





“Impact of digital transformation on banking employee performance with self-efficacy as a mediator”

AUTHORS	Sri Annisa  Elisabet Siahaan  Prihatin Lumbanraja 
ARTICLE INFO	Sri Annisa, Elisabet Siahaan and Prihatin Lumbanraja (2024). Impact of digital transformation on banking employee performance with self-efficacy as a mediator. <i>Problems and Perspectives in Management</i> , 22(4), 523-531. doi: 10.21511/ppm.22(4).2024.39
DOI	http://dx.doi.org/10.21511/ppm.22(4).2024.39
RELEASED ON	Friday, 13 December 2024
RECEIVED ON	Saturday, 28 September 2024
ACCEPTED ON	Friday, 15 November 2024
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

40



NUMBER OF FIGURES

1



NUMBER OF TABLES

4

© The author(s) 2024. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 28th of September, 2024
Accepted on: 15th of November, 2024
Published on: 13th of December, 2024

© Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja, 2024

Sri Annisa, Doctoral Student,
Management Science Department,
Economy and Business Faculty,
Universitas Sumatera Utara [University
of Northern Sumatra], Indonesia.

Elisabet Siahaan, Lecturer, Management
Science Department, Economy and
Business Faculty, Universitas Sumatera
Utara [University of Northern
Sumatra], Indonesia. (Corresponding
author)

Prihatin Lumbanraja, Lecturer,
Management Science Department,
Economy and Business Faculty,
Universitas Sumatera Utara [University
of Northern Sumatra], Indonesia.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:
Author(s) reported no conflict of interest

Sri Annisa (Indonesia), Elisabet Siahaan (Indonesia), Prihatin Lumbanraja (Indonesia)

IMPACT OF DIGITAL TRANSFORMATION ON BANKING EMPLOYEE PERFORMANCE WITH SELF-EFFICACY AS A MEDIATOR

Abstract

In the digitalization era, banks strive to implement digital transformations; digital culture, competence, and leadership become essential factors to advance the company's digitalization. Digital transformation is indispensable in improving employee performance amidst rapid digital advancements, helping companies stay competitive and avoid falling behind fintech and banking rivals. The study aims to examine the influence of digital transformations on banking employee performance in Indonesia, targeting state-owned banks. Primary data were gathered through questionnaires involving 100 participants. Data analysis employed partial least squares structural equation modeling (PLS-SEM) to assess the influence of independent on dependent and mediating variables. The results demonstrate that digital culture ($p < 0.05$), digital competency ($p < 0.05$), and digital leadership ($p < 0.05$) positively and significantly influence employee performance. Self-efficacy does not function as a substantial mediating variable between digital culture ($p > 0.05$) or digital competence ($p > 0.05$) and employee performance. However, self-efficacy is a crucial mediating variable connecting digital leadership to employee success ($p < 0.05$). The study demonstrates that digital transformation in terms of culture, competence, and leadership can improve performance. Self-efficacy is able to mediate the effect of digital leadership on employee performance but fails to affect the influence of digital culture and digital capabilities on the performance of banking employees.

Keywords

digital culture, digital competence, digital leadership,
employee performance, self-efficacy

JEL Classification

O33, M54, G21

INTRODUCTION

The banking sector is at the forefront of industry-changing digital transformation. The fast adoption of digital banking services has changed how customers interact with financial institutions and significantly impacted banks' operational dynamics. Astonishing statistics reveal that nearly 80% of consumers now prefer digital banking channels over traditional methods, highlighting a significant shift in consumer behavior and expectations (Sugihyanto & Arsjah, 2023). Therefore, banks need to introduce digital transformation as soon as possible through the culture, competence, and leadership of their employees to improve employee performance which, in the end, improves overall organizational performance. Unfortunately, research shows that digital transformation in companies triggers excessive anxiety in employees who feel unprepared to adapt to new technologies (Kemer & Tekeli, 2022). Digital transformations in this study encompass digital culture, digital competence, and employee leadership.

