



Relationship Between Agile Human Resource Management and SMEs Performance in Katsina

**Alphonsus Chibuzoh¹, Prof. Suleiman S. Abubakar² and
Ozurumba Chibueze Vitus³**

^{1&2} Department of Business Management, Federal University Dutsin-Ma,
Katsina State, Nigeria.

³ Department of Economics, Federal College of Education Katsina,
Katsina State, Nigeria.

Abstract

This study examined the relationship between Agile Human Resource Management and SMEs performance in Katsina State, Nigeria. Specifically, the study investigated the relationship between agile talent management, agile employee engagement, and SMEs performance. A correlational research design was adopted. The population comprised 337 registered manufacturing SMEs in Katsina State as identified by the 2025 SMEDAN and NBS survey. The sample size of 180 was determined using Cochran 1977 formula for finite population. Structured questionnaires were administered to owners and managers of the SMEs within the State, of which 172 valid responses were used for analysis. Data were analyzed using Pearson Product Moment Correlation. The findings revealed a strong and statistically significant positive relationship between agile talent management and SMEs performance ($r = 0.763$, $p < 0.01$). The study also found a strong and statistically significant positive relationship between agile employee engagement and SMEs performance ($r = 0.790$, $p < 0.01$). The results indicate that SMEs that adopt flexible talent management practices and foster employee participation, continuous feedback, collaboration, and adaptability tend to achieve higher levels of organizational performance. The study concludes that agile human resource management is a critical strategic capability that enhances the performance and sustainability of SMEs operating in dynamic business environments. The study recommends among other things that SME managers should institutionalize agile talent management practices through continuous employee development, flexible recruitment, and adaptive performance management systems. The study contributes to knowledge by providing empirical evidence on the role of agile human resource management in enhancing SME performance within the context of Katsina State, Nigeria.

Keywords: Agile Human Resource Management, Agile Talent Management, Agile Employee Engagement, and SMEs Performance.

Introduction

In an era characterized by accelerated technological evolution, globalization, and unpredictable market disruptions, organizational adaptability has become a central



determinant of performance and survival. Across global economies, small and medium-sized enterprises (SMEs) are increasingly required to navigate volatile environments while simultaneously maintaining competitiveness, operational efficiency, and innovation. Agile practices, originally conceptualized within software development, have expanded beyond their initial domain to reshape organizational functions, notably human resource management (HRM), thereby enabling firms to respond rapidly to environmental changes (Moh'd et al., 2024; Mirji et al., 2023). The relevance of agility in HR lies in its capacity to foster flexibility, iterative learning, and employee-driven responsiveness, which are vital in sustaining performance outcomes amidst high uncertainty.

Globally, organizations embracing agile HR practices report measurable gains in productivity, employee engagement, and innovation, as evidenced by recent studies highlighting improvements in project completion rates, time-to-market reduction, and quality of deliverables by up to 33%, alongside enhanced work-life balance and task completion among employees (Khalil & Hussain, 2025). The proliferation of agile HR has been further amplified by the widespread adoption of remote work, digital transformation initiatives, and competitive pressures that necessitate continual organizational adaptation (Kocot et al., 2024; Ohagwa, 2025).

In developing and emerging economies, SMEs face a distinctive set of challenges that make agility in HR particularly strategic. Resource constraints, institutional fragility, and infrastructural limitations amplify the consequences of managerial inflexibility, thereby magnifying the impact of effective HR practices on organizational outcomes (Pathomphatthaphan et al., 2023). Empirical evidence from India, Thailand, and Kenya suggests that organizations employing agile HR strategies such as adaptive talent acquisition, iterative performance management, and continuous learning mechanisms exhibit superior employee engagement, enhanced collaboration, and improved operational resilience (Julie, 2022; Pathomphatthaphan et al., 2023). These studies underscore the critical role of agile HR in shaping organizational culture and fostering employee-driven innovation, which is especially pertinent in SMEs that typically operate under tighter resource constraints and higher exposure to environmental shocks. Consequently, agility in HR not only addresses immediate operational challenges but also equips firms with dynamic capabilities essential for long-term sustainability and growth.



