have only a very small proportion, which is 3.33% to 6.67%.

3. RESULTS AND DISCUSSION

3.1. Theoretical Framework in the Study of MSME Productivity and Growth

Based on the results of a synthesis of 30 scientific articles dominated by internationally reputable journals (Scopus Q1), this study compiles a comprehensive analysis of the role of human capital in increasing the productivity and growth of MSMEs. The study focuses on how the quality of human resources, capabilities, and digitalization support contribute to driving business performance, especially in the micro, small, and medium enterprises sector

in various country contexts. The results of the synthesis show that most of the studies identified a positive relationship around 80% of the studies analyzed identified a positive relationship between the application of *human capital* in increasing productivity and growth of MSMEs, both directly and through the role of mediation and moderation variables.

However, not all studies show consistent results. The other 20% of articles showed non-positive results, which included insignificant, conditional, mixed, or negative findings. *Human capital* and increasing the productivity and growth of MSMEs, both directly and through mediation variables such as *Resource Based View*, *Dynamic Capability*, and *Value Co-Creation*. *Human capital* has proven to be a key factor in improving operational efficiency, innovation capabilities, and the competitiveness of MSMEs. In addition, digitalization support, such as the use of digital technology and business platforms, strengthens the role of human capital in encouraging productivity and business expansion.

However, not all studies show completely consistent results. A small number of studies showed conditional or insignificant results, which were generally influenced by limited quality of human resources, low digital literacy, and limited access to technology and funding. This shows that the role of human capital in increasing the productivity and growth of MSMEs is highly dependent on the internal readiness of business actors and external environmental support.

In explaining the mechanism of the relationship between variables, the majority of the research uses a theoretical approach based on strategic management. *The Resource-Based View (RBV)* is widely used to emphasize that human capital is a strategic asset that can create a competitive advantage for MSMEs. In addition, *Dynamic Capabilities Theory* explains how MSME actors are able to develop, adapt, and utilize their abilities to respond to changes in the business environment. This approach shows that the increase in productivity and growth of MSMEs is not only determined by technological factors, but also by the ability of individuals to manage and utilize resources effectively.

Overall, the results of this synthesis confirm that human capital is the main factor in increasing the productivity and growth of MSMEs, especially when supported by the ability to innovate and utilize digital technology. However, its effectiveness is greatly influenced by the context of implementation, so efforts to improve the quality of human resources and appropriate policy support are needed to encourage the sustainable development of MSMEs.

Table 3. Distribution of Research Theories

Theory	Quantity	Percentage
Human Capital Theory	11	36.67%
Resource-Based View (RBV)	7	23.33%
Dynamic Capabilities Theory	6	20.00%
Value Co-Creation Theory	3	10.00%
SME Internationalization Theory	1	3.33%
Public Economics Theory	1	3.33%
Green Human Capital Theory	1	3.33%
Organizational Ambidexterity Theory	1	3.33%
Governance Theory	1	3.33%

Theory	Quantity	Percentage
Endogenous Growth Theory	1	3.33%
I love model	1	3.33%
Upper Echelons Theory	1	3.33%
Systems Thinking Theory	1	3.33%
Regional Resilience Theory	1	3.33%
Social Capital Theory	1	3.33%
Total	30	100%

Source: Data Processed, 2026

Based on table 3 of the theoretical distributions that have been compiled, it can be seen that the use of theory in articles that focus on the productivity and growth of MSMEs is dominated by several main approaches, especially *Human Capital Theory*, *Resource-Based View (RBV)*, and *Dynamic Capabilities Theory*.

The dominance of *Human Capital Theory* of 36.67% shows that most studies place human resources as the main factor in increasing the productivity and growth of MSMEs. This indicates that the quality of human resources including skills, knowledge, and adaptability—is seen as a strategic asset that directly affects business performance. In the context of MSMEs, human capital is an important foundation because the limitations of other resources make the role of individuals very crucial in determining business success.

Furthermore, *the Resource-Based View (RBV)* of 23.33% strengthens the findings by emphasizing that the competitive advantage of MSMEs comes from the management of internal resources that are unique and difficult to replicate. In this case, human capital is often positioned as part of strategic resources that are able to increase business efficiency, innovation, and competitiveness. RBV also explained how MSMEs can grow despite their limitations, as long as they are able to make optimal use of the resources they have.

Meanwhile, *the Dynamic Capabilities Theory* of 20.00% shows that it is not enough for MSMEs to only have resources, but also to be able to manage, adapt, and develop these resources in the face of changes in the business environment. This theory emphasizes the importance of organizational innovation, learning, and flexibility capabilities in increasing productivity and driving sustainable growth, especially in the digital age and dynamic markets.

In addition to these three main theories, there is also a contribution from *the Value Co-Creation Theory* 10.00% which highlights the importance of collaboration with external parties in creating added value. This theory is relevant in the context of MSMEs because it allows business actors to overcome internal limitations through partnerships, networks, and integration of external resources, thus having an impact on increasing productivity and business expansion.