1. LITERATURE REVIEW AND HYPOTHESES

In the digitalization era, banks compete to carry out digital transformation. Company culture, competence, and leadership of employees are the benchmarks for improving company digitalization (Gadzali et al., 2023). Digital transformation has a role in optimizing employee performance amid rapid digital changes so that companies are competitive and not left behind by other fintech and banking companies (Forcadell et al., 2020). The transformation from conventional banking to digital platforms has improved efficiency and cost-effectiveness, as banks can reduce physical and operational costs while improving service delivery (Son et al., 2020). However, banks face challenges and hurdles in this digitalization journey, including maintaining a solid reputation among the fierce competition from fintech companies (Forcadell et al., 2020). In addition, evolving customer expectations require banks to constantly innovate and improve their digital offerings to avoid losing market share (Mohsin et al., 2022). As digital technologies gain prevalence in the banking sector, it is essential to comprehend their impact on employee performance and organizational dynamics. The technology acceptance model (TAM) posits that users' views of usability and usefulness substantially affect employees' acceptance and use of digital products.

Digital culture is a workplace atmosphere in which digital technology is seamlessly incorporated into every facet of a company's operations and communication procedures. Digital culture includes the ability to navigate digital spaces, critically analyze information, and participate in daily activities that reflect national values and diversity (Wijaya, 2023). It functions as both a catalyst and an outcome of digital transformation, influencing employee engagement with technology and interpersonal interactions. Firican (2023) contends that digital culture is crucial for facilitating or obstructing digital transformation, as it encompasses the attributes that organizations must embrace to succeed in a digital landscape. Pangarso et al. (2022) argue that a robust digital organizational culture can affect the relationship between empowered leadership and employee performance, emphasizing its crucial role in promoting a high-

performance environment. Conversely, Xu (2023) argues that digital culture does not directly affect employee performance.

Banks must evolve in response to shifting customer behaviors influenced by digital technology, necessitating the enhancement of new digital competencies (Tran et al., 2022). Digital competence encompasses the skills needed to effectively utilize digital technologies in the workplace. It represents the abilities and knowledge employees need to leverage digital tools efficiently in their tasks. Zamilah (2024) asserts that incorporating digital technology can significantly enhance operational efficiency and employee performance, indicating that digital competence is essential for achieving organizational objectives. As banking personnel enhance their digital proficiency, their performance improves due to heightened operational efficiency and customer service capabilities (Islatince, 2023; Halim et al., 2023; Nikou et al., 2022).

Digital leadership encompasses the ability of individuals to direct, oversee, and utilize digital technologies to achieve organizational goals. It is vital for managing resources, fostering innovative behaviors among employees, and boosting motivation and performance (Erhan et al., 2022; Shin et al., 2023; Alafi, 2024). Additionally, the significance of digital leadership in creating an environment that nurtures employee creativity and engagement is well established, as effective digital leaders can have a substantial influence on employee performance (Zhu et al., 2022; Öngel et al., 2023). Employees with digital leadership can foster a culture of learning and adaptability, helping colleagues improve their digital skills (N. Saputra & A. Saputra, 2020).

Reduced anxiety about digital transformation and enhanced performance are associated with self-efficacy (Ruijia et al., 2022). It describes people's confidence in their capacity to complete tasks or thrive in digital environments. Research has demonstrated a favorable correlation between self-efficacy and performance, indicating that workers who have faith in their abilities typically deliver superior outcomes (Firmansyah et al., 2018; Monteiro et al., 2021). Additionally, individuals who receive proper support in their digital endeavors often demonstrate greater job satisfaction and engagement (Efimov et al., 2022).

