The Role of Digital Readiness and Work Competence in Enhancing Employee Performance at the Medan Central Mail Processing Center

Auzy Arifin Hutabarat, Sri Rahayu, Yohny Anwar

Abstract

Digital transformation has changed business processes and human-resource capability requirements, including in logistics and postal services. The use of digital technology requires not only system availability but also employees' readiness to accept, understand, and use technology, together with relevant work competence. This article examines the role of digital readiness and work competence in supporting employee performance, using the Medan Central Mail Processing Center as its discussion context. The study adopts a qualitative literature review approach based on relevant academic books and journal articles. The analysis involves thematic classification, comparison of concepts, and thematic synthesis. The review indicates that digital readiness supports employees' ability to adapt to and use technology, while work competence ensures that tasks are performed according to the required knowledge, skills, and operational standards. Both aspects need to be developed together because technological proficiency without operational competence may not produce optimal performance. In the context of the Medan Central Mail Processing Center, the conceptual implications include mapping digital capabilities, job-based training, strengthening technical competence, continuous mentoring, and integrating competence development with performance management. This article is a literature synthesis; it does not assess employees' actual conditions or test empirical relationships using field data.

Keywords: digital readiness; work competence; employee performance; digital transformation; logistics

Auzy Arifin Hutabarat
Master Management, Universitas Pembangunan Panca Budi, Indonesia
Email : auzyarifin94@gmail.com

Sri Rahayu, Yohny Anwar
E-Mail : srirahayu@dosen.pancabudi.ac.id, yohnyanwar@dosen.pancabudi.ac.id
3rd International Conference Epicentrum of Economic Global Framework (ICEEGLOF)
Theme: Cross-Sector and Cross-Disciplinary Strategies for Achieving the SDGS
https://proceeding.pancabudi.ac.id/index.php/ICEEGLOF

Introduction

Information technology has transformed business processes, coordination patterns, and the competencies required within organizations. Digital transformation is not limited to adopting devices or applications; it also involves changes in processes, capabilities, structures, and organizational value creation. [19] describes digital transformation as organizational change triggered by digital technologies, while [18] position it as a multidisciplinary phenomenon affecting organizational strategy, structure, and capabilities.

These changes are particularly relevant to logistics and postal services. The sequence of mail acceptance, processing, sorting, transportation, distribution, and final delivery requires accurate information, consistent coordination, and completion within service standards. Information systems, barcode scanning, shipment tracking, and digital status updates can support process control. However, technology does not generate benefits automatically. Employees need to understand the systems, possess relevant skills, and be willing to adapt to changing work procedures.

Digital readiness is therefore an important element of this process. [7] emphasize employees' intentional digital readiness, referring to their willingness to engage in digital transformation. Such readiness involves more than technical skills; attitudes, confidence, willingness to learn, and acceptance of change are also relevant. At the organizational level, Michelotto and Joia (2024) and Mashwama et al. (2026) highlight organizational readiness and capabilities as drivers of digital transformation.

In addition to digital readiness, work competence determines employees' ability to perform tasks according to established standards. Competence includes knowledge, skills, problem-solving ability, communication, and accountability. [2] and [3] position competence development as an important part of human resource management. Firmansyah et al. (2023), Susi and Anwar (2026), and Hasrizal et al. (2026) also examine the relationships among competence, training, and employee performance.

The Medan Central Mail Processing Center provides a relevant context for discussing the integration of digital readiness and work competence because mail-processing and distribution activities are increasingly connected to digital systems. Technology use in operational processes requires employees to understand system workflows, follow procedures, and maintain information accuracy. Differences in experience and adaptive capability may present challenges during this transition. This description serves as a conceptual context rather than an empirical assessment of employees.

Accordingly, this article examines the role of digital readiness and work competence in supporting employee performance through a literature review. The Medan Central Mail Processing Center is used as a context for conceptual application, not as a source of field data.

