



Digital Transformation and Entrepreneurial Orientation: How Operational and Supply Chain Capabilities Shape Employee Performance in Creative SMEs

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ABSTRACT:

Digital transformation has become a critical strategic priority for small and medium-sized enterprises (SMEs), yet its implications for employee performance remain insufficiently understood—particularly in traditional and creative industries. Drawing on the Resource-Based View and Dynamic Capability Theory, this study examines how digital transformation and entrepreneurial orientation influence employee performance through operational efficiency and supply chain management as dual mediating mechanisms.

Using survey data from 220 employees and managers of Indonesian Batik SMEs and analysing the model with Partial Least Squares Structural Equation Modelling (PLS-SEM), the results demonstrate that both digital transformation and entrepreneurial orientation exert significant direct effects on employee performance. More importantly, these relationships are partially mediated by operational efficiency and supply chain management, indicating that strategic orientations enhance employee performance primarily by strengthening internal process efficiency and inter-organisational coordination.

This study contributes to the human resource management literature by clarifying the process-based mechanisms through which strategic digital and entrepreneurial capabilities are translated into employee-level outcomes in creative SMEs. Practically, the findings highlight the importance of aligning digital initiatives, entrepreneurial culture, and operational processes to sustain workforce effectiveness in emerging economy contexts.

KEYWORDS: Digital transformation; Entrepreneurial orientation; Employee performance; Operational capability; Supply chain management; Creative SMEs

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I. INTRODUCTION

Digital transformation has become a central concern in contemporary human resource management (HRM), reshaping how work is organised, how skills are deployed, and how employee performance is evaluated (Vial, 2019; Verhoef et al., 2021). Beyond the adoption of digital technologies, digital transformation alters organisational routines and work processes that directly influence employee behaviour and performance outcomes (Kane et al., 2015; Teece et al., 1997).

Despite growing scholarly attention to digital transformation, much of the existing research has focused on firm-level outcomes such as innovation, productivity, and competitiveness, while the mechanisms through which digital transformation shapes employee-level performance remain underexplored (Bondarouk & Brewster, 2016; Strohmeier, 2020). From an HRM perspective, employee performance is not an automatic consequence of digitalisation but depends on how strategic initiatives are embedded into daily work processes and coordination mechanisms (Strohmeier, 2020).

These challenges are particularly salient in small and medium-sized enterprises (SMEs), where limited resources, informal HR structures, and operational constraints complicate the translation of digital initiatives into consistent employee performance (Cooke et al., 2019; Harney & Alkhalaf, 2021). In creative SMEs, employees' performance is closely tied to operational routines and inter-organisational coordination rather than to formalised HR systems (Cooke et al., 2019).

Entrepreneurial orientation, characterised by innovativeness, proactiveness, and risk-taking, represents a strategic posture that shapes organisational behaviour and employee attitudes (Covin & Slevin, 1989; Lumpkin & Dess, 1996). From an HRM perspective, entrepreneurial orientation influences employee performance by fostering a work climate that encourages learning, experimentation, and proactive problem-solving among employees (Rauch et al., 2009).

Drawing on the Resource-Based View (RBV) and Dynamic Capability Theory (DCT), strategic orientations are transformed into performance outcomes when organisations effectively sense, seize, and reconfigure resources through work processes and coordination mechanisms (Barney, 1991; Teece et al., 1997; Teece, 2007). However, HRM research has paid limited attention to the process-based mechanisms through which digital and entrepreneurial capabilities are deployed to shape employee performance, particularly within SME contexts.

Operational efficiency and supply chain management represent two critical yet underexplored mechanisms in this context. Operational efficiency reflects how effectively employees are supported by streamlined workflows, standardised procedures, and digitally enabled routines that reduce inefficiencies and enable consistent performance (Teece, 2007). Supply chain management captures the coordination and relational processes through which employees interact with suppliers, artisans, and customers—an especially important factor in creative industries where production and delivery are highly interdependent (Flynn et al., 2010; Cao & Zhang, 2011). Although both constructs have been extensively studied in operations and supply chain research, their combined role as mediating mechanisms linking strategic orientations to employee performance remains largely absent from the HRM literature.

