E-ISSN: 3025-0994
Halaman 7438-7448
Volume 4 Nomor 3 Tahun 2026

Digital Human Resource Management Practices and Employee Performace in Msmes: Evidence from Kupang City

Rena Saputri Hilaria Sitanggang[1], Yunita Chrisna Riane Antonia Bere[2], Maria Karmelita Delistiani Sambang[3]

[1,2,3] Program Studi Administrasi Bisnis, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Nusa Cendana
e-mail: rena.sitanggang@staf.undana.ac.id , yunita.bere@staf.undana.ac.id , maria.sambang@staf.undana.ac.id

Abstract

This study examines the influence of digital Human Resource Management (HRM) practices on employee performance in Micro, Small, and Medium Enterprises (MSMEs) in Kupang City, East Nusa Tenggara, Indonesia. Three dimensions of digital HRM were examined The Digital Technology Implemention in HRM (X1), Digital Training and Development (X2), and Digital Performance Management (X3) on Employee Performace (Y). Based on Resource-Based View (RBV) theory, this study employed a cross-sectional quantitative survey design with data collected from 39 MSME owners and managers through a structured online questionnaire (five-point Likert scale). Data were analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS procedures, including bootstrapping 5.000 subsamples for path coefficient significance. The measurement model demonstrated adequate reliability reliability and validity across all constructs (Composite Reliability: 0.905–0.940; Average Variance Extracted: 0.655–0.757). The structural model explains 75.7% of the variance in employee performance ($R^2 = 0.757$). Bootstrapping results confirm that Digital Technology Adoption has a significant positive effect on employee performance ($\beta = 0.641$, $t = 5.274$, $p < 0.001$, $f^2 = 0.599$ [large]), supporting H1. Digital Training and Development ($\beta = -0.053$, $p = 0.645$) and Digital Performance Management ($\beta = 0.303$, $p = 0.083$) did not reach the level of significance, thus failing to support H2 and H3. These findings highlight the importance of foundational digital tools as the a critical driver of employee performance in MSMEs in Eastern Indonesian with implications for practitioners and regional policymakers in NTT.

Keywords: Digital HRM; Employee Performance; MSMEs; East Nusa Tenggara; Resource-Based View

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) serve as the backbone of Indonesia's economy, accounting for approximately 61% of gross domestic product (GDP)

and employing about 97% of the domestic workforce (BPS, 2023). In the era of the Fourth Industrial Revolution, the practice of digital human resource management (HRM) has emerged as a key factor determining the sustainability of organizational performance and competitiveness. Broadly defined, HRM involves planning, implementing, and applying digital technologies to achieve HRM objectives (Bondarouk & Ruël, 2009), enabling organizations to improve operational efficiency, reduce managerial friction, and enhance labor productivity. For Indonesian small and medium-sized enterprises (SMEs), which generally lack the organizational structure and abundant resources of large corporations, the digitization of HR processes remains under-explored, despite being a critical opportunity to build sustainable competitive advantage.

The Industry 4.0 Roadmap issued by the Indonesian government, along with various national digital transformation programs, signals a strong policy commitment to accelerating the adoption of digital technologies across the SME sector. Nevertheless, the penetration of digital human resource management (HRM) practices remains highly uneven across Indonesia; regions in Western Indonesia, particularly Java and Bali, are far more advanced than provinces in Eastern Indonesia, both in terms of digital infrastructure and digital management capacity.

East Nusa Tenggara (NTT) is one of the most geographically fragmented and economically marginalized provinces in Indonesia, comprising more than 550 islands. It is also characterized by limited infrastructure, unstable internet connectivity, and an average level of digital literacy that falls below the national average. According to the NTT Statistics Agency (2022), there are more than 300,000 registered small and medium-sized enterprises (SMEs) in the province, the majority of which are concentrated in the provincial capital, Kupang. Despite the rapid proliferation of smartphones and mobile data in recent years, NTT Province still lags behind in the systematic adoption of digital tools for business management processes. The current state of SMEs in Kupang City where the food and beverage, service, and retail sectors dominate provides a unique context for studying digital talent. There, even the introduction of basic digitalization can represent a transformative leap away from entirely verbal and paper-based human resources management systems.

