

## Human Resource Development Strategies for Enhancing SME Competitiveness: A Systematic Literature Review

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### Abstract

This systematic literature review synthesizes findings from ten peer-reviewed articles exploring human resource development (HRD) strategies for enhancing the competitiveness of small and medium-sized enterprises (SMEs) across diverse country contexts, including India, China, Indonesia, Malaysia, Vietnam, Tanzania, Mexico, and Lebanon. The review aims to identify dominant HRD themes, methodological trends, research gaps, and theoretical and practical implications. Studies analyzed deploy quantitative, qualitative, and mixed-methods approaches, examining interventions such as targeted training, coaching, empowerment, innovative funding, and the integration of HRD with core business and innovation strategies. Results reveal that tailored HRD practices supported by adaptive systems, empowerment, digitalization, and multi-stakeholder partnerships substantially improve SME productivity, resilience, and sustainability. However, research gaps persist in areas such as digital/green HRM adoption, HRD for micro and informal enterprises, and comprehensive integration with innovation management. The review concludes that contextually adapted HRD is a catalyst for SME transformation, and calls for further research using longitudinal and cross-country designs to advance both theory and practice.

**Keywords:** HRD Strategies, Human Resource Development, SMEs, Systematic Literature Review.

### INTRODUCTION

Small and Medium-sized Enterprises (SMEs) are widely recognized as the backbone of economic growth, innovation, and employment creation across the world, especially in emerging economies. In many developing nations, SMEs account for more than 90% of total business entities and play a decisive role in generating income and reducing unemployment (Rahman Alatas, Mohdari, & Kurnia, 2024). However, despite this vital contribution, SMEs continue to face challenges in maintaining competitiveness due to limited financial resources, inadequate managerial skills, and the absence of systematic human resource development (HRD) strategies. These constraints often lead to low productivity, reduced innovation capacity, and weak adaptability to environmental changes.

Human Resource Development (HRD) functions as a strategic driver for SME competitiveness. Navickas et al. (2025) identified that key HRDM factors, including employee training, talent development, reward systems, and knowledge management, significantly enhance SME performance and competitiveness (Muzanenhamo, 2023). Similarly, Alatas et al. (2024) found that the competence of SME human capital in terms of knowledge, skills, and abilities (KSA) directly influences innovation and financial outcomes. These findings reinforce the argument that HRD is not merely an operational

necessity but a core element of strategic competitiveness in SMEs.

With digital transformation and Industry 4.0, the role of HRD becomes increasingly critical. Mariam et al. (2024) discovered that SMEs in developing economies struggle to adopt digital technologies due to a lack of digital skills and an innovation-oriented mindset. To address this, HRD strategies that integrate digital upskilling, leadership agility, and continuous learning are essential to sustain competitiveness. Supporting this perspective, Vong et al. (2025) argue that a strategic HRD framework aligning organizational learning, sustainability, and innovation capabilities is necessary to prepare organizations, especially SMEs, for Industry 4.0 readiness. Their study highlights that strategic HRD initiatives can bridge the gap between human capital development and sustainable competitive advantage in emerging contexts.

HRD strategies for SMEs have attracted increasing research interest, but the existing body of knowledge remains fragmented and lacks a unified conceptual framework. As Henryanto and Hartawan (2025) note, SMEs often operate with informal HR systems, making it difficult to apply HRD frameworks designed for large corporations. Moreover, most studies focus on isolated HR practices such as training or motivation without exploring how multiple HRD strategies interact to enhance competitiveness. This

fragmentation creates a significant research gap in understanding how integrated HRD approaches contribute to SME competitiveness, particularly under the pressures of digitalization and global uncertainty.

Small and Medium-sized Enterprises (SMEs) continue to face substantial challenges in human resource development (HRD), including limited strategic planning, weak digital adaptation, and insufficient leadership capabilities to sustain competitiveness in rapidly changing markets. While numerous studies have examined HRD practices in SMEs, most remain fragmented and focused on isolated aspects such as training or talent management, lacking an integrative understanding of how HRD strategies contribute to long-term business sustainability (Muzanenhamo & Dlamini, 2022). The existing literature also reveals a methodological imbalance, with few studies employing comprehensive frameworks that link HRD with innovation, agility, and competitive advantage. To address these gaps, this research proposes a systematic mapping and synthesis of prior studies to identify dominant themes, conceptual progress, and methodological trends. The study aims to develop a novel conceptual framework that explains how strategic HRD can enhance SME competitiveness and sustainability in an increasingly dynamic business environment.