Addressing this gap, the present study develops and empirically tests a process-based model that explains how digital transformation and entrepreneurial orientation influence employee performance through operational efficiency and supply chain management. By focusing on employee-level outcomes in creative SMEs, this study responds to calls for more context-sensitive and process-oriented HRM research in emerging economy settings (Strohmeier, 2020; Cooke et al., 2019).

Based on this framework, the study addresses the following research questions:

- (1) How do digital transformation and entrepreneurial orientation influence employee performance in creative SMEs?
- (2) To what extent do operational efficiency and supply chain management mediate these relationships?
- (3) How can strategic digital and entrepreneurial capabilities be aligned with organisational processes to sustain employee performance in emerging economy contexts?

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Digital Transformation and Employee Performance

Digital transformation (DT) represents a firm's strategic effort to integrate digital technologies into all areas of business, fundamentally reshaping how value is created and delivered. Drawing on Dynamic Capability Theory, organisations that develop digital capabilities are better able to sense opportunities, seize them through timely action, and reconfigure processes to maintain competitiveness (Teece, 2018). These dynamic routines influence not only organisational outcomes but also how employees perform their work, learn, and adapt to change.

Empirical studies suggest that digital transformation enhances employee performance by automating routine tasks, improving access to information, and facilitating real-time collaboration (Margherita & Braccini, 2022; Ahmad et al., 2023). However, most prior research has examined these effects at the firm level, offering limited insight into the employee-level mechanisms through which digital transformation shapes performance. This gap is particularly salient in SMEs, where employee outcomes depend heavily on how digital initiatives are embedded into daily work processes. Accordingly, this study proposes that digital transformation positively influences employee performance.

H1: Digital transformation has a positive and significant effect on employee performance.

Entrepreneurial Orientation and Employee Performance

Entrepreneurial orientation (EO) reflects a firm's strategic posture characterised by innovativeness, proactiveness, and risk-taking (Lumpkin & Dess, 1996). From a Resource-Based View, EO constitutes a valuable and inimitable organisational capability that enables firms to generate competitive advantage (Barney, 1991). When embedded in organisational culture, EO shapes employee attitudes and behaviours by encouraging experimentation, initiative, and commitment to challenging goals.

Empirical evidence indicates that EO fosters adaptive behaviour, learning orientation, and proactive problem-solving among employees (Covin & Wales, 2019; Gupta & Bose, 2022). Despite these findings, the HRM literature has paid limited attention to how EO translates into employee performance outcomes,

particularly within SME contexts characterised by informal HR structures. Therefore, EO is expected to positively influence employee performance.

H2: Entrepreneurial orientation has a positive and significant effect on employee performance.

Operational Efficiency as a Mediator

Operational efficiency (OE) refers to a firm's ability to utilise resources effectively to minimise waste and maximise output. From a dynamic capability perspective, OE reflects an organisation's capacity to reconfigure processes and technologies in response to environmental change. Digital transformation enhances OE by streamlining workflows, automating production activities, and improving information flow across organisational functions (Nambisan et al., 2021).

From an HRM perspective, improved operational efficiency reduces role ambiguity, lowers unnecessary workload, and enables employees to focus on value-adding activities. Prior studies suggest that efficient operations are associated with higher task performance and employee commitment (Khin & Ho, 2019). However, the mediating role of OE in explaining how digital transformation translates into employee performance remains underexplored. Thus, OE is expected to mediate the relationship between digital transformation and employee performance.

H3: Operational efficiency mediates the relationship between digital transformation and employee performance.

Supply Chain Management as a Mediator

Supply chain management (SCM) involves the coordination of activities across suppliers, production units, and customers to ensure smooth material and information flows. From a strategic capability perspective, effective SCM enhances organisational responsiveness and reliability. Digital transformation supports SCM through real-time tracking, inventory management, and communication technologies (Dubey et al., 2021), while EO strengthens SCM by encouraging proactive and innovative collaboration with partners.

In SME contexts, effective SCM shapes the work environment in which employees operate by reducing uncertainty, improving coordination, and enabling timely task execution. Prior research indicates that SCM mediates the relationship between strategic orientations and performance outcomes in SMEs (Gunasekaran et al., 2017; Kock et al., 2020). Nevertheless, its role as an employee-level performance mechanism has received limited attention in HRM research. Accordingly, SCM is expected to mediate the relationship between entrepreneurial orientation and employee performance.