The academic literature on digital human resource management (Digital HRM) has evolved rapidly over the past decade, driven by contributions from scholars such as Strohmeier (2020), Bondarouk et al. (2021), and Parry and Strohmeier (2014). In the Indonesian context, while research on the digitalization of SMEs is increasing, most empirical studies continue to focus on Java, Bali, and other urban centers in Western Indonesia. Systematic quantitative studies on the relationship between digital HRM and employee performance in the provinces of Eastern Indonesia which are primarily characterized by infrastructural constraints and geographical isolation are virtually absent from the literature. This gap is significant because the contextual factors shaping the adoption and effectiveness of digital HRM in NTT differ greatly from those in more developed regions, making it difficult to transfer insights from West Indonesia or the global context to the context of NTT.

This study aims to: (1) describe current digital HRM practices in MSMEs in Kupang City; (2) test the effect of Digital Technology Adoption (X1), Digital Training and Development (X2), and Digital Performance Management (X3) on employee performance (Y) using PLS-

SEM; and (3) generate context-specific recommendations for practitioners and regional policymakers. The research hypotheses are:

H1: Digital Technology Adoption in HRM has a significant positive effect on Employee Performance in MSMEs in Kupang City.

H2: Digital Training and Development has a significant positive effect on Employee Performance in MSMEs in Kupang City.

H3: Digital Performance Management has a significant positive effect on Employee Performance in MSMEs in Kupang City.

LITERATURE REVIEW AND THEORITICAL FRAMEWORK

Resource-Based View (RBV) Theory

The resource-based view (RBV), introduced by Barney (1991), posits that sustainable competitive advantage stems from organizational resources that are valuable, rare, imitable, and non-substitutable (VRIN). In Human Resource Management (HRM), the RBV has been widely used to demonstrate that human resources including employees' skills, knowledge, and adaptability constitute the primary source of competitive differentiation (Teece et al., 1997). The extension of RBV to digital competencies further emphasizes that an organization's ability to strategically configure and implement digital resources creates superior performance, which is not easily mimicked by competitors lacking equivalent digital competencies.

In the context of SMEs in NTT, where digitalization is still in its early stages and unevenly distributed, even the implementation of basic digital HR tools can provide a significant competitive advantage as a pioneer. This study uses RBV as its primary theoretical foundation and conceptualizes digital HR practices as a set of organizational resources and competencies that drive employee performance through better task clarity, enhanced competency development, and more systematic performance management.

Digital HRM Practices and Dimensions

Digital Human Resource Management (HRM) refers to the use of digital technologies including internet based platforms, mobile applications, cloud computing, and digital communication tools to support and carry out HRM functions such as recruitment, training, performance evaluation, and employee data recording (Bondarouk & Ruël, 2009; Strohmeier, 2020). In this study, Digital HRM is operationalized based on three reflective dimensions. First, "The application of digital technology in HRM" (X1) describes the extent to which digital tools are used for work assignments, attendance management, employee communication, and HR administration (Strohmeier, 2020). Second, digital training and development (X2) encompasses the use of digital media including YouTube tutorials, online courses, and digital learning materials to train and enhance employee skills (Bondarouk et al., 2021). Third, digital performance management (X3) refers to the use of digital tools to monitor, evaluate, and provide feedback on employee performance, including spreadsheet based KPI tracking and digital communication channels for evaluations (Parry & Strohmeier, 2014).

Employee Performance in MSMEs

Employee performance is a multidimensional concept that encompasses task performance (the ability to carry out activities defined by one's role), contextual performance

(behaviors outside one's role that support the organizational environment), and adaptive performance (the ability to adapt to changing tasks and conditions) (Campbell, 1990; Motowidlo, 2003). In the context of MSMEs, where role boundaries are flexible, resources are limited, and operational demands change rapidly, these three dimensions become particularly evident. Previous research on SMEs in developing countries confirms that HR practices, including clarity in task allocation, development opportunities, and regular feedback, are significant predictors of employee performance outcomes (Nguyen & Bryant, 2004).