This review addresses four questions: (1) how digital readiness is understood in workplaces undergoing digital transformation; (2) how work competence supports task performance; (3) how digital readiness and work competence complement one another in supporting performance; and (4) what conceptual implications follow for human resource development at the Medan Central Mail Processing Center.

The objectives are to explain the concepts of digital readiness and work competence, synthesize literature on their relationship with employee performance, and formulate human-resource development implications for postal and logistics operations.

Literature Review

2.1 Digital Transformation

Digital transformation refers to organizational change driven by the use of digital technologies, affecting processes, strategy, structure, and organizational capabilities [19], [18]. In logistics, transformation may be reflected in data integration, shipment tracking, scanning, process automation, and operational monitoring. Technology adoption needs to be accompanied by human capability development and work-practice adjustments to ensure effective use.

2.2 Digital Readiness

Digital readiness is understood in this article as an individual's capability and willingness to accept, use, and adapt to digital technologies at work. [7] emphasize the intentional dimension of employee readiness. This article's conceptual synthesis covers: (1) understanding digital technology; (2) skills in using digital systems; (3) willingness to adapt; (4) digital self-confidence; and (5) information-security awareness. These aspects provide an analytical framework and are not an empirically validated measurement instrument in this study.

2.3 Work Competence

Work competence comprises the knowledge, skills, abilities, and behaviours required to fulfil job responsibilities. [2] and [3] emphasize aligning employee capabilities with organizational requirements. This review discusses competence through job knowledge, technical skills, problem-solving, communication and coordination, and discipline and accountability. Susi and Anwar (2026), Hasrizal et al. (2026), and Samosir and Rahayu (2026) provide research contexts concerning competence, training, and performance.

2.4 Employee Performance

Employee performance refers to the results of task execution against organizational goals and standards. [1] views performance management as an ongoing process connecting individual and organizational goals through goal setting, monitoring, feedback, and development. The conceptual dimensions used in this article include work quality, quantity, timeliness, effectiveness, and accountability. These dimensions serve as a synthesis framework and are not measurements of Medan Central Mail Processing Center employees.

2.5 Relationships among Digital Readiness, Competence, and Performance

Digital readiness helps employees use technology, follow system updates, and apply information in their work. [10] examines employee engagement in digital transformation and job performance in logistics companies. Pohan et al. (2026) discuss human-resource technology adoption and digital competencies in relation to employee performance through employee involvement. Work competence complements digital readiness by ensuring that technology is used in accordance with procedures and job requirements. Firmansyah et al. (2023) and [11] provide perspectives on competence, technology, person-job fit, and performance in organizational and logistics contexts.

2.6 Gaps and Rationale for the Present Study

Previous literature has examined digital transformation at the organizational level [19], [18], employee digital readiness [7], organizational readiness [9], [8], and competence and performance across different contexts [5], [10]; [11]. A relevant opportunity remains to integrate digital readiness and work competence in one conceptual discussion that considers the characteristics of postal processing and distribution operations. The rationale is that successful technology use requires employees who are willing to adapt and capable of performing their work according to standards. The article contributes a literature synthesis and conceptual implications rather than testing causal relationships with field data.

Research Methodology

3.1 Research Approach and Literature Sources

This study adopts a qualitative approach using a literature review method. The sources consist of academic books and journal articles relevant to digital transformation, digital readiness, work competence, performance management, and logistics. Sources were selected based on substantive relevance, identifiable publication information, and their connection to the research focus.

3.2 Literature Collection and Analysis

The literature collection process involved identifying key concepts, searching academic sources, selecting relevant publications, and classifying sources by theme. Analysis was conducted through thematic synthesis: (1) identifying the main ideas in each source; (2) classifying literature by theme; (3)

comparing concepts and research findings; (4) synthesizing relationships among concepts; and (5) formulating conceptual implications.