H4: Supply chain management mediates the relationship between entrepreneurial orientation and employee performance.

The Integrative Mediation Model

Building on the above arguments, this study proposes a dual-mediation model linking digital transformation and entrepreneurial orientation to employee performance through operational efficiency and supply chain management. Consistent with Dynamic Capability Theory, strategic orientations act as drivers, while internal efficiency and external coordination function as process mechanisms that translate strategic intent into employee-level outcomes.

By simultaneously strengthening operational routines and inter-organisational coordination, SMEs can enhance employees' task performance, creativity, and responsiveness. This integrated perspective extends HRM research by explaining how strategic and process capabilities jointly shape employee performance.

H5: Operational efficiency and supply chain management jointly mediate the relationship between digital transformation, entrepreneurial orientation, and employee performance.

Conceptual Framework

The proposed conceptual model (Figure 1) illustrates the hypothesised relationships among digital transformation, entrepreneurial orientation, operational efficiency, supply chain management, and employee performance. The model integrates insights from the Resource-Based View and Dynamic Capability Theory to explain how strategic orientations are translated into employee-level outcomes through process-based mechanisms. The Conceptual Framework can be seen in figure 1.

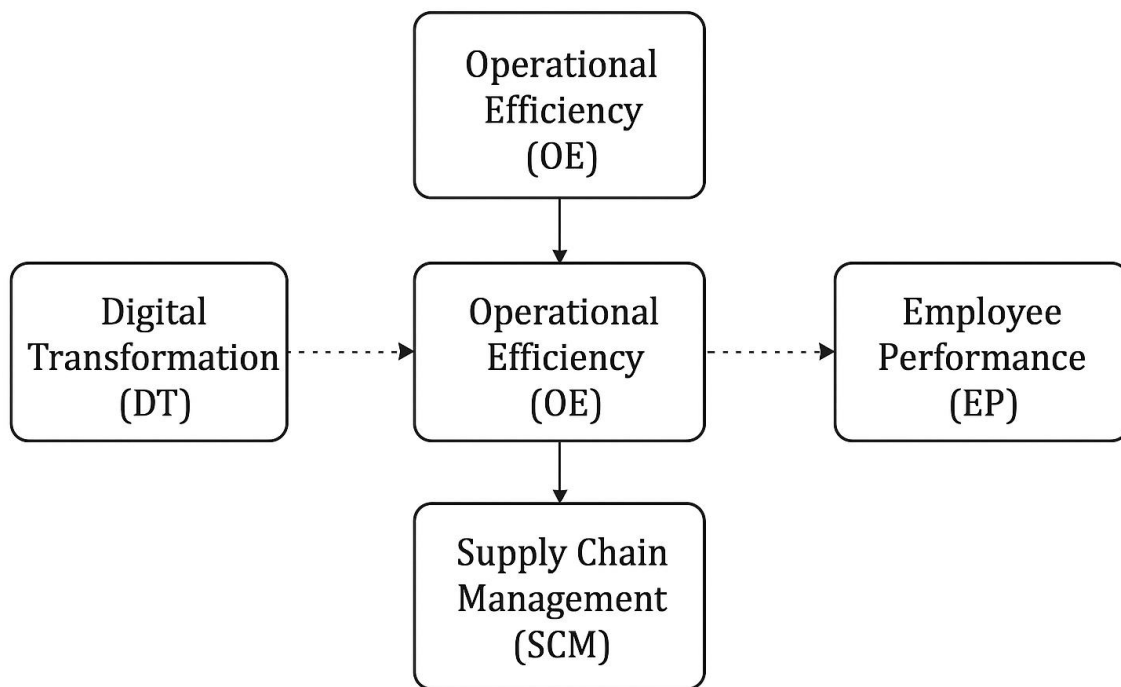


Figure 1. Research Model. Source: Authors.

III. METHODOLOGY

Research Design and Theoretical Approach

This study adopts a quantitative, explanatory research design to test a theory-driven model that explains how strategic orientations are translated into employee performance outcomes in small and medium-sized enterprises (SMEs). Drawing on the Resource-Based View (RBV) and Dynamic Capability Theory (DCT), digital transformation and entrepreneurial orientation are conceptualised as higher-order strategic capabilities that influence employee performance through organisational process mechanisms.