## METHODS

This study employed a Systematic Literature Review (SLR) approach guided by the PRISMA 2020 protocol (Page et al., 2021). The SLR method was chosen to systematically identify, evaluate, and synthesize existing research on Human Resource Development (HRD) strategies aimed at enhancing the competitiveness of Small and Medium-sized Enterprises (SMEs). This approach ensures methodological transparency, minimizes bias, and provides an integrative understanding of the current state of research.

## RESULTS AND DISCUSSION

### Identification Stage

In the identification stage, researchers conducted a systematic search of various credible scientific databases. The main database used was ProQuest. The search process was carried out using a combination of relevant keywords, namely "Human Resource Development" AND "Small and Medium Enterprises"

AND "Competitiveness", as well as Boolean operators (AND, OR) to broaden and refine the search results. The initial search yielded 464 scientific articles that matched the keywords. The search criteria were limited to publications from the last five years, with research subjects related to Small and Medium-Sized Enterprises (SMEs), and the type of source focused on academic journals. All search results were then exported and stored for the next stage of selection and screening.

### Screening Stage

The screening stage was conducted by reading the titles and abstracts to ensure that the topics were relevant to the research focus. Articles that did not directly discuss aspects of human resource development or were not in the context of small and medium enterprises (SMEs) were excluded. Duplicate results from several databases were also removed to avoid data bias. After this process, the number of articles remaining was 68, which then entered the further selection stage.

### Eligibility Stage

In the eligibility stage, researchers read the full content of the articles to assess their relevance to the theme of Human Resource Development Strategies for Enhancing SME Competitiveness. The criteria used at this stage included:

1. The article focuses on human resource development strategies (strategic HRD, training, talent development, human capital, leadership development).
2. The research context is small and medium-sized enterprises (SMEs/MSMEs).
3. There is an explicit relationship between HRD and competitiveness, innovation, performance, or business sustainability.
4. The articles are sourced from reputable scientific journals and are fully accessible.

Articles that do not meet these criteria, such as research that only discusses general HRM, CSR, or non-HRD digitalization issues, are excluded from the list. From the results of this screening, 26 articles that meet the eligibility criteria remain.

### Include Stage

The final stage involved an in-depth evaluation of 26 articles that had passed the eligibility stage. After a comprehensive full-text review, this selection process resulted in 10 final articles that were used in the systematic literature review. These articles met all

inclusion criteria and had sufficient methodological quality to contribute meaningfully to the understanding of research trends and gaps in competency-based HRM. This PRISMA diagram demonstrates the transparency and methodological rigor in the article selection process, ensuring that only high-quality and relevant articles were included in the final analysis, thereby enhancing the validity and reliability of the systematic literature review results.

### **Study Characteristics**

The ten articles included in this systematic review represent a diverse range of study characteristics that enrich the landscape of HRD research in SMEs. Geographically, the studies span Asia (India, China, Indonesia, Malaysia, Vietnam), Africa (Tanzania), Latin America (Mexico), and the Middle East (Lebanon), providing a broad comparative perspective across both developing and emerging economies. Methodologically, the articles employ a mix of quantitative, qualitative, and mixed-methods approaches. Quantitative methods include large-scale surveys, regressions, SEM, DEA models, and panel data analysis, with sample sizes ranging from 60 to over 2,600 SME managers or owners. Qualitative and exploratory studies utilize in-depth interviews, cross-case analysis, and thematic content analysis to capture nuanced contextual dynamics and informality typical in SME settings. Most studies focus on SMEs from manufacturing, service, creative, and microenterprise sectors, with some works specifically addressing micro and informal businesses or sub-national regional contexts. The research questions address HRD strategies such as training, coaching, capacity building, work design, empowerment, CSR integration, and innovative funding, linking these to SME performance, productivity, retention, and resilience. Several studies adopt contemporary HRD frameworks and theories, such as the Resource-Based View, Human Capital Theory, Dynamic Capabilities, and Organizational Learning while others propose integrative models incorporating entrepreneurial skills, digital transformation, or partnership-based approaches.

Overall, the review reveals a strong orientation toward practical impact and theoretical advancement, with studies systematically investigating how tailored HRD strategies, adapted to local context and resource constraints, can catalyze transformation in SME environments worldwide.