Hypotheses Development

Hypothesis 1 is based on research findings indicating that the use of digital tools reduces coordination costs, enhances information clarity, and enables more efficient task allocation mechanisms that directly contribute to task execution and adaptive performance (Strohmeier, 2020; Bondarouk et al., 2021). In the context of NTT, where many micro, small, and medium-sized enterprises (MSMEs) conduct human resource management entirely verbally or on paper, the introduction of even a single digital tool can lead to a significant formalization of HR management, from which measurable performance improvements are expected. H2 is based on evidence that e-learning and digital training resources expand skill development opportunities beyond the scope of formal training budgets. Previous research has confirmed a positive correlation between access to digital training and employee skill improvement (Noe et al., 2020). However, contextual constraints in the NTT context, particularly unstable internet connections and varying levels of digital literacy, are expected to weaken this relationship. H3 is based on findings that digital performance management systems increase the frequency and objectivity of performance feedback, reduce ambiguity regarding expectations, and improve motivation (Parry & Strohmeier, 2014). However, the informal management culture commonly found in NTT's micro-enterprises limits both the implementation and resulting effectiveness of such systems as follows.

METHOD

This study employs a quantitative research design using a cross-sectional survey method based on the positivist paradigm. The study tests the causal relationship between digital HR practices (exogenous construct) and employee performance (endogenous construct) using Partial Least Squares Structural Equation Modeling (PLS-SEM), specifically a reflexive measurement model with external weight estimation in Mode A. PLS-SEM was chosen due to its suitability for predictive research, its robustness with respect to small samples, and its ability to estimate measurement models and structural models simultaneously (Hair et al., 2019; Ringle et al., 2015).

The target population consisted of owners and managers of SMEs registered in Kupang City with the Kupang City Department of Cooperatives and SMEs. The sample was selected using a targeted sampling method with a selection criterion requiring respondents to be owners or managers of SMEs in Kupang that had implemented at least one digital technology in their operations management (e.g., WhatsApp Business, social media, e-commerce platforms, or digital accounting). This criterion ensured that all respondents could evaluate the digital HRM construct in a meaningful way. A total of 39 valid responses were

collected, meeting the minimum threshold for PLS-SEM with three exogenous constructs as recommended by Hair et al. (2019).

Primary data were collected through a structured self-administered questionnaire distributed via Google Forms in 2025, shared through WhatsApp networks of local MSME communities and the researcher's professional networks in Kupang City. All 20 measurement items used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), adapted from validated Digital HRM instruments and contextualised for the MSME setting.

Data were analysed following the two-stage PLS-SEM approach recommended by Hair et al. (2019): Stage 1 evaluates the measurement model (outer model) and Stage 2 evaluates the structural model (inner model). The measurement model was assessed for indicator reliability (outer loadings ≥ 0.70), internal consistency reliability (Cronbach's α ≥ 0.70; Composite Reliability [CR] ≥ 0.70), convergent validity (Average Variance Extracted [AVE] ≥ 0.50), and discriminant validity via the Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT < 0.90). The structural model was evaluated through path coefficients, R^2, and effect sizes (f^2). Significance of path coefficients was determined via bootstrapping with 5,000 subsamples (two-tailed, α = 0.05).

RESULT AND DISCUSSION

Digital Technology Adoption and Employee Performance (H1 Supported)

The finding that the implementation of digital technologies has a strong and significant positive influence on employee performance (β = 0.641, t = 5.274, p < 0.001, F^2 = 0.599 [high]) constitutes the main empirical contribution of this study and is fully consistent with RBV theory. In the context of the city of Kupang, where many SMEs are transitioning from a management system based entirely on oral and paper-based communications to basic digital operations, the adoption of digital communication tools such as WhatsApp Business for task assignment, Instagram for coordination with customers, and Google Drive or mobile storage for human resources records, has resulted in a significant improvement in the clarity of delegation, the speed of information exchange, and the quality of human resources documentation. The improvement of these processes has a direct impact on employees' task performance, contextual contribution, and greater adaptability.