Consistent with a process-based perspective in human resource management (HRM), operational efficiency and supply chain management are modelled as mediating mechanisms that enable the deployment of strategic capabilities into day-to-day work processes and coordination activities. This approach allows the study to move beyond direct-effect explanations and to empirically examine how and through which organisational processes strategic orientations shape employee-level performance outcomes.

To simultaneously test the proposed direct and indirect relationships within a single framework, this study employs partial least squares structural equation modelling (PLS-SEM), which is well-suited for theory testing involving complex mediation structures and SME contexts.

Sample and Data Collection

The empirical context of this study is Batik SMEs in Indonesia, representing creative enterprises operating in traditional yet increasingly digitalised industries. Data were collected through a structured survey administered to employees and managerial staff involved in operational, production, and digital-related activities.

A purposive sampling technique was applied using the following criteria: (1) respondents had worked in the enterprise for at least one year, (2) respondents were directly involved in operational or digital processes, and (3) the enterprise had adopted or was in the process of adopting digital tools. A total of 240 questionnaires were distributed between May and July 2024. After data screening, 220 valid responses were retained for analysis, yielding an effective response rate of 92%.

This sample size exceeds the minimum threshold recommended for PLS-SEM and is adequate for testing mediation effects in models with multiple constructs. The demographic profile of respondents is presented in **Table 1** and reflects workforce characteristics commonly found in creative SMEs.

Table 1. Demographic Characteristics

Demographic variable	Categories	Frequency	%
Gender	Male	167	75.91
	Female	53	24.09
Age	<30	45	20.45
	30-39	55	25.00
	40-49	78	35.45
	≥50	42	19.09
Level of Education	Senior High School	112	50.91
	Diploma	58	26.36
	Bachelor's Degree	23	10.45
	Master's Degree	7	3.18
Position	Owners	41	18.64
	Manager	49	22.27
	Supervisor	60	27.27
	Staff	70	31.82
Years of service	≤ 1 year	28	12.73
	1-3 years	52	23.64
	4-5 years	54	24.55
	Ears	46	20.91
	> 10 years	50	22.73

Source: Primary Data Processed, 2025

Table 1 presents the demographic profile of the respondents. Overall, the sample reflects the typical workforce composition of creative SMEs, with respondents representing diverse age groups, educational backgrounds, job positions, and years of work experience.

Measurement of Constructs

All constructs were measured using multi-item scales adapted from prior validated studies and contextualised to the Batik SME setting. Responses were recorded using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Digital transformation was measured using indicators capturing the use of digital tools, data integration, process automation, employee digital capability, data analytics, and digital literacy. Entrepreneurial orientation was assessed through dimensions of innovativeness, proactiveness, and risk-taking. Operational efficiency captured resource optimisation, process standardisation, productivity improvement, and lead-time reduction. Supply chain management reflected coordination, information sharing, supplier collaboration, system integration, and relational trust. Employee performance was operationalised as a multidimensional construct encompassing task, contextual, adaptive, and innovative performance.

All measurement items were adapted from established scales reported in prior HRM, operations, and SME research to ensure content validity. A pilot test was conducted prior to the main survey to assess clarity and contextual relevance. Details of constructs, dimensions, and measurement sources are reported in **Table 2**.

Table 2. Measurement of Constructs

Variable	Dimensions / Indicators	Source
Digital Transformation (X1)	use of digital tools, data integration, process automation, employee digital capability, data analytics, digital literacy.	Vial (2019); Kane et al. (2021);
Entrepreneurial Orientation (X2)	innovativeness, proactiveness, risk-taking, autonomy, aggressiveness.	Lumpkin and Dess (1996); Wales (2016)
Operational Efficiency (M1)	resource optimisation, process standardisation, productivity improvement, digital dashboards, lead-time reduction.	Mishra and Gupta (2021); Matt et al. (2015)
Supply Chain Management (M2)	coordination, information sharing, supplier collaboration, Integration of SCM systems, mutual trust.	Mentzer et al. (2001); Kumar et al. (2020)
Employee Performance (Y)	task performance, contextual performance, adaptive performance,	Rana et al. (2021); Gupta and Bose (2022); Borman & Motowidlo (1993); Koopmans et al. (2014);

	innovative performance, work commitment and consistency in results.	
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Source: Primary Data Processed, 2025