Other theories such as *Innovation Theory*, *Institutional Theory*, *Social Capital Theory*, and others appear in a smaller proportion, but still provide additional perspectives on supporting factors such as innovation, institutional environment, and social networks that also affect the growth of MSMEs.

Overall, the results of this analysis show that research on the productivity and growth of MSMEs emphasizes the integration between the quality of human resources, internal resource management, and organizational adaptability. The combination of these three aspects is the main key in improving the performance of MSMEs, as well as showing that business growth does not only depend on economic factors alone, but also on strategic capabilities in managing and developing their potential.

3.2. Implications of *Human Capital* on the Productivity and Growth of MSMEs

The results of the literature synthesis show that *human capital* have a very strategic role in increasing the productivity and growth of MSMEs through various mechanisms, both directly and indirectly. Human capital contributes to increasing efficiency and productivity through improving the quality of knowledge, skills, and capabilities of the workforce. Individuals with higher levels of education and competence are able to improve production efficiency as well as encourage innovation in business processes. This is in line with the findings of a study in China that shows that improved quality *human capital* can increase productivity through improved technology and innovation capabilities (Hou & Liu, 2025). These findings reinforce that in the context of developing countries with rapid economic growth, *human capital* is the main factor in driving company productivity. *Human capital* plays a role in strengthening innovation and resilience, which ultimately encourages the growth of MSMEs. Innovative human capital is able to be a link in the transfer of knowledge and technology so as to improve the organization's ability to deal with changes in the business environment. Research in China shows that *innovative human capital* significantly improve supply chain resilience through increased adaptability and organizational flexibility (Zhou et al., 2025). This shows that in a competitive economic context, human capital plays a key role as the main driver of sustainability and business growth.

Human capital has an indirect influence on performance through the role of innovation mediator. *Human capital* that is good encourages the creation of *innovation capability*, which then has an impact on improving organizational performance. This is supported by a study in Indonesia that found that human capital has a direct effect on performance and indirectly through *innovation capability* as a mediation variable (Hafiluddin & Widiastuti, 2025). These findings confirm that in the context of MSMEs in developing countries, innovation is an important pathway that connects *human capital* with productivity and business growth. *Human capital* It is also influenced by external environmental contexts, such as national conditions and government policies, which also determine its effectiveness in improving performance. Cross-country studies covering 20 countries/global regions show that *human capital* at the state level affects the relationship between the work system and organizational performance, especially through the aspects of training and development (Zhai et al., 2025). This shows that the effectiveness of human capital is not universal, but highly depends on the institutional conditions and level of economic development of a country.

Nevertheless, *human capital* play a role in improving adaptability to environmental changes, which is very important for the sustainability of MSMEs. Studies in Indonesia show that education and training as part of human capital significantly improve adaptability to climate change and other external conditions (Prayitno et al., 2025). This indicates that

human capital not only has an impact on productivity, but also on the ability of businesses to survive and thrive in conditions full of uncertainty.

3.3. Implications of *Resource Based View* on Productivity and Growth of MSMEs

The results of synthesis from various empirical studies show that *Resource-Based View* (RBV) explained that the productivity and growth of MSMEs are highly determined by the ability to manage and utilize their strategic resources, both internal and external. The implementation of RBV emphasizes that valuable, scarce, difficult to replicate, and irreplaceable resources are the main basis for the competitive advantage of MSMEs. Studies on business clusters in Ghana show that the attractiveness of resources in a business ecosystem encourages collaboration, which in turn increases *knowledge sharing dan innovation* as the main factor in improving business performance (Kobina et al., 2026). These findings indicate that access to external resources through strategic networks can significantly increase the productivity of MSMEs.

In the context of developing countries, RBV emphasizes not only the ownership of resources, but also how those resources are used dynamically. Studies in Indonesia show that investment in human capital and the use of digital platforms as strategic resources do not directly improve performance, but through the process of digital innovation as the main driving mechanism (Safitri et al., 2026). This shows that the productivity of MSMEs is highly dependent on the ability to orchestrate resources into valuable innovations. However, RBV also highlights the importance of a combination of resources and capabilities in improving business resilience and sustainability. A study in Bangladesh found that internal resources such as flexibility, commitment, and adaptability are important factors in building *organizational resilience*, which ultimately has an impact on improving performance and business growth (Uddin & Fakhrul, 2025). This shows that MSMEs that are able to manage resources effectively will be better able to survive and thrive in uncertain environmental conditions. Viewed from the dynamic market context, RBV explained that technology capabilities as part of strategic resources have an important role in creating value and increasing productivity. A study on manufacturing MSMEs in Ghana shows that *technological capabilities* significantly improve *value creation*, both directly and through business model innovation (Osei et al., 2025). This shows that the ability to utilize technology is a key factor in encouraging the growth of MSMEs, especially in the digital era.