This result is consistent with Strohmeier (2020), who demonstrates that even basic digital HR information systems reduce friction in HR processes and improve the quality of human capital deployment, and with Bondarouk et al. (2021), who show that digital tool adoption in small firms enhances managerial effectiveness and employee responsiveness. The large effect size (f^2 = 0.599) is particularly notable: it indicates that the unique contribution of Digital Technology Adoption to explaining employee performance variance goes well beyond a statistical artefact. In NTT, where prior HRM was predominantly ad hoc and verbal, the formalising effect of even modest digital adoption represents a qualitative step change in management effectiveness. Qualitative open-ended responses corroborate this interpretation several respondents reported that using WhatsApp to communicate schedules and performance expectations had eliminated persistent misunderstandings that previously hampered operations.

From an RBV perspective, digital technology adoption constitutes a first-order organisational capability that is accessible to most Kupang City MSMEs given the proliferation of affordable smartphones and mobile data, yet strategically differentiates enterprises that systematically integrate these tools into HRM from those that do not. The results thus confirm that even relatively low-cost digital investments can yield disproportionate performance returns in resource-constrained MSME environments.

Digital Training and Development and Employee Performance (H2 Not Supported)

The non-significant and negligible effect of Digital Training and Development on employee performance ($\beta = -0.053$, $p = 0.645$, $f^2 = 0.005$) is a substantively important finding that is interpretable within the contextual realities of NTT. Several factors may explain why digital training practices do not translate into significant performance improvements in this sample.

First, the descriptive data reveal high variability in digital training adoption (SD = 1.023), indicating a bimodal distribution between enterprises that make extensive use of YouTube tutorials and online resources and those that have not adopted digital training at all. This polarisation, combined with the relatively small sample, may mask an underlying relationship. Second, qualitative responses from participants highlight persistent barriers to digital training effectiveness in NTT: unreliable internet connectivity disrupts continuous online learning, and uneven employee digital literacy explicitly noted by multiple respondents means that digital training materials are not uniformly accessible or effective. One respondent described the need to supplement YouTube tutorials with in-person coaching, reflecting the hybrid learning reality in this context.

Third, with 59% of enterprises being micro-scale (1–4 employees), informal on-the-job learning owner demonstration, peer instruction, and learning-by-doing may be the dominant development mechanism, rendering structured digital training an add-on rather than the primary modality. The effect of digital training on performance may become more pronounced in larger, more formalised enterprises and in settings with better internet infrastructure conditions more characteristic of Western Indonesia than Kupang. Future research should examine digital literacy and internet quality as potential moderators of the X2–Y relationship.

Digital Performance Management and Employee Performance (H3 Not Supported)

The positive but statistically non-significant path for Digital Performance Management ($\beta = 0.303$, $t = 1.788$, $p = 0.083$, $f^2 = 0.086$ [small]) warrants careful interpretation. The directional result is consistent with H3 and the theoretical predictions of Parry and Strohmeier (2014), yet statistical significance is not achieved at the $\alpha = 0.05$ level. The borderline p-value (0.083) and small-to-medium effect size suggest that the relationship may be real but is insufficiently powered to achieve significance with $n = 39$. Type II error (failure to detect a true effect) cannot be excluded, particularly given that the 95% confidence interval [−0.014; 0.653] barely crosses zero at its lower bound.

Several contextual factors may explain the attenuated effect. Digital Performance Management (M = 3.443) records the lowest mean adoption level among the three digital HRM dimensions, and the high standard deviation (1.016) reflects nascent and highly heterogeneous adoption of formal KPI-setting and digital appraisal systems. In micro-

enterprises managed personally by their owners, performance management is typically exercised through direct daily supervision and real-time verbal feedback mechanisms perceived as natural and effective without digital formalisation. The incremental value of adding digital performance management tools may thus be lower in these settings than in larger, more structurally complex enterprises. Furthermore, the predominantly informal management culture in NTT MSMEs may slow adoption of formal digital appraisal systems, limiting their realised performance effects. Future studies with larger samples and longitudinal designs should revisit H3.