Data Analysis Technique

Data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS 4.0. PLS-SEM was selected due to its suitability for theory testing involving complex models, mediation analysis, and data that may not meet multivariate normality assumptions. The analysis followed a two-stage approach. First, the measurement model was assessed to establish reliability and validity, including indicator reliability, internal consistency, convergent validity, and discriminant validity. Second, the structural model was evaluated to test the hypothesised relationships and mediation effects using bootstrapping with 5,000 resamples. The demographic profile of the respondents is presented in Table 1 and reflects the workforce characteristics commonly found in creative SMEs.

Measurement Model Assessment

The measurement model demonstrated satisfactory reliability and validity. All constructs met established thresholds for indicator reliability, internal consistency, and convergent validity. Discriminant validity was assessed using the Fornell–Larcker criterion and the heterotrait–monotrait (HTMT) ratio. Although two HTMT values slightly exceeded the conservative threshold, discriminant validity was considered acceptable given the strong theoretical distinction among constructs and satisfactory Fornell–Larcker results. Detailed measurement model results are reported in **Tables 3 and 4**. The measurement model was first evaluated to establish indicator reliability, internal consistency, and convergent validity

Table 3. Measurement Model Results

Construct/indicator	Item reliability	Convergent validity		
	Loading	CR	AVE	Alpha
DT (<i>Digital Transformations</i>)		0.900	0.695	0.851
Use of digital tools and platforms in daily operations.	0.966			
Integration of digital data across departments.	0.867			
Process automation for efficiency improvement.	0.906			
Enhancement of employee digital capability and literacy.	0.735			
Utilisation of data analytics for strategic decision-making	0.895			
Digital literacy to master the internet and digital technology.	0.879			
EO (<i>Entrepreneurial Orientation</i>)		0.913	0.677	0.884
Innovativeness in developing new ideas and products.	0.847			
Proactiveness in responding to market trends.	0.759			
Willingness to take calculated risks.	0.788			
Aggressiveness in pursuing business opportunities.	0.829			
Autonomy in decision-making within teams.	0.884			
OE (<i>Operational Efficiency</i>)		0.922	0.706	0.893
Optimisation of resources to reduce waste.	0.952			
Standardisation of processes for better control.	0.703			
Continuous improvement in productivity levels.	0.859			
Reduction of lead time and operational cost.	0.938			
Application of performance monitoring and digital dashboards.	0.809			
SCM (<i>Supply Chain Management</i>)		0.931	0.733	0.906
Coordination and synchronisation across functions.	0.709			
Effective information sharing among supply chain partners.	0.947			
Collaboration with suppliers for joint planning.	0.883			
Integration of SCM systems (ERP, CRM).	0.800			
Mutual trust and long-term relationships with partners.	0.842			
EP (<i>Employee Performance</i>)		0.943	0.769	0.923
Task performance (fulfilment of assigned duties).	0.933			
Contextual performance (helping behaviour, teamwork).	0.738			
Adaptive performance (responding to change effectively).	0.904			
Innovative performance (generation of new ideas).	0.740			
Work commitment and consistency in results (loyal and productive)	0.755			

Source: Primary Data Processed, 2025

Following the assessment of indicator reliability and convergent validity, discriminant validity was subsequently examined to ensure that each construct was empirically distinct from the others.

Table 4. Discriminant Validity of Constructs

Variable	DT	EO	EP	OE	SCM
Discriminant Validity: Fornell-Larcker Criterion					
DT	0.865				
EO	0.781	0.781			
EP	0.846	0.684	0.846		
OE	0.789	0.682	0.720	0.789	
SCM	0.820	0.627	0.909	0.617	0.820
Heterotrait-Monotrait Criterion					
DT	-				
EO	0.865	-			
EP	0.939	0.765	-		
OE	0.860	0.773	0.814	-	
SCM	0.851	0.721	1.011	0.703	-

Source: Primary Data Processed, 2025

Overall, the measurement model demonstrates satisfactory psychometric properties, allowing further evaluation of the structural model.