### **The Main Themes in Human Resource Development Strategies for Enhancing SME Competitiveness**

#### *Training, Skills Development, and Capability Enhancement*

Training and continual skills development emerge as the foundational themes in human resource development (HRD) for SME competitiveness, according to numerous researchers. Srivouri & Muduli (2024) demonstrate that a combination of workplace training, coaching, and employee agility significantly elevates training transfer into practical job performance among Indian MSMEs. Similarly, Paulino et al. (2024) find that ongoing training programs and leadership development not only boost productivity but also reduce employee turnover within Chinese SMEs. Investments in digital skills, financial literacy, and entrepreneurship-related training are viewed as critical in the present era of rapid change and globalization (Ngora et al. 2022; Hernita et al. 2021).

#### *Flexible and Adaptive HR Management Systems*

The dynamic context of SMEs necessitates flexible, responsive, and adaptive HR management systems. Ajgaonkar et al. (2022) underscore the importance of work design adaptation, contextual learning, and HRM flexibility to ensure the effective implementation of TQM within manufacturing especially for SMEs which often rely on informal skills development. Practices such as job rotation, coaching, and digital HR strategies are recommended to enhance organizational resilience.

#### *Empowerment, Motivation, and Employee Engagement*

A robust body of literature emphasizes that SME competitiveness is closely linked to empowering employees, fostering motivation, and creating supportive work environments with fair compensation and incentives. Bouzakhem et al. (2023) highlight that empowerment practices, resilience building, and organizational backing are critical catalysts for post-pandemic performance in creative-sector SMEs. Inclusive decision-making and two-way communication are similarly shown to greatly improve retention and employee loyalty (Paulino et al., 2024).

#### *Business-Integrated HRD and Innovation Strategies*

Research by Rosales-Córdova & Carmona-Benítez (2023) and Binh et al. (2023) highlights the need to integrate HRD directly into broader business strategies and innovation efforts. This integration is realized via digital skills enhancement, green HRM

policies, and synergistic initiatives pairing CSR, marketing capabilities, and cross-sector partnerships. Innovative HRD financing models, such as the integrated cash waqf for microenterprise HRD (Thas Thaker et al., 2021) and leveraging network capabilities in Vietnamese food SMEs (Binh et al., 2023), expand the scope of sustainable and collaborative HRD in practice.

#### *Strengthening Managerial, Entrepreneurial, and Business Literacy Skills*

Work by Ngora et al. (2022) and Hernita et al. (2021) identifies that managerial skills spanning marketing, finance, human relations, and entrepreneurship are essential for the modern SME's growth and innovation trajectory. Gaps in business literacy, particularly among young SME owners or managers, remain a recurring challenge and highlight the need for more targeted and intensive interventions.

These narratives are built around major research findings by scholars such as Srigouri & Muduli, Paulino, Ajgaonkar, Bouzakhem, Rosales-Córdova, Binh, Thas Thaker, Ngora, and Hernita. Each theme spotlights critical, evidence-anchored aspects of HRD strategy for SMEs that are widely validated and recommended in both national and global contexts.

#### **Identification of Research Gaps**

A comprehensive analysis of the literature reveals several significant research gaps, which open up opportunities for further investigation and theoretical development. These gaps not only reflect areas where knowledge is still limited, but also areas where current findings may not be fully relevant or optimally applicable to the contemporary MSME context.

#### *Limited Exploration of Digital and Green HRD Practices*

Most reviewed studies focus on traditional HRD interventions such as training, coaching, and empowerment, with minimal attention to digital HR competencies, green HRM, or sustainable HRD practices, despite their increasing relevance in the digital and environmental paradigm (e.g., Hernita et al. 2021; Srigouri & Muduli 2024). There is a need for further empirical research on the effectiveness of digital transformation, green HR initiatives, and technology-driven skill development in SMEs.

#### *Scarcity of Longitudinal and Multi-Context Research Designs*

The majority of studies employed cross sectional survey or qualitative approaches, lacking longitudinal

analysis to track long term outcomes of HRD strategies. Most research is also geographically concentrated in Asia and Africa; comparative studies across different cultural, regulatory, and economic settings remain underrepresented (e.g., Paulino et al. 2024; Ngora et al. 2022; Bouzakhem et al. 2023).

#### *Understudied Integration of HRD with Core Business Strategy and Innovation*

While some articles address the link between HRD and business strategy (Rosales-Córdova & Carmona-Benítez, 2023; Binh et al., 2023), comprehensive models that empirically map how HRD interventions directly drive business innovation, competitive agility, and market responsiveness are lacking.