Theoretical Implications. This study makes three contributions to the literature. First, it provides empirical support for the applicability of the RBV framework to digital HRM in MSME settings in geographically marginalised Eastern Indonesia, extending the scope of Digital HRM scholarship beyond Western Indonesian and global contexts. The finding that digital technology adoption as an accessible organisational resource generates a large performance effect reinforces the RBV proposition that competitive advantage arises from the strategic deployment of even basic resources where competitors have not yet adopted equivalent capabilities. Second, the study advances the "context turn" in HRM scholarship (Brewster, 2007) by demonstrating that contextual factors including digital infrastructure quality, digital literacy levels, and enterprise micro-scale are critical moderators of the Digital HRM–performance relationship that must be explicitly theorised in non-Western settings. Third, the use of PLS-SEM provides a rigorous methodological framework for simultaneous measurement and structural model evaluation in MSME digital HRM research, offering a methodological template for future studies in similar contexts.

Practical Implications. For MSME practitioners in Kupang City and NTT, the most actionable recommendation is to prioritise digital technology adoption as the foundational first step in a digital HRM transformation journey. Specifically, MSME owners are encouraged to formalise work assignment, scheduling, and HR record-keeping using widely accessible, low-cost tools WhatsApp Business groups for task instruction, Google Forms for attendance and scheduling, and cloud storage for employee documentation. For regional policymakers including the Dinas Koperasi dan UMKM and the provincial government of NTT the findings call for MSME development programmes that include structured digital literacy components, subsidised access to basic digital management tools, and sustained investment in reliable mobile internet infrastructure. The non-significance of digital training and performance management effects suggests that programmes should sequence interventions: build foundational digital tool adoption first before advancing to digital training systems and performance management platforms.

CONCLUSION

Summary of Findings

This study investigated the effects of three Digital HRM practice dimensions on employee performance in 39 MSMEs in Kupang City, East Nusa Tenggara, using PLS-SEM. The overall structural model achieves strong explanatory power ($R^2 = 0.757$), confirming that digital HRM practices are collectively powerful predictors of employee performance in this context. H1 is supported: Digital Technology Adoption in HRM exerts a significant and large-

effect positive influence on employee performance (β = 0.641, t = 5.274, p < 0.001, f^2 = 0.599), establishing foundational digital tool adoption as the primary driver of performance improvement in Kupang City MSMEs. H2 is not supported: Digital Training and Development shows a negligible and non-significant effect (β = −0.053, p = 0.645), likely attributable to contextual constraints including limited internet infrastructure, uneven employee digital literacy, and the dominance of informal on-the-job learning in micro-enterprises. H3 is not supported at the conventional significance level: Digital Performance Management shows a positive directional effect (β = 0.303) with a small effect size (f^2 = 0.086) that does not achieve statistical significance (p = 0.083), reflecting nascent adoption of formal digital appraisal systems in predominantly informally managed micro-enterprises.

Research Contributions

This study contributes to the academic literature in three ways. Theoretically, it is among the first studies to empirically test the RBV framework in the context of digital HRM in Eastern Indonesian MSMEs, extending the geographic scope of the field. Methodologically, it introduces PLS-SEM to the study of digital HRM in NTT MSMEs, providing a rigorous simultaneous measurement and structural evaluation. Practically, it generates the first evidence-based, context-specific recommendations for digital HRM investment sequencing in resource-constrained Kupang City MSMEs, with direct relevance for regional policymakers and MSME practitioners.