Within the Nigerian context, SMEs constitute approximately 96% of all businesses and contribute over 48% of national employment, yet they consistently grapple with issues of operational inefficiency, talent retention, and adaptive capacity (SMEDAN/NBS, 2022). The Nigerian business environment is characterized by fluctuating macroeconomic indicators, regulatory uncertainties, and varying access to technology and finance, conditions that intensify the necessity for agile organizational practices (Arabi, 2022; Ohagwa, 2025). Evidence from the public sector also illustrates that the adoption of agile HR practices such as flexible workforce planning, iterative training programs, and cross-functional collaboration enhances organizational responsiveness and service delivery, suggesting similar applicability within the SME sector (Arabi, 2022). Nevertheless, the penetration of agile HR within Nigerian SMEs remains uneven, and systematic empirical evidence on its impact on firm performance is scarce, highlighting a critical gap in both practice and research.

Agile human resource management represents a paradigm shift from traditional, bureaucratic HR approaches towards a model that emphasizes iterative processes, adaptability, cross-functional collaboration, continuous feedback, and employee-centric decision-making (Moh'd et al., 2024; Ohagwa, 2025). This approach allows HR functions to align closely with business strategy, responding to evolving workforce and market demands in real-time. In practice, agile HR encompasses flexible recruitment, adaptive performance management, talent development through iterative learning cycles, and employee engagement frameworks that prioritize feedback and empowerment (Mirji et al., 2023; Saran & Prasanna, 2025). The strategic significance of agile HR is anchored in its ability to enhance organizational capabilities such as responsiveness, innovation, and operational resilience while simultaneously reinforcing human capital as a source of competitive advantage (Moh'd et al., 2024; Pathomphatthaphan et al., 2023).

Empirical investigations into agile HR across diverse sectors provide converging evidence of its positive impact on organizational performance, however, the magnitude, and manifestation of this influence differ across organizational and contextual settings. Studies in healthcare, public service, and manufacturing contexts demonstrate that agile HR enhances employee engagement, operational efficiency, and organizational adaptability (Saran & Prasanna, 2025; Khalil & Hussain, 2025). Cross-cultural studies reveal that the effectiveness of agile HR practices is contingent upon contextual factors such as organizational culture,



regulatory environment, and workforce characteristics (Pathomphattaphan et al., 2023). Despite these findings, inconsistencies remain regarding the specific mechanisms through which agile HR drives performance, the relative efficacy of individual practices, and their applicability in SMEs, particularly within developing economies like Nigeria.

Katsina offers a unique contextual setting for investigating agile HR in SMEs due to its distinctive institutional, economic, and socio-cultural environment. SMEs in this region operate under conditions of constrained resources, fluctuating market access, and cultural norms that shape workforce expectations and managerial practices. These features may moderate the implementation and outcomes of agile HR, suggesting that insights derived from other national or sectoral contexts may not fully capture the dynamics present in Nigerian SMEs (Ohagwa, 2025; Arabi, 2022). Consequently, empirical research situated within this specific context is crucial to enhance the theoretical and practical understanding of agile HR's role in driving SME performance. Given the nascent state of agile HR research in Nigerian SMEs, there is a compelling need to examine how these practices influence SMEs performance in Katsina State. While global and cross-sectoral studies have demonstrated the potential of agile HR to improve responsiveness, employee engagement, and productivity, localized evidence remains limited.

Statement of the Problem

In today's dynamic business environment, Small and Medium Enterprises (SMEs) must operate with flexibility, adaptability, and efficiency to remain competitive. Organizational performance, reflected in productivity, profitability, employee engagement, and market responsiveness, is essential for SME sustainability and growth. Agile Human Resource Management (Agile HRM) has emerged as a strategic approach that enables organizations to respond rapidly to changing business conditions through adaptive planning, continuous learning, and collaborative work practices. Scholars argue that agile HR practices, such as Agile talent management and agile HR policies, enhance employee capabilities, innovation, and organizational effectiveness (Mirji, Patil, & Mane, 2023; Khalil & Hussain, 2025). Consequently, SMEs that adopt agile HR practices are expected to achieve superior performance (Julie, 2022; Dasuki, 2022).