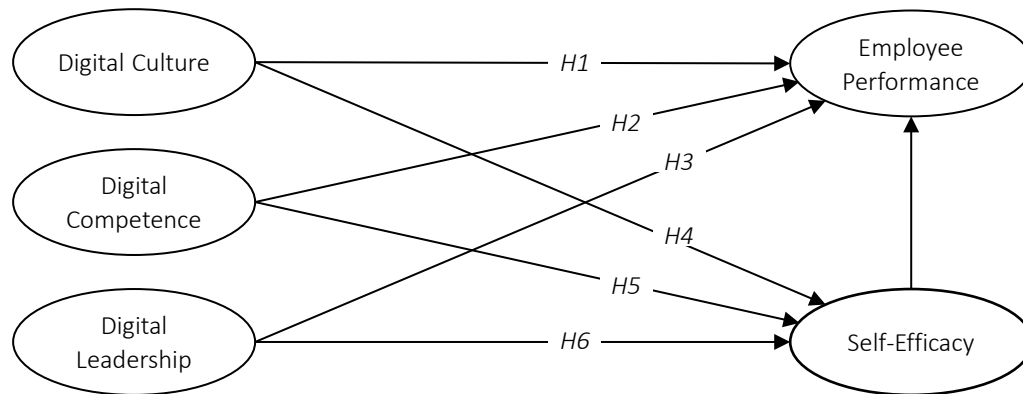


Figure 1. Conceptual framework

Self-efficacy functions as a mediating variable that connects digital culture with employee performance. It can enhance workplace well-being by fostering resilience, indicating that a supportive organizational culture promotes greater self-efficacy among employees (Pradhan et al., 2021; Akanni et al., 2021). Furthermore, self-efficacy helps mitigate negative workplace experiences, such as ostracism or bullying, which can negatively affect employee performance. Employees with higher levels of self-efficacy are better equipped to handle unfavorable encounters in a digital workplace. Clercq et al. (2019) found that self-efficacy reduces the harmful effects of workplace ostracism on job performance. Similarly, Hsieh et al. (2019) have shown that self-efficacy has a protective role in sustaining performance levels and partially mediates the relationship between workplace bullying and mental health.

Employees who view themselves as digitally skilled often demonstrate greater levels of self-efficacy, which in turn positively influences their performance. Tomczak et al. (2023) highlight that young employees, particularly recent graduates from technical universities, express a strong sense of digital self-efficacy, which correlates with optimistic performance outcomes. Moreover, Alifya and Mardiana (2022) emphasize that self-efficacy is crucial for employees' belief in their ability to tackle tasks, thereby directly affecting their performance. Additionally, Tsareva and Omelyanenko (2020) emphasize the importance of self-efficacy within digital contexts, particularly in relation to operational digital skills in remote work settings. Similarly, Muliyanto et al. (2023), examining how competence and motivation affect employee per-

formance through self-efficacy, underscored that self-efficacy is a crucial mediator between digital competence and performance.

The intricate relationship between employee performance, self-efficacy, and digital leadership has garnered a lot of attention in contemporary organizational research. The impact of digital leadership on vocational teachers' reflective practices is mediated by self-efficacy, trust, and work engagement. This suggests that leaders who create a supportive environment can enhance their employees' self-efficacy, subsequently improving performance (Agustina et al., 2020). Furthermore, digital leadership promotes innovative work behaviors among employees, which is facilitated by their self-efficacy. Leaders who are adept in digital environments can stimulate motivation and performance through the enhancement of employees' self-efficacy (Erhan et al., 2022; Wang & Shao, 2024).

The significance of self-efficacy in individuals' confidence in their capacity to improve employee performance is frequently disregarded. This study uses self-efficacy as an intervening or mediation variable that affects digital transformation and employee performance, with employee culture, competence, and leadership. Figure 1 shows the conceptual framework of this study.