Limitations and Directions for Future Research

This study has several limitations. First, the cross-sectional design prevents causal inference; longitudinal studies are needed to establish temporal precedence between digital HRM adoption and performance improvement. Second, the sample of 39 respondents, while meeting minimum PLS-SEM thresholds, limits statistical power, particularly for detecting small-to-medium effects (H3). Future studies should recruit ≥ 100 respondents to increase precision and power. Third, the study is geographically restricted to Kupang City; comparative studies across NTT kabupaten or inter-provincial comparisons would enrich contextual understanding. Fourth, self-reported data introduce common-method bias; future research should supplement owner-manager perceptions with independent employee performance measures or objective productivity indicators. Future studies might also examine potential mediators (e.g., digital HRM capability, employee digital literacy) and moderators (e.g., internet quality, firm size) of the digital HRM–performance relationship in Eastern Indonesian MSME contexts, as well as consider longitudinal and experimental designs to establish stronger causal claims.

DAFTAR PUSTAKA

Alexandro, R. (2025). Strategic Human Resource Management In The Digital Economy Era: An Empirical Study Of Challenges And Opportunities Among Msmes And Startups In Indonesia. Cogent Business And Management, 12(1). Https://Doi.Org/10.1080/23311975.2025.2528436

Ali, A., Cichoń, D., & Abbas, A. (2026). AI-Driven HRM Digitization In Effect: Mechanisms, Conditions, And Employee Outcomes. Journal Of Innovation And Knowledge, 13. Https://Doi.Org/10.1016/J.Jik.2025.100919

Ali, A., Yang, Q., Ali, A., Ali, Z., & Noman, M. (2025). How And When AI-Driven Capabilities Foster Organizational Sustainability: A Moderated Mediation Analysis Of Digital Literacy And Green HRM. International Journal Of Information Management, 85. Https://Doi.Org/10.1016/J.Ijinfomgt.2025.102956

Almashyakhi, A. M. (2022). An Evidence-Based Review Of E-HRM And Its Impact On Strategic Human Resource Management. Journal Of Human Resource And Sustainability Studies, 10(03), 542–556. Https://Doi.Org/10.4236/Jhrss.2022.103033

Alshuaibi, M. S. I., Alhebri, A., Khan, S. N., & Sheikh, A. A. (2024). Big Data Analytics, GHRM Practices, And Green Digital Learning Paving The Way Towards Green Innovation And Sustainable Firm Performance. Journal Of Open Innovation: Technology, Market, And Complexity, 10(4). Https://Doi.Org/10.1016/J.Joitmc.2024.100396

Ayaz, O., Tabaghdehi, S. A. H., Rosli, A., & Tambay, P. (2025). Ethical Implications Of Employee And Customer Digital Footprint: Smes Perspective. Journal Of Business Research, 188. Https://Doi.Org/10.1016/J.Jbusres.2024.115088

Cuel, R., Ravarini, A., Imperatori, B., Antonelli, G., & Torre, T. (2025). Have HR Strategic Partners Left The Building? The (New) Role Of HR Professionals From A Social-Symbolic Perspective. Personnel Review, 54(2), 722–739. Https://Doi.Org/10.1108/PR-11-2023-0929

Dhae, Y., & Fa'ah, Y. (N.D.). Persepsi Dan Implementasi Digitalisasi Di Kalangan UMKM: Studi Empiris Dari Perspektif Pelaku UMKM Kota Kupang. Https://Doi.Org/10.38035/Jemsi.V6i3

Digital_HRM_Msmes_Kupang_NTT_Final. (N.D.).

Gautam, V., Mishra, A. A., & Maheshwari, M. (2024). Examining The Relevance Of Human Resource Management In Gig Work: A Systematic Literature Review & Research Agenda. German Journal Of Human Resource Management, 38(4), 375–412. Https://Doi.Org/10.1177/23970022241231536

Gupta, P., Lakhera, G., & Sharma, M. (2024). Examining The Impact Of Artificial Intelligence On Employee Performance In The Digital Era: An Analysis And Future Research Direction. Journal Of High Technology Management Research, 35(2). Https://Doi.Org/10.1016/J.Hitech.2024.100520