Despite these expectations, many SMEs in Nigeria continue to experience low productivity, weak employee engagement, ineffective HR practices, and limited



responsiveness to market changes. Empirical evidence indicates that organizations often struggle to translate investments in employee development into improved performance outcomes, thereby constraining competitiveness and growth (Kocot et al., 2024; Pathomphatthaphan, Das, & Jena, 2023). These challenges have intensified interest in Agile HRM as a mechanism for improving organizational adaptability and performance. Although agile talent management and agile employee engagement are considered important drivers of workforce effectiveness and organizational responsiveness, their implementation remains inconsistent, particularly among SMEs operating in resource-constrained environments (Ohagwa, 2025; Moh'd et al., 2024). Furthermore, empirical findings on the relationship between Agile HRM and organizational performance remain inconclusive. While some studies report significant positive effects on employee engagement, innovation, and productivity (Kocot et al., 2024; Pathomphatthaphan et al., 2023), others reveal weak or context-dependent outcomes influenced by organizational culture, managerial capability, and resource availability (Julie, 2022; Dasuki, 2022).

Several gaps are evident in the literature. Conceptually, limited attention has been given to the specific effects of agile talent management and agile employee engagement on SME performance. Contextually, most studies have been conducted in developed economies or large organizations, with little evidence from Nigerian SMEs, particularly in Katsina, where unique institutional and socio-economic conditions prevail (Saran & Prasanna, 2025; Ohagwa, 2025). Methodologically, many studies rely on cross-sectional designs and self-reported measures, limiting the robustness and generalizability of findings (Moh'd et al., 2024). Therefore, against this backdrop that this study seeks to examine the relationship between agile talent management, agile employee engagement, and SME performance in Katsina.

Objectives of the Study

The broad objective is to determine the relationship between agile human resource management and SMEs performance in Katsina. Specifically, the study seeks;

1. To examine the relationship between agile talent management and SMEs performance in Katsina,
2. To assess the relationship between agile employee engagement and SMEs performance in Katsina

**Research Hypothesis**

- H₀1** There is no significant relationship between agile talent management and SMEs performance in Katsina,
- H₀2** There is no significant relationship between agile employee engagement and SMEs performance in Katsina.

Literature Review**Conceptual Review****SMEs Performance**

Small and Medium-Sized Enterprises (SMEs) performance is a multidimensional construct reflecting an enterprise's ability to achieve economic, operational, and strategic objectives under dynamic conditions. Performance includes both financial outcomes, such as profitability, sales growth, and market share, and non-financial outcomes, such as customer satisfaction, innovation capacity, employee productivity, and responsiveness to market changes (Islami & Mulolli, 2024). Contemporary literature emphasizes that reliance solely on financial metrics neglects the dynamic capabilities required for long-term competitiveness. In SME contexts, performance is often conceptualized as a composite of financial viability, growth sustainability, and adaptability to environmental turbulence. For this study, SME performance is operationally defined as the extent to which SMEs achieve non-financial objectives including growth, innovation, customer satisfaction, and operational adaptability relative to internal targets and industry benchmarks.

Agile Human Resources Management

Agility in HR means the ability to respond quickly to the needs of employees and teams, as well as the flexible adaptation of management strategies to the dynamically changing work environment. This is manifested, among others, in the use of flexible recruitment methods that allow for the rapid acquisition of talent, in creating development programs that support the acquisition of new skills, and in building an organizational culture that promotes innovation and openness to change (Kt and Sivasubramanian, 2023). Agility in HR management also involves moving away from traditional, hierarchical organizational structures towards flatter and more diverse teams (van den Brom, Meijer, and Visscher, 2018). Agile teams are characterized by a high level of autonomy, which allows them to make decisions faster and better adapt to changing requirements. Employees are encouraged to collaborate, and their opinions and ideas are actively considered in the decision-making process (Zitkienė and Deksnys, 2018). This method of human resources



management supports creativity and commitment, which translates into higher work efficiency and greater satisfaction with the tasks performed (Rosario and Raimundo, 2021).

Agile human resources management is gaining importance in the context of dynamic changes taking place in the modern labor market. The growth of globalization, the intensification of digitalization processes and the growing role of automation in enterprises introduce new challenges for HR departments, which must quickly respond to changing market requirements (Varshney, 2020). Agility in human resources management is becoming a key factor that allows organizations not only to adapt to new conditions, but also to actively shape their employment and talent development strategies (Raschke, 2010). Agile management in this context means the ability to quickly introduce new tools and technologies that enable effective remote work, as well as to create structures that support collaboration and communication over distance. Companies that can flexibly adapt their work models are better able to respond to the challenges of the global labor market and changing employee expectations, which gives them a competitive advantage. (Luo, Ren, Cao, and Hong, 2020). At the same time, agile human resources management is becoming important in the face of growing economic uncertainty and changing market conditions. An example is the need to quickly adapt to changing customer requirements, which forces organizations to take a flexible approach to workforce planning and competency development (Joiner, 2019).