This conceptual framework (Figure 1) reveals that this study aims to investigate the influence of digital transformation – particularly digital culture, digital competence, and digital leadership – on employee performance, mediated by self-efficacy. This study seeks to address the existing deficiencies in research concerning the performance

of banking personnel. Based on the conceptual framework, the study suggested the following hypotheses:

- H1: *Digital culture positively and significantly affects employee performance.*
- H2: *Digital competence positively and significantly affects employee performance.*
- H3: *Digital leadership positively and significantly affects employee performance.*
- H4: *Employee self-efficacy mediates the effect of digital culture on employee performance.*
- H5: *Employee self-efficacy mediates the effect of digital competence on employee performance.*
- H6: *Employee self-efficacy mediates the effect of digital leadership on employee performance.*

2. METHOD

This is a quantitative study. Taking into account the diverse roles and duties of workers in the banking business, the study was conducted among employees of a state-owned bank (BUMN) in Indonesia. The study population consisted of 72.816 employees in one of Indonesia's state-owned banks in 2023. The sample size was 99,863 and then rounded to 100 employees. Obtained using the Slovin formula as follows $n = N / (1 + Ne^2)$. With a significance level of 0.1 (10%) (Abdurachman & Librita, 2022). Purposive sampling was used to identify participants for primary data collection, with personnel selected based on certain standards (Sudaryono, 2023). The sample criteria for this study are permanent employees who work using digital devices. Based on the research criteria, one hundred state-owned bank (BUMN) workers were chosen and requested to fill out a questionnaire.

The demographic characteristics of the respondents are listed in Table 1. Women make up the majority of employees based on gender. It indicates that shifting social norms encourage women to enter the workforce at these banks. Then, 49% of workers are in the 26–30 age range. Additionally, 82% of workers have one to ten years of experience.

A 5-point Likert scale was used in the survey; 1 denoted subpar performance, and 5 denoted exceptional performance. Reliability and validity assessments and partial least squares structural equation modeling (PLS-SEM) were part of the data analysis (Sudaryono, 2023). The effects of digital culture, digital competency, and digital leadership as independent variables were investigated using Smart PLS 4. Self-efficacy was investigated as the mediating variable, whereas employee performance was the dependent variable.

Table 1. Respondents' demographic characteristics

Classification	Frequency	Percentage (%)
Gender		
Female	72	72%
Male	28	28%
Age		
20-25 years old	24	24%
26-30 years old	49	49%
Above 30 years old	27	27%
Length of work		
1-10 years	82	82%
Above 10 years	18	18%

3. RESULTS

The measurement and structural models were analyzed using partial least squares (PLS) modeling with Smart PLS 4 software. Reflective constructs were used, and indicator reliability, discriminant validity, convergent validity, and consistency reliability were used to evaluate the measurement quality (Khine, 2013). The path coefficients and the study hypotheses were assessed, and the structural model was checked for multicollinearity problems. The values for Cronbach's alpha (CA), average variance extracted (AVE), and composite reliability (CR), which were used to assess the construct indicators in the model, are shown in Table 2. Strong internal consistency was shown by composite reliability and Cronbach's alpha values exceeding 0.7 (Sudaryono, 2023).

The AVE value in Table 2 exceeds 0.5, demonstrating strong validity (Sudaryono, 2023; Khine, 2013). The assessment of multicollinearity and path coefficients of the structural model was conducted to examine and validate the structural model. The outcomes of the collinearity evaluation are dis-

Table 2. Cronbach's alpha, CR, and average variance extracted (AVE)

Factors	Cronbach's alpha	Cr (rho_a)	Cr (rho_c)	Average variance extracted (AVE)
Digital competence	0.931	0.935	0.941	0.615
Digital culture	0.918	0.925	0.932	0.606
Digital leadership	0.930	0.932	0.941	0.614
Employee performance	0.931	0.935	0.941	0.618
Self-efficacy	0.904	0.908	0.921	0.566

Table 3. Multicollinearity testing

Predictor Construct	VIF
Digital culture → Employee performance	1.918
Digital competence → Employee performance	2.231
Digital leadership → Employee performance	2.376
Digital culture → Self-efficacy → Employee performance	2.504
Digital competence → Self-efficacy → Employee performance	2.732
Digital leadership → Self-efficacy → Employee performance	2.450

played in Table 3, with the maximum value attaining 2.732. If all VIF values are below 5, multicollinearity is either minimal or absent. Consequently, there are no substantial issues related to multicollinearity, as the variance inflation factor (VIF) stays below 5 (Sudaryono, 2023; Khine, 2013).