Viewed in a cross-country perspective, RBV shows that resource effectiveness is not universal, but highly dependent on cultural and environmental contexts. Studies across 15 countries (global) show that the value and utilization of resources in MSMEs are influenced by national culture, especially in determining internationalization strategies and business growth (Aïssaoui et al., 2025). This indicates that resource-based strategies must be tailored to the local context in order to have an optimal impact on productivity and growth.

3.4. Implications of *Dynamic Capability* on the Productivity and Growth of MSMEs

Dynamic Capabilities Theory explained that the success of MSMEs in increasing productivity and growth does not only depend on resource ownership, but on the ability to dynamically integrate, build, and reconfigure resources in the face of environmental

changes. *Dynamic capabilities* It plays a key role in directing organizational change in a sustainable manner. Studies on traditional sector MSMEs in China show that sensing, seizing, and reconfiguring capabilities allow companies to adapt to technological changes through gradual processes such as exploring, scaling, optimizing, and sustaining (Xiang et al., 2026). This confirms that the productivity of MSMEs increases when they are able to dynamically adjust their strategies and operations to digital changes. *Dynamic capabilities* It also serves as a link between market capabilities and company performance. A study of companies in South Korea found that sensing and seizing capabilities significantly improve performance through market positional advantage (Lee & Shin, 2026). These findings show that MSMEs that are able to read market changes and respond quickly will have higher productivity and growth than passive ones.

In the context of digitalization and innovation, *dynamic capabilities* is a key factor in improving innovation performance. A study on high-tech SMEs in China shows that *dynamic capabilities* act as a mediator between *digital maturity dan innovation performance* (Jie et al., 2025). This indicates that the increase in the productivity of MSMEs does not only come from the adoption of technology, but from the ability of organizations to manage and adapt these technologies strategically. In developing countries, *dynamic capabilities* It plays an important role in transforming resource investment into real business performance. Studies on the creative economy sector in Indonesia show that digital innovation as a form of *dynamic capability* be the main mechanism that connects *human capital* and technology with *business performance* (Safitri et al., 2026). In other words, MSMEs that are able to develop digital innovation capabilities will be more effective in increasing productivity and business growth.

Across contexts, *dynamic capabilities* emphasizing the importance of continuous learning processes and organizational adaptation. Studies have shown that the ability to continuously update competencies, respond to market changes, and integrate internal and external resources are the main factors that determine the success of MSMEs in dealing with the uncertainty of the business environment (Jie et al., 2025; Xiang et al., 2026). This reinforces that the growth of MSMEs is dynamic and highly dependent on the adaptive capabilities of the organization.

3.5. The Implications of Value Co-Creation on the Productivity and Growth of MSMEs

Value Co-Creation emphasizes that the productivity and growth of MSMEs does not only come from internal resources, but from active collaboration with various stakeholders in creating shared value. *Value co-creation* enabling MSMEs to access resources that were previously not owned through strategic collaboration. Studies on the cloud computing ecosystem in the United Kingdom & Europe show that alliances between companies enable the integration of knowledge, reputation, and global networks thereby enhancing innovation capabilities and competitive advantage (Jyoti & Efpraxia, 2023). This indicates that MSMEs can increase productivity by utilizing external resources through partnerships. *Value co-creation* play an important role in increasing innovation and sustainable performance of MSMEs. Study-based *systematic review* in the Indonesian & global context shows that the involvement of multi-stakeholders—such as customers, suppliers, and institutions—is able to improve the economic and environmental performance of MSMEs through mechanisms

knowledge sharing and *resource pooling* (Giordino et al., 2025). These findings confirm that collaboration is a key factor in driving sustainable business growth.

In empirical studies, *value co-creation* strengthening the ability of MSMEs to create value through technology integration and business model innovation. A study on manufacturing MSMEs in Ghana shows that *value creation* increases when companies combine technological capabilities with business model innovations that involve interaction with customers and markets (Osei et al., 2025). This shows that collaboration with external stakeholders accelerates the transformation of value into real performance

4. CONCLUSION

Based on the results of a synthesis of 30 scientific articles dominated by internationally reputable journals (Scopus Q1), this study compiles a comprehensive analysis of the role of human capital in increasing the productivity and growth of MSMEs. The study focuses on how the quality of human resources, capabilities, and digitalization support contribute to driving business performance, especially in the micro, small, and medium enterprises sector in various country contexts.

The results of the synthesis show that most studies identify a positive relationship between human capital and increased productivity and growth of MSMEs, either directly or through mediation variables such as *Resource Based View*, *Dynamic Capability*, and *Value Co-Creation*. Human capital has proven to be a key factor in improving operational efficiency, innovation capabilities, and the competitiveness of MSMEs. In addition, digitalization support, such as the use of digital technology and business platforms, strengthens the role of human capital in encouraging productivity and business expansion.

However, not all studies show completely consistent results. A small number of studies showed conditional or insignificant results, which were generally influenced by limited quality of human resources, low digital literacy, and limited access to technology and funding. This shows that the role of human capital in increasing the productivity and growth of MSMEs is highly dependent on the internal readiness of business actors and external environmental support.

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