Hafeez, S., Shahzad, K., Helo, P., & Mubarak, M. F. (2025). Knowledge Management And Smes' Digital Transformation: A Systematic Literature Review And Future Research Agenda. Journal Of Innovation And Knowledge, 10(3), 1–21. Https://Doi.Org/10.1016/J.Jik.2025.100728

Homepage, J., Uta, M. J., Resi, Y., Wona, P. M., Wenggo, K. S. K., Abe, H., & Jamu, M. E. (2025). Journal Of Innovative And Creativity Analisis Pengaruh Teknologi Terhadap Pertumbuhan UMKM Di Kabupaten Ende. In Journal Of Innovative And Creativity (Vol. 5, Number 3).

Hu, J., Cheng, D., Feng, T., & Huang, S. (2026). HRM Digitalization Affordance: When Legitimate And Effective? Journal Of Business Research, 210. Https://Doi.Org/10.1016/J.Jbusres.2026.116163

Jam, F. A., Ali, I., Albishri, N., Mammadov, A., & Mohapatra, A. K. (2025). How Does The Adoption Of Digital Technologies In Supply Chain Management Enhance Supply Chain Performance? A Mediated And Moderated Model. Technological Forecasting And Social Change, 219. Https://Doi.Org/10.1016/J.Techfore.2025.124225

Laho'an, S. A. A., Frescilia Ocensiani Polin, Eufracia Placida Manek, & Enike Tje Yustin Dima. (2025a). PERAN UMKM DALAM MENDORONG PERTUMBUHAN EKONOMI LOKAL DI KOTA KUPANG. JURNAL ILMIAH EKONOMI DAN MANAJEMEN, 3(7), 129–136. Https://Doi.Org/10.61722/Jiem.V3i7.5795

Laho'an, S. A. A., Frescilia Ocensiani Polin, Eufracia Placida Manek, & Enike Tje Yustin Dima. (2025b). PERAN UMKM DALAM MENDORONG PERTUMBUHAN EKONOMI LOKAL DI KOTA KUPANG. JURNAL ILMIAH EKONOMI DAN MANAJEMEN, 3(7), 129–136. Https://Doi.Org/10.61722/Jiem.V3i7.5795

Lee, J. Y., Yang, Y. S., Ghauri, P. N., & Park, B. Il. (2022). The Impact Of Social Media And Digital Platforms Experience On SME International Orientation: The Moderating Role Of COVID-19 Pandemic. Journal Of International Management, 28(4). Https://Doi.Org/10.1016/J.Intman.2022.100950

Liu, Y., Zhang, Y., Tian, M., & Li, X. (2026). Understanding The Impact Of Digital Organizational Culture On Employees' Innovative Work Behavior. International Journal Of Information Management, 88. Https://Doi.Org/10.1016/J.Ijinfomgt.2026.103047

Luo, H., & Yao, Z. (2026). Linking High-Involvement Work Systems To Employee Voice Behavior: The Mediating Role Of Ambidextrous Learning And The Moderating Role Of Digital Leadership. Acta Psychologica, 265. Https://Doi.Org/10.1016/J.Actpsy.2026.106755

Maden Eyiusta, C., & Esen, A. (2025). Fostering Organizational Innovation In Smes Through Employee-Driven Innovation: The Role Of IB-HRM Practices And Empowering Leadership. European Management Journal. Https://Doi.Org/10.1016/J.Emj.2025.04.006

Margherita, A., Nasiri, M., & Papadopoulos, T. (2023). The Application Of Digital Technologies In Company Responses To COVID-19: An Integrative Framework. Technology Analysis And Strategic Management, 35(8), 979–992. Https://Doi.Org/10.1080/09537325.2021.1990255

Marler, J. H., & Fisher, S. L. (2013). An Evidence-Based Review Of E-HRM And Strategic Human Resource Management. In Human Resource Management Review (Vol. 23, Number 1, Pp. 18–36). Https://Doi.Org/10.1016/J.Hrmr.2012.06.002