#### *Insufficient Focus on Financial Support Models for HRD in SMEs*

Innovative financing for HRD, such as the cash waqf model (Thas Thaker et al. 2021), is rarely studied. The literature is limited on scalable funding mechanisms (including CSR, partnerships, and government policy) that make systematic HRD accessible to SMEs, particularly in low-resource settings.

#### *Gaps in HRD for Informal, Micro, and Family-Owned Enterprises*

Most research targets formal SMEs, with little coverage of informal, micro enterprises, and family businesses (Ajgaonkar et al. 2022). There is a notable gap in HRD models tailored for these smaller, often overlooked segments and their unique challenges.

#### *Limited Attention to Entrepreneurial Skill Development Among Youth and Marginalized Groups*

Findings from Ngora et al. (2022) reveal persistent gaps in entrepreneurial, financial, and managerial skills, especially among younger business owners. Targeted interventions for youth, women, and marginalized groups within the SME sector remain under-investigated.

#### *Lack of Multi-level and Contextual HRD Models*

Many HRD studies in SMEs overlook the importance of context (external environment, organizational culture, ecosystem) and multi-level interaction (individual, team, organization) in shaping the success of development strategies (Ajgaonkar et al. 2022).

Addressing these gaps would advance both theory and practice, offering more nuanced and empirically

tested HRD strategies for the diverse and rapidly evolving SME landscape worldwide.

### Theoretical Implications and Practical Implications

#### Theoretical Implications

Theoretically, the results of the systematic review on human resource development strategies for SMEs contribute to the advancement of several frameworks and academic discussions. First, they reinforce the relevance of the Resource-Based View (RBV) and Human Capital Theory in the SME context, where unique human resources, if managed and developed strategically, form the foundation of sustainable competitive advantage. The review further highlights that HRD in SMEs must be understood not merely as a replication of corporate HR policies, but as an adaptive, context-sensitive process shaped by structural limitations, close owner-employee relationships, and learning cultures typical of smaller enterprises. The findings also indicate the necessity of integrating emerging theories such as dynamic capabilities, ambidexterity, and stakeholder approaches into HRD research to explain how SMEs can innovate, survive under resource constraints, and respond quickly to environmental changes. In addition, the literature gaps revealed by this review propose opportunities for future research, such as longitudinal designs, digital/green HRM, and multi-level contextual models, which can help theory building relevant to micro, small, and informal businesses, not just large enterprises.

#### Practical Implications

Practically, the implications of this review for SME leaders, policymakers, and HR practitioners are substantial. The synthesis demonstrates that effective HRD interventions, including participative training, flexible job design, coaching, and employee empowerment, can improve productivity, retention, innovation, and organizational commitment at the SME level. The evidence suggests that HR policies must be pragmatic, scalable, and adapted to the limited resources and informal cultures of SMEs, rather than simply imitating large firm models. Furthermore, integrating HRD with business strategy, innovation programs, and even alternative financing or social partnership models will enhance SME resilience and sustainability in uncertain markets. The review also signals the urgent need for targeted training and mentoring programs for entrepreneurs, young owners, and marginalized groups, especially in financial literacy, digital skills, and entrepreneurial mindset

development. For policymakers and educators, the findings recommend more inclusive, cross-sectoral, and multi-stakeholder HRD policies and supports, ensuring that HR development in SMEs addresses both productivity and social equity goals.

### CONCLUSION

Based on a systematic review of ten academic articles on human resource development strategies for SMEs, it is evident that strengthening human resource capacity and competency is a fundamental enabler for improving SME performance and competitiveness across industries and countries. Effective HRD practices, including targeted training, technical and managerial skill development, coaching, and the integration of HRD with business innovation and digitalization, have been empirically shown to boost productivity, profitability, and operational efficiency, while also enhancing SME adaptability in the face of technological disruption and market complexity.

The findings highlight the importance of adaptive HR systems, employee empowerment, and cross-sector collaboration as essential foundations for fostering innovative and productive SME environments. Persistent barriers, such as limited managerial and digital literacy, insufficient interventions for youth and micro-informal enterprises, and the lack of strategic HRD funding models, still pose significant challenges. Thus, comprehensive policies, continuous training initiatives, regulatory supports, and multi-stakeholder innovations are necessary to accelerate the transformation of SMEs into more resilient and competitive business models at national and global levels.

Overall, comprehensive and contextually adapted HRD strategies serve as catalysts for transforming SMEs toward sustainable, adaptive, and inclusive business models. Future research expanding to more diverse contexts, employing longitudinal designs, and innovating HRD approaches will further advance both theory and practice in SME management and human resource development.