Table 4 depicts the findings of the direct and indirect effects derived from the study. A positive path coefficient indicates a unidirectional effect of a variable in the context of direct and indirect influences. An increase in the value of an exogenous variable leads to a corresponding rise in the endogenous variable. A negative path coefficient signifies that the variable's influence operates in the contrary direction. An elevation in the value of an external variable results in a decrease in the endogenous variable (Sudaryono, 2023; Khine, 2013).

The significance level, or *p*-value, implies that a *p*-value below 0.05 denotes a significant result, leading to the acceptance of the hypothesis. If the *p*-value exceeds 0.05, the result is deemed insignificant, resulting in the rejection of the hypothesis (Khine, 2013).

Table 4. Hypotheses testing

Hypotheses	Original Sample (O)	p-values	Result
H1: Digital culture → Employee performance	0.230	0.048	Significant
H2: Digital competence → Employee performance	0.256	0.012	Significant
H3: Digital leadership → Employee performance	0.303	0.022	Significant
Intervening Effects			
H4: Digital culture → Self-efficacy → Employee performance	-0.186	0.162	Insignificant
H5: Digital competence → Self-efficacy → Employee performance	-0.196	0.117	Insignificant
H6: Digital leadership → Self-efficacy → Employee performance	0.392	0.003	Significant

Table 4 asserts that digital culture has a positive (0.230) and significant ($0.048 < 0.05$) impact on employee performance, hence validating Hypothesis 1. Hypothesis 2, related to digital competence, exhibits a positive effect of 0.256 and is statistically significant ($0.012 < 0.05$) on employee performance, hence verifying Hypothesis 2. Hypothesis 3 is validated, as digital leadership has a positive (0.303) and significant ($0.022 < 0.05$) impact on employee performance.

Then, the indirect path indicates *p*-values < 0.05 , suggesting that the intervening variable mediates the relationship between an exogenous and an endogenous variable, thereby corroborating the study hypotheses. Consequently, Hypotheses 4 and 5 are rejected, as employee self-efficacy does not mediate ($0.162 > 0.05$) the relationship between digital culture and employee performance, nor does it mediate ($0.117 > 0.05$) the relationship between digital competence and employee performance. The results for Hypothesis 6 demonstrate that employee self-efficacy significantly mediates ($0.003 < 0.05$) the effect of digital leadership on employee performance.

4. DISCUSSION

Employee performance and digital culture are strongly positively correlated (Pangarso et al., 2022; Shin et al., 2023). Employee performance is improved by an organization's strong digital culture, which contradicts Xu's (2023) findings. Pangarso et al. (2022) highlight that aspects of digital culture, such as collaboration and innovation, serve as essential drivers for employees to adapt and contribute effectively. By creating an environment that supports the use of technology, organizations can increase employee motivation and productivity. Shin et al. (2023) stressed the role of digitalized services, as in this study, the company tries to provide all services to customers digitally. Then, to support the success of digital culture in terms of performance, banks provide a special budget for increased digitalization, which ultimately improves employee performance (Xu, 2023).

The considerable influence of digital competence on employee performance has been recognized (Nikou et al., 2022; Islatince, 2023; Halim et al., 2023). In this bank, employees are provided with a lot of training to increase employee competence. Employees with strong digital competence generally adapt more swiftly to new technologies, positively influencing their work productivity and effectiveness (Nikou et al., 2022). Those who can resolve digital issues and generate ideas using technology are better equipped to handle the growing complexity of job demands (Islatince, 2023). Moreover, employees equipped with relevant digital skills are able to implement digital solutions better and are reliable in every banking project, which ultimately improves customer experience and company performance (Halim et al., 2023).