3.3 Scope and Limitations

This article does not use interviews, field observations, questionnaires, or primary data. The Medan Central Mail Processing Center is used as a discussion context rather than an empirical data-collection site. Accordingly, the article does not report measured levels of digital readiness or competence, nor does it claim empirically established effects on employee performance at the Center.

Results

4.1 Digital Readiness as a Foundation for Work Transformation

The literature synthesis indicates that digital readiness is an important foundation for employee participation in technological change. Readiness involves understanding, skills, willingness to learn, and acceptance of change. [7] emphasize employees' willingness to engage in transformation, while Mashwama et al. (2026) highlight organizational readiness and capabilities. In the Medan Central Mail Processing Center context, this concept is relevant to operational systems, status updates, and activity recording. Practical implications include system orientation, task-based training, mentoring, and continuous learning.

4.2 Work Competence and the Quality of Task Execution

Work competence ensures that employees can do more than operate technology: they must also understand procedures and work standards. Literature on competence and training [5], [16]; [14] positions capability development as an important element of human resource management. In processing and distribution operations, competence requirements vary by function: processing requires procedural accuracy; transportation requires coordination and route-flow understanding; delivery requires procedural compliance and information accuracy. Competency mapping should therefore reflect job characteristics.

4.3 Integrating Digital Readiness and Work Competence

Digital readiness and work competence are complementary. Digital readiness without sufficient operational competence may result in technology being used without an adequate understanding of work procedures. Conversely, operational competence without digital readiness may hinder adaptation to new systems. Integrating both enables employees to understand technology and use it to complete tasks according to standards. [10] logistics context and Nong et al.'s (2024) discussion of competence and job fit provide contextual support for the importance of the human dimension in logistics operations.

4.4 Implications for the Medan Central Mail Processing Center

Based on the synthesis, human resource development may be directed toward: (1) mapping digital capability requirements by job function; (2) providing digital training based on operational activities; (3) strengthening technical and procedural competence; (4) providing continuous mentoring and learning; (5) linking competence development with performance standards; and (6) strengthening a digital work culture through leadership example, communication, and accountability in information management. These recommendations are conceptual and should be adapted to the organization's actual needs and conditions.

4.5 Synthesis of the Discussion

Overall, the literature suggests that technology, individual readiness, competence, and performance management should be viewed as interconnected elements. Digital readiness helps employees accept and use technology; competence ensures that work is performed correctly; and performance management connects task execution with organizational objectives [1]. Human-resource development strategies in logistics should therefore integrate digital training with the strengthening of core job competencies.

Conclusion

This review concludes that digital readiness and work competence are complementary elements in supporting employee performance in organizations undergoing digital transformation. Digital readiness

involves the capability and willingness to use technology and adapt to change. Work competence includes the knowledge, skills, problem-solving ability, communication, discipline, and accountability required to perform work.

Developing both aspects in an integrated manner is important because technological proficiency without procedural understanding may not produce quality work, while operational competence without digital readiness may hinder adaptation to changing systems. In the context of the Medan Central Mail Processing Center, conceptual implications include mapping digital capabilities, job-based training, strengthening technical competence, continuous mentoring, and integrating competence development with performance management.

The limitation of this article is its reliance on a literature review without primary data collection. Therefore, it does not determine the actual level of digital readiness or competence among the Center's employees and does not claim empirically tested relationships. Future research may test and deepen this synthesis through field research designed around the organization's needs.

References

[1] Aguinis, H. (2019). Performance management (4th ed.). Chicago Business Press.

[2] Armstrong, M., & Taylor, S. (2020). Armstrong's handbook of human resource management practice (15th ed.). Kogan Page.

[3] Dessler, G. (2020). Human resource management (16th ed.). Pearson.