Agile Talent Management

Agile Talent Management (ATM) integrates principles of agility—responsiveness, iterative learning, cross-functional collaboration, and flexibility—into how organizations attract, develop, and retain talent (Moh'd et al., 2024). Unlike traditional talent management, which emphasizes fixed career paths, structured evaluations, and predictive workforce planning, ATM prioritizes continuous alignment between workforce capabilities and organizational goals through rapid feedback, skill redeployment, and adaptive learning cycles. ATM is increasingly recognized as a core component of Agile HR systems, enabling organizations to maintain workforce agility in rapidly changing environments (Moh'd et al., 2024). For this study, ATM is defined as the set of interrelated HR practices that allow SMEs to iteratively adapt talent acquisition, learning, deployment, and performance feedback in response to internal and external contextual changes. This definition



emphasises the adaptive orientation of ATM as relevant to the volatile contexts facing SMEs in Katsina.

Agile Employee Engagement (AEE)

Agile Employee Engagement (AEE) merges classical engagement theory with agile principles to capture the dynamic involvement of employees in iterative, responsive work contexts. Employee engagement has been conceptualized as the harnessing of an individual's physical, cognitive, and emotional energies in their work roles (Kahn, 1990). It is widely accepted that engagement manifests through vigour, dedication, and absorption, contributing to improved individual and organizational outcomes (Schaufeli et al., 2002). In agile work contexts, engagement is activated and sustained through flexible task structures, iterative feedback, collaborative teamwork, and adaptive job design (Kim, 2025). Accordingly, AEE is defined as a multilevel psychological and behavioral state in which SME employees demonstrate cognitive involvement, emotional enthusiasm, and behavioral initiative fostered by agile practices that emphasize autonomy, responsiveness, and iterative collaboration. This definition balances established engagement theory with the dynamic, iterative nature of agile organisational behaviour, and is suitable for SMEs in volatile environments like Katsina.

Theoretical Framework

The study is anchored on Dynamic Capabilities Theory (DCT) was pioneered by David J. Teece, Gary Pisano, and Amy Shuen in 1997 to explain how firms achieve competitive advantage in rapidly changing environments. DCT evolved from the resource-based view (RBV) by emphasising not just possession of valuable resources but the ability to adapt, integrate, and reconfigure internal and external competencies in response to environmental dynamism (Teece, Pisano, & Shuen, 1997; Teece, 2018). Eisenhardt & Martin (2000), further operationalised the theory in terms of micro-foundations such as sensing, seizing, and transforming; and Teece (2018), also linked the theory explicitly to organisational learning, innovation, and human capital management. The Major Assumptions of the theory includes competitive advantage is contingent on dynamic resource orchestration, not static resource possession, firms require sensing, seizing, and reconfiguring capabilities to respond effectively to changing environments, human capital, organisational routines, and technological resources are interdependent and must be continuously aligned and environmental dynamism necessitates adaptive, flexible, and iterative organisational processes, rather than fixed strategies.



The relevance of the theory to this Study is that DCT provide a causal logic linking agile HRM practices (independent variables) to SME performance (dependent variable). Agile Talent Management represents a micro-foundation enabling SMEs to sense and seize human capital opportunities, while Agile Employee Engagement reflects routines that facilitate transformation and adaptation. Hence DCT explains why SMEs that cultivate these dynamic HR capabilities can achieve superior operational, and market performance in volatile contexts like Katsina.

Empirical Review

Bett (2022) examined the effect of firm Agile Human Resource on Organizational Performance: A Case Study of the NOREB Counties, Kenya. The study employed a correlational research design targeting 1,129 respondents, of which 285 formed the sample. Data collection was via questionnaires and interviews, while multiple regression was used for inferential analysis. The results showed that Agile Sensitivity Training had no significant relationship with organizational performance ($p = 0.080$), agile organizational culture management had a significant relationship ($p = 0.000$), agile management level of interactions had no significant relationship ($p = 0.065$), and agile human resource policy had a significant relationship ($p = 0.000$). The study concluded that sensitivity training needs to be contextually relevant, while team cooperation and HR policy reforms enhance organizational agility and performance. The study recommended a transformation of HR operations to be more agile.