Employees are empowered to improve performance through digital leadership (Erhan et al., 2022; Zhu et al., 2022). In order to make decisions more quickly and intelligently, personnel with a digital leadership attitude are trained to use data and digital technologies. This approach facilitates collaboration and guidance among colleagues through digital platforms. Employees who adopt a digital mindset encourage their peers to embrace innovation and explore new ideas, ultimately boosting the organi-

zation's overall performance (Erhan et al., 2022). Additionally, employees embodying a responsive and adaptive digital leadership spirit play a crucial role in promoting "job crafting," which involves customizing tasks and responsibilities based on individual strengths and interests. This collaborative environment fosters greater alignment between individuals and the organization, positively affecting creativity and, in turn, employee performance (Zhu et al., 2022).

Additionally, self-efficacy is unable to act as a mediator between employee performance and digital culture. These results, therefore, are in opposition to those of previous studies (Pradhan et al., 2021; Akanni et al., 2021; Clercq et al., 2019; Hsieh et al., 2019). Employees were not given enough support, such as speaking during training sessions. So, employees tend not to know how self-efficacy is shaped. In addition, other factors, such as work pressure, also affect performance. If these factors are not favorable, self-efficacy is not enough to improve performance despite a good digital culture.

The function of self-efficacy as a mediator between employee performance and digital competence was another indirect pathway investigated. The performance of employees who believe they are proficient in digital skills is positively impacted by their high levels of self-efficacy (Tomczak et al., 2023; Alifya & Mardiana, 2022; Tsareva & Omelyanenko, 2020; Muliyanto et al., 2023). However, this study's results show that the relationship between employee performance and digital competences cannot be mediated by self-efficacy. This finding suggests that although companies provide extensive digital training, other factors may hinder the expected outcomes. However, employees lack practical experience in applying these skills. If they do not have the opportunity to use their digital competencies in a relevant context, their self-efficacy will not be built, thus hindering performance.

The last indirect path is the mediation of self-efficacy on digital leadership and employee performance. The results show self-efficacy can mediate employee digital leadership on employee performance (Fan, 2023; Procházka et al., 2017). Employees with a digital leadership spirit can

show positive attitudes toward technology and changes that inspire them to develop high self-efficacy, thus encouraging them to adapt and innovate (Agustina et al., 2020). Digital-minded employees tend to be more responsive to their

surroundings. This emotional support can boost employees' self-confidence, making them able to take initiative and contribute actively, which in turn improves performance (Erhan et al., 2022; Wang & Shao, 2024).

CONCLUSION

This study examines the impact of digital transformation – encompassing digital culture, digital competence, and digital leadership – on employee performance through the lens of self-efficacy. It aims to address the gaps in existing research regarding the performance of banking staff in Indonesia. The findings indicate that digital culture, competence, and leadership positively and significantly affect employee performance. However, self-efficacy does not serve as a significant mediating variable in the relationship between digital culture and employee performance, and between digital competence and employee performance. Instead, self-efficacy is identified as a key mediating variable that connects the influence of digital leadership on employee performance.

The study acknowledges several limitations that point to potential areas for further research and improvement. First, a more representative sample is needed to provide a thorough understanding of the banking sector. Given the relatively large population, the Slovin formula could be applied with a significance level of 0.05. This study opted for a significance level of 0.1 to capture effects that might be overlooked with a stricter threshold. Lastly, the study identified several negative and negligible correlation indicators, suggesting that future studies should investigate these aspects to improve the performance of banking employees.

AUTHOR CONTRIBUTIONS

Conceptualization: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Data curation: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Formal analysis: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Investigation: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Methodology: Sri Annisa, Elisabet Siahaan.

Project administration: Sri Annisa.

Resources: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Software: Sri Annisa.

Supervision: Elisabet Siahaan, Prihatin Lumbanraja.

Validation: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

Writing – original draft: Sri Annisa, Elisabet Siahaan.

Writing – review & editing: Sri Annisa, Elisabet Siahaan, Prihatin Lumbanraja.

ACKNOWLEDGMENT

The authors thank Universitas Sumatera Utara, especially the Research Institute, for their support. Acknowledgments are also expressed to the Kementerian Pendidikan dan Riset through the DRTPM program (number: 92/UN5.4.10.S/PPM/KP-DRTPM/2024), which has provided intellectual and financial assistance. The authors would also like to thank the Management Science Study Program, Universitas Sumatera Utara.