[4] Febrianti, M., Samrin, & Sebayang, S. (2026). The effect of work discipline, work load and work environment on employee performance of the TVRI Public Broadcasting Institution, North Sumatra, Medan. Jurnal Akuntansi, Manajemen dan Bisnis Digital, 5(2), 869–880. https://doi.org/10.37676/jambd.v5i2.11250

[5] Firmansyah, F., Farida Ferine, K., & Nizamuddin, N. (2023). Analysis of the use of information technology and organizational culture on employee performance with competence as an intervening variable at the Panca Budi Development University, Medan. International Journal of Social Science, Education, Communication and Economics (SINOMICS Journal), 2(5), 1435–1450. https://doi.org/10.54443/sj.v2i5.239

[6] Hasrizal, H., Elfitra Desi, & Rahayu, S. (2026). The effect of competence and compensation on employee performance with job satisfaction as an intervening variable at PLN UP2D Sumut. Equivalent: Journal of Economic, Accounting and Management, 4(1), 1308–1325. https://doi.org/10.61994/equivalent.v4i1.1821

[7] Höyng, M., & Lau, A. (2023). Being ready for digital transformation: How to enhance employees' intentional digital readiness. Computers in Human Behavior Reports, 11, 100314. https://doi.org/10.1016/j.chbr.2023.100314

[8] Mashwama, N. X., Matobobo, C., & Ncube, P. D. (2026). Digital transformation success: A systematic review of organizational readiness and capability drivers. Indonesian Journal of Information Systems, 9(1), 139–154. https://doi.org/10.24002/ijis.v9i1.14396

[9] Michelotto, F., & Joia, L. A. (2024). Organizational digital transformation readiness: An exploratory investigation. Journal of Theoretical and Applied Electronic Commerce Research, 19(4), 3283–3304. https://doi.org/10.3390/jtaer19040159

[10] Nguyen, T.-H. (2025). Research on factors influencing the employees' digital transformation engagement and job performance in logistics companies. SAGE Open, 15(3). https://doi.org/10.1177/21582440251353391

[11] Nong, N.-M. T., Phuong, N. Q., & Duc-Son, H. (2024). The effect of employee competence and competence–job–fit on business performance through moderating role of social exchange: A study in logistics firms. The Asian Journal of Shipping and Logistics, 40(4), 187–197. https://doi.org/10.1016/j.ajsl.2024.10.001.

[12] Pohan, A., Surya, E. D., & Ferine, K. F. (2026). Analysis of the adoption of human resources technology and digital competencies towards employee performance through employee involvement. Jurnal Fokus Manajemen, 6(4), 1345–1354. https://doi.org/10.37676/jfm.v6i4.12836

[13] Rahayu, S. (2019). Human resources management. UNPAB.

[14] Samosir, A. S., & Rahayu, S. (2026). The effect of performance-based training (PBK) and work environment on employee competency through emotional intelligence for distribution employees of PT PLN (Persero) UID North Sumatera. Equivalent: Journal of Economic, Accounting and Management, 4(1), 807–828. https://doi.org/10.61994/equivalent.v4i1.1787

[15] Sebayang, S. A. M., Nasution, M. D. T. P., & Rossanty, Y. (2018). Organizational behaviour. Lembaga Penelitian dan Penulisan Ilmiah AQLI.

[16] Susi, S., & Anwar, Y. (2026). The effect of competency and job training on employee performance with career development as a moderation variable in employees Medan Petisah Sub District Office. Equivalent: Journal of Economic, Accounting and Management, 4(1), 669–684. https://doi.org/10.61994/equivalent.v4i1.1700

[17] Tampubolon, J. T., Ferine, K. F., & Erwansyah, E. (2026). Digital competency analysis, work-balance and organizational support for employee performance through job satisfaction. Jurnal Fokus Manajemen, 6(4), 1403–1412. https://doi.org/10.37676/jfm.v6i4.12902

[18] Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. Journal of Business Research, 122, 889–901. https://doi.org/10.1016/j.jbusres.2019.09.022

[19] Vial, G. (2019). Understanding digital transformation: A review and a research agenda. The Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003