Structural Model Assessment

After confirming the adequacy of the measurement model, the structural relationships were examined using bootstrapping with 5,000 resamples. The results indicate that all proposed hypotheses are supported, including both direct and mediating effects. The findings demonstrate that digital transformation and entrepreneurial orientation influence employee performance directly and indirectly through operational efficiency and supply chain management. Detailed hypothesis testing results are presented in **Table 5**.

Table 5. Structural Model Assessment (PLS-SEM Results)

Hypothesis	Path	Effect Type	β	t-value	p-value	Result
H1	DT → EP	Direct	0.276	4.21	<0.001	Supported
H2	EO → EP	Direct	0.244	3.82	<0.001	Supported
H3	DT → OE → EP	Indirect (Mediation)	0.125	2.40	0.005	Supported
H4	EO → SCM → EP	Indirect (Mediation)	0.163	2.98	<0.001	Supported
H5	DT & EO → (OE & SCM) → EP	Joint Mediation	0.217	3.50	0.001	Supported

Source: Primary Data Processed, 2025

Common Method Bias and Ethical Considerations

To assess potential common method bias, a full collinearity test was conducted. All variance inflation factor values were below the recommended threshold of 3.3, indicating that common method variance was not a significant concern (Kock, 2015). Procedural remedies, including anonymity, voluntary participation, and item randomisation, were also applied during data collection.

Ethical clearance was obtained from the institutional ethics committee, and informed consent was secured from all respondents prior to participation. The study did not involve vulnerable populations, and no identifying information was collected, ensuring compliance with established ethical standards for social science research.

IV. RESULTS AND DISCUSSION

Results

Prior to hypothesis testing, the measurement model was assessed to establish reliability and validity. The results indicate that all constructs demonstrate satisfactory psychometric properties, supporting further structural model evaluation. Detailed measurement model results are reported in Tables 3 and 4.

The structural model results show that all proposed hypotheses are supported. Digital transformation and entrepreneurial orientation have significant direct effects on employee performance. In addition, operational efficiency and supply chain management function as partial mediators in these relationships. The joint mediation effect further confirms that strategic digital and entrepreneurial orientations influence employee performance through combined internal efficiency and external coordination mechanisms. Detailed hypothesis testing results are presented in Table 5.

Discussion

The findings of this study provide strong empirical support for the proposed conceptual model, demonstrating that digital transformation and entrepreneurial orientation are key strategic drivers of employee performance in creative SMEs. Importantly, the results indicate that these strategic orientations influence

employee performance not only directly but also indirectly through operational efficiency and supply chain management, thereby validating a process-based explanation of performance outcomes.

From a Resource-Based View perspective, digital transformation and entrepreneurial orientation can be understood as intangible organisational capabilities that shape how work is organised and performed. Digital transformation enhances employees' access to information, restructures work routines, and supports more systematic task execution, while entrepreneurial orientation fosters behavioural norms that encourage initiative, learning, and adaptability. These findings reinforce prior HRM research suggesting that strategic resources and leadership orientations play a critical role in shaping employee behaviour and performance.

However, the significant mediating roles of operational efficiency and supply chain management suggest that the performance impact of digital and entrepreneurial capabilities is realised through dynamic organisational processes rather than occurring automatically. In line with Dynamic Capability Theory, the findings highlight the importance of process reconfiguration in translating strategic intent into employee-level outcomes. Operational efficiency reduces role ambiguity and unnecessary workload, enabling employees to focus on value-adding activities, while effective supply chain management enhances coordination across internal and external actors, creating a more predictable and supportive work environment.

The joint mediation effect further demonstrates that digital and entrepreneurial capabilities operate synergistically. When internal efficiency and external coordination are strengthened simultaneously, employees experience clearer workflows, faster information exchange, and more aligned performance expectations. This synergy explains why the combined influence of digital transformation and entrepreneurial orientation yields greater performance benefits than either orientation alone, particularly in resource-constrained SME contexts.

These findings extend HRM literature by providing empirical evidence at the employee level within traditional and creative industries, where research has predominantly focused on firm-level outcomes such as innovation and competitiveness. By shifting attention to employee performance mechanisms, this study bridges the gap between digital technology adoption and human resource effectiveness in emerging economy settings.