Menzies, J., Zheng, C., & Mcdonnell, A. (2025). The Application Of HRM Systems To Enhance The Innovation Activities Of Foreign Smes. International Business Review, 34(1). Https://Doi.Org/10.1016/J.Ibusrev.2023.102249

Mollah, M. A., Amin, M. Bin, Rahman, M. M., Islam, K. M. A., Debnath, N. C., Debnath, G. C., & Oláh, J. (2026b). Synergetic Role Of Digital Leadership And Artificial Intelligence (AI) In HRM For Sustainable Performance: A Dual-Method Approach Using SEM And NCA. Telematics And Informatics Reports, 21. Https://Doi.Org/10.1016/J.Teler.2026.100303

Nongnuch, P., Thananusak, T., & Hallinger, P. (2026). SME Resilience In Response To Business Disruptions: A Bibliometric Review. Sustainable Futures, 11, 101864. Https://Doi.Org/10.1016/J.Sftr.2026.101864

Outline Artikel Digital Human Resource Management Practices And Employee Performance In Msmes. (N.D.).

Putri, A. N. A., Hermawan, P., Mirzanti, I. R., Meadows, M., & Sadraei, R. (2025). Unpacking Green Growth In Smes: A Framework For Dynamic Capabilities, Value Co-Creation, And Sustainable Performance. In Sustainable Futures (Vol. 10). Elsevier Ltd. Https://Doi.Org/10.1016/J.Sftr.2025.100840

Rudin, & Azizurrohman, M. (2025). Informal Hiring As A Strategic Workforce Practice: Evidence From Msmes In Indonesia. Journal Of The International Council For Small Business. Https://Doi.Org/10.1080/26437015.2025.2576100

Schmid, D., Bueechl, J., Härting, R. C., Beldarrain, Y., Schwörer, R., & Naeve, J. (2024). Opportunities And Barriers Of Agility And Digital Processes In HR In Smes. Procedia Computer Science, 246(C), 3605–3613. Https://Doi.Org/10.1016/J.Procs.2024.09.197

Shah, M. A. N., & Mola, L. (2026). Digital Transformation And Knowledge In Sustainable Employability: A Systematic Literature Review. Journal Of Innovation And Knowledge, 11. Https://Doi.Org/10.1016/J.Jik.2025.100855

Srivastava, S. P., & Himanshu. (2026). Examining Antecedents Of AI-Integrated Digital HRM Adoption In Indian Smes. Millennial Asia. Https://Doi.Org/10.1177/09763996251409324

Strohmeier, S. (2020). Digital Human Resource Management: A Conceptual Clarification. German Journal Of Human Resource Management, 34(3), 345–365. Https://Doi.Org/10.1177/2397002220921131

Wang, G., Mansor, Z. D., & Leong, Y. C. (2024a). Linking Digital Leadership And Employee Digital Performance In Smes In China: The Chain-Mediating Role Of High-Involvement Human Resource Management Practice And Employee Dynamic Capability. Heliyon, 10(16). Https://Doi.Org/10.1016/J.Heliyon.2024.E36026

Wiblen, S., & Marler, J. H. (2021). Digitalised Talent Management And Automated Talent Decisions: The Implications For HR Professionals. International Journal Of Human Resource Management, 32(12), 2592–2621. Https://Doi.Org/10.1080/09585192.2021.1886149

Yuan Valentino Elim, Mariano Nugraha, Zulkifly Umar, & Aprianus Ronny Modena. (2024). Dampak Dampak Digital Marketing Terhadap Kinerja UMKM Di Kota Kupang Pada Masa Pandemi Covid-19. E-Bisnis : Jurnal Ilmiah Ekonomi Dan Bisnis, 17(1), 97–110. Https://Doi.Org/10.51903/E-Bisnis.V17i1.1743

Zhang, Y., Iqbal, S., Tian, H., & Akhtar, S. (2024). Digitizing Success: Leveraging Digital Human Resource Practices For Transformative Productivity In Chinese Smes. Heliyon, 10(17). Https://Doi.Org/10.1016/J.Heliyon.2024.E36853