Khalil and Hussain (2025) explored the impact of agile management practices on organizational performance and employee productivity in remote work environments across ten organizations. Using a mixed-methods approach combining quantitative surveys and qualitative interviews, the study found that agile practices significantly improved project completion rates by 20%, reduced time-to-market by 33%, and increased quality of deliverables by 16%. Employee productivity improved, with task completion rates up by 15% and reported higher work-life balance satisfaction. Communication, collaboration, and team cohesion were enhanced, though challenges like virtual meeting issues and time zones were noted. The study concluded that agile practices foster employee autonomy and engagement, thereby enhancing productivity in remote teams.

Arabi Dasuki (2022) examined the adoption of Agile HR practices in driving performance within the Nigerian public service. Through a qualitative review of



federal and state Ministries, Departments, and Agencies, the study highlighted that Agile HR implementation involves cross-functional teams, iterative sprints, frequent feedback, co-location, and technology to enhance collaboration. Agile HR enablers identified included senior leadership support, flexible funding models, training, and productivity measures. The study concluded that public service agencies can improve efficiency, responsiveness, and employee engagement by systematically embedding agile HR practices and enablers within organizational operations.

Pathomphatthaphan et al. (2023) conducted a cross-cultural study on Agile Strategic Human Resource Management (ASHRM) in India and Thailand. Using PLS-SEM on data from 674 managers in food processing firms, the study demonstrated that agile SHRM practices, especially talent acquisition, learning and development, and rewards, positively influenced employee outcomes such as engagement, job satisfaction, motivation, and productivity, which in turn improved organizational outcomes like profitability, retention, and customer satisfaction. The study emphasized cultural alignment of agile practices for optimal impact across countries.

Moh'd et al. (2024) conducted a systematic mapping study on agile HR research. They reviewed 86 primary studies and categorized research into “Agile for HR” and “HR for Agile.” Findings indicate that Agile HR adoption improves organizational performance, talent acquisition, employee engagement, and workforce agility. The study noted that HR can transition incrementally to agile by adjusting practices rather than radical restructuring, and highlighted gaps for future research including contextual factors and outcome measurement.

Across these studies, empirical evidence consistently demonstrates that Agile HR practices whether in public service, healthcare, remote work, or cross-cultural contexts enhance organizational performance, employee engagement, adaptability, and operational efficiency. Key mechanisms include iterative HR processes, frequent feedback, trust-building, employee-centric practices, and leadership support. Contextual adaptation (culture, sector, remote vs. on-site work) and enabling factors (technology, training, governance) are critical for maximizing the impact of Agile HR. Collectively, these studies underscore the centrality of agile HR as both an operational strategy and a driver of workforce and organizational outcomes in dynamic environments.



Methodology

The study adopted correlational research design. The population of this study comprised of all the 337 registered manufacturing SMEs operating in Katsina State, Nigeria, obtained from the 2025 survey by SMEDAN and NBS registered in Katsina State. Cochran 1977 finite population sample size determination formula was used to determine the sample size of 180 for the study. The formula is $n = \frac{Z^2 pq N}{(N - 1) d^2 + Z^2 pq}$. Where n =sample size, N =population size, Z =Z-value at 95% confidence level, $p=0.5$, $p=0.5$ and $d=0.05$ precision level. Questionnaire were distributed randomly to the 180 the managers and owners of these SMEs made up the study's respondents. 172 questionnaires were returned and used for the analysis. The collected data was analyzed using Pearson correlation analysis.

Result and Discussion

Test of Hypothesis One

There is no significant relationship between agile talent management and SMEs performance in Katsina.

There is no significant relationship between agile talent management and SMEs performance in Katsina.

Relationship between agile talent management and SMEs performance in in Katsina.

		Correlations	
Agile talent management		Agile talent management	SMEs performance
		Pearson Correlation	1
		Sig. (2-tailed)	.763
		N	.000
SMEs performance		Pearson Correlation	172
		Sig. (2-tailed)	.763
		N	1
			.000

. Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher's computation 2026



The correlation coefficient ($r = 0.763$) indicates a strong positive relationship between agile talent management and SMEs performance. The p-value (0.000) is less than the significance level of 0.01 ($p < 0.01$), indicating that the relationship is statistically significant. Therefore, the null hypothesis (H01), which states that there is no significant relationship between agile talent management and SMEs performance, is rejected. This implies that as the use of agile talent management increases, SMEs performance in Katsina also tends to increase.