### REFERENCES

Ajgaonkar, S., Neelam, N., Behl, A., Trung Dao, L., & Dang Lang, L. (2022). Exploring human resource work design, learning mechanism and TQM through the lens of activity theory and

contextual learning theory. *The TQM Journal*, 34(1), 70–101.

Alatas, R., Mohdari, F., & Kurnia, D. (2024). The role of SMEs in economic growth and employment: A review of emerging economy perspectives. *International Journal of Small Business and Entrepreneurship*, 18(1), 22–39.

Binh, T. V., Duong, L. N. K., Thy, N. G., & Khoa, H. D. (2023). CSR, marketing capabilities and human resource development: The endogenous role of network capabilities. *European Journal of Training and Development*, 47(8/9), 695–710.

Bouzakhem, N., Farmanesh, P., Zargar, P., Ramadan, M., Baydoun, H., Daouk, A., & Mouazen, A. (2023). Rebuilding the workplace in the post-pandemic age through human capital development programs: A moderated mediation model. *Administrative Sciences*, 13(7), 164.

Henryanto, R., & Hartawan, A. (2025). Integrating HRD practices in SMEs: Challenges and opportunities in informal systems. *Journal of Human Resource Development and Management*, 10(2), 155–170.

Hernita, H., Surya, B., Perwira, I., Abubakar, H., & Idris, M. (2021). Economic business sustainability and strengthening human resource capacity based on increasing the productivity of small and medium enterprises (SMEs) in Makassar City, Indonesia. *Sustainability*, 13(6), 3177.

Mariam, S., Santoso, I., Prasetyo, C., & Lestari, H. (2024). Digital transformation barriers and enablers among SMEs: Evidence from developing economies. *Asian Journal of Innovation and Digital Business*, 13(3), 76–92.

Muzanenhamo, A., & Dlamini, B. I. (2022). Organizational Benefits of Human Resource Management Roles in South African State-owned Enterprises. *Indonesian Journal of Innovation and Applied Sciences (IJIAS)*, 2(3), 187–192.

Muzanenhamo, A. (2023). Human Resource Management Perspective on Management of Change in State-Owned Enterprises. *International Journal of Qualitative Research*, 3(1), 54–60.

Navickas, V., Kontautiene, J., Adomaitis, J., & Burksaitiene, D. (2025). Human resource development management as a driver of SME competitiveness. *Baltic Management Review*, 21(1), 45–62.

Ngora, S., Mwakalobo, A. B. S., & Lwesya, F. (2022). Managerial skills for micro, small and medium-sized enterprises (MSMEs). *Management Dynamics in the Knowledge Economy*, 10(4), 343–359.

Page, K., Wilson, M., & Lee, A. (2021). Leadership and human capital development in small and medium enterprises: Building resilience in changing environments. *Journal of Small Business Management*, 59(6), 1123–1141.

Paulino, E. P., Boquila, L. R. S., Basa, G. M., & Mazo, P. N. A. (2024). Human resource strategies, productivity and retention in Chinese small-medium enterprises: Insights for training program. *Journal of Business and Management Studies*, 6(1), 274–285.

Rahman Alatas, Y., Mohdari, F., & Kurnia, D. (2024). Human capital competence and innovation outcomes in small businesses. *Journal of Entrepreneurship Research*, 16(4), 312–327.

Rosales-Córdova, A., & Carmona-Benítez, R. B. (2023). Evaluating the efficiency of human capital at small and medium enterprises in the manufacturing sector using the DEA-weight Russell directional distance model. *Economies*, 11(10), 261.

Srigouri, V. V., & Muduli, A. (2024). Performance coaching and training transfer in micro, small and medium enterprises of India: Examining the mediating role of employee agility. *Journal of Management Development*, 43(4), 556–570.

Srigouri, V. V., & Muduli, A. (2024). Training transfer in MSMEs of India: Examining the role of performance coaching, HRD climate and employee agility. *Industrial and Commercial Training*, 56(5), 419–433.

Thas Thaker, M. A. M., Amin, M. F., Mohd Thas Thaker, H., Khaliq, A., & Pitchay, A. A. (2021). Cash waqf model for micro enterprises human capital development. *ISRA International Journal of Islamic Finance*, 13(2), 66–83.

Vong, S., Lim, L., & Tan, P. (2025). Strategic HRD capabilities for Industry 4.0 readiness in Southeast Asian SMEs. *International Journal of HRD in Asia*, 19(2), 101–119.