From a managerial perspective, the results suggest that digital transformation initiatives in SMEs should be accompanied by deliberate efforts to redesign work processes and strengthen coordination across the supply chain. Investments in digital technologies are likely to yield limited performance gains if employees are not supported by efficient operational routines and collaborative working arrangements. Fostering an entrepreneurial mindset among employees, combined with process integration, can create a work environment that sustains productivity, innovation, and adaptability.

Overall, the findings demonstrate that employee performance improvement in creative SMEs is not a direct outcome of digitalisation alone but rather the result of aligned strategic orientations and process capabilities. This underscores the importance of adopting a holistic HRM approach that integrates technological, managerial, and human resource strategies in dynamic and resource-constrained environments such as Indonesia's Batik industry.

V. Conclusion, Implications, and Future Research

Conclusion

This study advances understanding of employee performance in creative SMEs by demonstrating how strategic orientations are translated into individual-level outcomes through process-based mechanisms. Drawing on the Resource-Based View and Dynamic Capability Theory, the study develops and empirically tests a dual-path mediation model linking digital transformation and entrepreneurial orientation to employee performance via operational efficiency and supply chain management.

The findings confirm that digital and entrepreneurial orientations alone are insufficient to explain performance improvement. Instead, employee performance emerges when strategic capabilities are embedded into internal work routines and external coordination processes. Operational efficiency enables employees to perform tasks more consistently and productively, while effective supply chain management supports coordination, responsiveness, and reliability in interdependent production environments. The joint mediation effect further indicates that digital and entrepreneurial capabilities operate synergistically rather than independently in shaping human resource outcomes.

Overall, this study shows that employee performance improvement in creative SMEs is not a direct consequence of digitalisation, but a result of aligned strategic orientation and process capability deployment. By focusing on employee-level outcomes, the study contributes a process-oriented explanation that connects strategy, operations, and human resource effectiveness in emerging economy contexts.

Theoretical Implications

This study offers several theoretical contributions to the HRM literature. First, it extends the Resource-Based View by demonstrating that strategic orientations such as digital transformation and entrepreneurial orientation function as intangible capabilities that influence employee performance, not only firm-level

outcomes. Second, it advances Dynamic Capability Theory by identifying operational efficiency and supply chain management as process-level mechanisms through which strategic intent is converted into employee effectiveness.

Third, the study contributes to process-based HRM research by shifting attention from direct strategy–performance relationships toward the organisational processes that structure employees’ daily work. By empirically validating a dual-path mediation model, this research provides a more nuanced explanation of how strategic capabilities are deployed within SMEs characterised by informal structures and resource constraints. This perspective enriches HRM theory by integrating strategic orientation, process capability, and employee performance into a single explanatory framework.

Managerial Implications

For managers of creative SMEs, the findings suggest that digital transformation initiatives should be accompanied by deliberate process redesign rather than treated as purely technological investments. Improving employee performance requires aligning digital tools with efficient workflows, clear task structures, and supportive coordination mechanisms. Similarly, fostering an entrepreneurial orientation among employees will yield performance benefits when supported by stable operational routines and effective supply chain relationships.

Managers are encouraged to invest simultaneously in employee digital capability development, process standardisation, and supply chain integration. This integrated approach enables employees to translate strategic initiatives into consistent performance outcomes while maintaining flexibility and innovation in dynamic market environments.

Policy Implications

At the policy level, the findings highlight the importance of supporting SMEs beyond technology adoption. Government programs should combine digital infrastructure support with capacity-building initiatives that strengthen operational processes and inter-organisational coordination. Policies that promote collaborative supply chain platforms, shared digital systems, and skill development can enhance the effectiveness of digital transformation initiatives in creative industries. Such integrated interventions are critical for sustaining employee performance and competitiveness in traditional yet digitally evolving sectors.

Limitations and Future Research Directions

This study has several limitations that open avenues for future research. First, the cross-sectional design limits causal inference; longitudinal studies could better capture how process capabilities and employee performance evolve. Second, the empirical context is limited to Batik SMEs in Indonesia, which may constrain generalisability. Future studies could replicate the model across different industries and cultural settings to test its broader applicability.

Further research may also incorporate additional mediating or moderating variables, such as leadership style, innovation climate, or employee engagement, to deepen understanding of the mechanisms linking strategic orientation to employee outcomes. By extending the process-based perspective, future studies can further refine HRM theory in digitally transforming organisational contexts.

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