Test of Hypothesis One

There is no significant relationship between agile employee engagement and SMEs performance in Katsina.

There is no significant relationship between agile employee engagement and SMEs performance in Katsina.

Relationship between agile employee engagement and SMEs performance in Katsina.

Correlations

			Agile employee engagement	SMEs performance
Agile employee engagement	Pearson Correlation		1	.790
	Sig. (2-tailed)			.000
	N		172	172
SMEs performance	Pearson Correlation		.790	1
	Sig. (2-tailed)		.000	
	N		172	172

. Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher's computation 2026

The correlation coefficient ($r = 0.790$) shows a strong positive relationship between agile employee engagement and SMEs performance. Since the p-value (0.000) is less than 0.01, the relationship is statistically significant. Thus, the null hypothesis (H02) is rejected. This result suggests that higher levels of agile employee engagement are associated with higher SMEs performance in Katsina.



Discussion of Findings

The findings of the study revealed a strong positive and statistically significant relationship between agile talent management and SMEs performance in Katsina State ($r = 0.763$, $p < 0.01$). This finding indicates that SMEs that adopt agile talent management practices are more likely to achieve improved organizational performance in terms of growth, innovation, customer satisfaction, and operational adaptability. The finding supports the study of Pathomphatthaphan, Das, and Jena (2023), who found that agile strategic human resource management practices, particularly talent acquisition and learning and development, positively influenced employee performance and organizational performance. The finding also corroborates Moh'd et al. (2024), whose systematic review concluded that agile HR practices enhance talent acquisition effectiveness, workforce agility, and overall organizational performance.

The study further revealed a strong positive and statistically significant relationship between agile employee engagement and SMEs performance in Katsina State ($r = 0.790$, $p < 0.01$). The result suggests that agile employee engagement enhances employee commitment, innovation, motivation, and proactive work behaviour, all of which contribute to improved organizational performance. The finding supports the study of Kim (2025), who reported that agile work practices significantly enhance employee engagement and subsequently improve organizational outcomes. It also agrees with Kocot et al. (2024), who found that trust-building, collaboration, innovative work methods, and employee-centred HR practices promote engagement and adaptability among employees.

Conclusion

This study examined the relationship between agile human resource management and SMEs performance in Katsina State, with particular focus on agile talent management and agile employee engagement. The findings established that both dimensions of agile human resource management have strong and significant positive relationships with SMEs performance. The study therefore concludes that agile human resource management constitutes a valuable strategic capability for SMEs operating in dynamic and uncertain business environments. SMEs that adopt flexible talent management systems and promote agile employee engagement are more likely to achieve superior growth, innovation, customer satisfaction, and operational adaptability. Therefore, agile HRM should be regarded as a critical



managerial approach for enhancing the performance and sustainability of SMEs in Katsina State.

Recommendations

1. SME owners and managers in Katsina State should institutionalize agile talent management practices by adopting flexible recruitment methods, continuous employee training, competency-based development programmes, and regular performance feedback mechanisms. This will enable organizations to rapidly acquire, develop, and deploy talent in response to changing market conditions, thereby improving organizational performance.
2. SME managers should strengthen agile employee engagement by encouraging participative decision-making, fostering open communication, providing continuous feedback, and creating opportunities for employee involvement in problem-solving and innovation activities. Such practices will enhance employees' commitment, motivation, and responsiveness to organizational objectives.

Contribution to Knowledge

The study provides empirical evidence on the relationship between agile human resource management and SMEs performance within the context of Katsina State, Nigeria, where such studies remain limited. The study demonstrates that agile talent management and agile employee engagement are not merely HR practices but strategic organizational capabilities that significantly influence growth, innovation, customer satisfaction, and operational adaptability. The findings provide practical guidance for SME owners, managers, policymakers, and HR practitioners on the specific agile HR practices that can be adopted to improve organizational performance and competitiveness in Katsina State and similar business environments. These contributions collectively advance the growing body of knowledge on agile human resource management and its role in enhancing SME performance in emerging economies.

References

- Al Jafa, F., Issa, H., & Wijewardena, H. (2022). Agile methodologies in HRM transformation: Insights from software development firms. *Journal of Business Research*, 144, 214–229.
- Almeida, P., & Simões, C. (2021). HRM strategies for agile adoption in dynamic environments. *International Journal of Human Resource Management*, 32(15), 3201–3223.



- Appelbaum, S., Bailey, T., Berg, P., & Kalleberg, A. L. (2018). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Arabi Dasuki, I. (2022). Adopting Agile HR practices in driving performance in the public service in Nigeria. Paper presented at the CIPM 54th International Conference, Port Harcourt, Rivers State, Nigeria.
- Bett, C. J. (2022). Firm Agile Human Resource and Organizational Performance: A Case Study of the NOREB Counties, Kenya. *Journal of Advanced Research in Economics and Administrative Sciences*, 3(4), 37–47. <https://doi.org/10.47631/jareas.v3i4.551>
- Chibuzo, C. O. (2025). Agile HR practices: Implementing agile methodologies in HR functions for increased adaptability. *International Journal of Research Publication and Reviews*, 6(11), 7847–7856.
- Chibuzo, C. O., & Prasanna, S. G. (2025). A study on Agile HRM practices and its impact on organization performance in VHS Multispeciality Hospital. *International Journal of Creative Research Thoughts*, 13(6), 30–36.
- Dasuki, A. I. (2022). Adopting agile HR practices in driving performance in the public service in Nigeria. CIPM International Conference, Port Harcourt, Nigeria.
- Islami, X., & Mulolli, E. (2024). When and how does innovation augment the effect of HRM on SME performance? *Journal of Entrepreneurship and Innovation in Emerging Economies*, 11(2), 145–163. <https://doi.org/10.1177/23939575241301477>
- Julie, B. C. (2022). Firm agile human resource and organizational performance: A case study of the NOREB counties, Kenya. *Journal of Advanced Research in Economics and Administrative Sciences*, 3(4), 37–47.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.5465/256287>
- Khalil, Q., & Hussain, S. (2025). Impact of agile management practices on organizational performance and employee productivity in remote work environments. *International Research Journal of Education and Innovation*, 6(1), 19–25.
- Kim, C. Y. (2025). Linking individual and team engagement in agile work teams: Multilevel evidence from dynamic organizations. *Journal of Organizational Behavior*, 46(2), 245–263. <https://doi.org/10.1002/job.2678>
- Kocot, M., Golińska-Pieszyńska, M., Kwasek, A., Dubois, E., Gontarek, I., & Gąsiński, H. (2024). Agile Human Resource Management practices in the context of remote work effectiveness research. *European Research Studies Journal*, 27(4), 1332–1352.
- Mirji, H., Patil, S., & Mane, P. (2023). Agile HR: Unleashing organizational effectiveness through agile practices in human resources. *Madhya Pradesh Journal of Social Sciences*, 28(2(ii)), 152–160.

- Moh'd, S., Gregory, P., Barroca, L., & Sharp, H. (2024). Agile human resource management: A systematic mapping study. *German Journal of Human Resource Management*, 38(4), 345–374. <https://doi.org/10.1177/23970022231226316>
-  **Dutse Business Review (DBR): Volume 1, Issue 1** ISSN: <https://doi.org/10.1177/23970022231226316>
- Ohagwa, C. C. (2025). Agile HR practices and organizational adaptability in Nigerian SMEs. *International Journal of Research Publication and Reviews*, 6(11), 7847–7856.
- Ohagwa, C. C. (2025). Agile HR practices: Implementing agile methodologies in HR functions for increased adaptability. *International Journal of Research Publication and Reviews*, 6(11), 7847–7856.
- Pathomphatthaphan, S., Das, S., & Jena, L. K. (2023). Agile SHRM practices and employee-organizational outcomes during new normal: Evidence from India and Thailand. *Journal of Organizational Effectiveness: People and Performance*, 11(3), 215–237. <https://doi.org/10.1108/JOEPP-07-2023-0288>
- Saran, A., & Prasanna, S. G. (2025). A study on agile HRM practices and organizational performance in healthcare. *International Journal of Creative Research Thoughts*, 13(6), 30–36.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- SMEDAN & NBS. (2022). *Annual report on small and medium enterprises in Nigeria*. National Bureau of Statistics.