REFERENCES

1. Abdurachman, E., & Arifiani, L. (2022). *Practical guide to ethical research techniques. Concepts, techniques, applications of research methods & publications*. Surabaya: Scopindo Media Pustaka.
2. Agustina, R., Kamdi, W., Hadi, S., & Nurhadi, D. (2020). Influence of the principal's digital leadership on the reflective practices of vocational teachers mediated by trust, self-efficacy, and work engagement. *International Journal of Learning Teaching and Educational Research*, 19(11), 24-40. <https://doi.org/10.26803/ijlter.19.11.2>
3. Akanni, A., Ajila, C., Omisile, I., & Ndubueze, K. (2021). Mediating effect of work self-efficacy on the relationship between psychosocial safety climate and workplace safety behaviors among bank employees after Covid-19 lockdown. *Central European Management Journal*, 29(1), 2-13. <https://doi.org/10.7206/cemj.2658-0845.38>
4. Alafi, K. (2024). Effect of business intelligence, digital transformation and digital leadership on employee satisfaction within the commercial banking sector in Jordan. *International Journal of Academic Research in Business and Social Sciences*, 14(1), 2874-2894. <https://doi.org/10.6007/ijarbss/v14-i1/20481>
5. Alifya, D., & Mardiana, N. (2022). The effect of self-efficacy, organizational culture and work motivation on employee performance at the department of education and culture of Lampung province. *Asian Journal of Economics and Business Management*, 1(2), 141-146. <https://doi.org/10.53402/ajebm.v1i2.176>
6. Clercq, D., Haq, I., & Azeem, M. (2019). Workplace ostracism and job performance: Roles of self-efficacy and job level. *Personnel Review*, 48(1), 184-203. <https://doi.org/10.1108/pr-02-2017-0039>
7. Efimov, I., Rohwer, E., Harth, V., & Mache, S. (2022). Virtual leadership about employees' mental health, job satisfaction and perceptions of isolation: A scoping review. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.960955>
8. Erhan, T., Uzunbacak, H., & Aydın, E. (2022). From conventional to digital leadership: Exploring digitalization of leadership and innovative work behavior. *Management Research Review*, 45(11), 1524-1543. <https://doi.org/10.1108/mrr-05-2021-0338>
9. Fan, P. (2023). Self-efficacy on transformational leadership and work engagement: Basis for higher education institutions work productivity framework. *International Journal of Research Studies in Management*, 11(5), 147-158. <https://doi.org/10.5861/ijrsm.2023.1060>
10. Firican, D. (2023). Digital transformation and digital culture: A literature review of the digital cultural attributes to enable digital transformation. *Proceedings of the International Conference on Business Excellence*, 17(1), 791-799. <https://doi.org/10.2478/picbe-2023-0073>
11. Firmansyah, F., Komala, R., & Rusdi, R. (2018). Self-efficacy and motivation: improving biology learning outcomes of senior high school students. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 4(3), 203-208. <https://doi.org/10.22219/jpbi.v4i3.6878>
12. Forcadell, F., Aracil, E., & Úbeda, F. (2020). Using reputation for corporate sustainability to tackle banks' digitalization challenges. *Business Strategy and the Environment*, 29(6), 2181-2193. <https://doi.org/10.1002/bse.2494>
13. Gadzali, S. S., Gazalin, J., Sutrisno, S., Prasetya, Y. B., & Almaududi Ausat, A. M. (2023). Human resource management strategy in organizational digital transformation. *Jurnal Minfo Polgan*, 12(1), 760-770. <https://doi.org/10.33395/jmp.v12i1.12508>
14. Halim, N. H. A. A., Azlan, M. A. M., Nor Adzhar, M. N. A., & Hussein, N. (2023). Accelerating digital talent readiness in Malaysian banking sector: A study on technology adoption through the intention to use customer-focused digital solutions. *Information Management and Business Review*, 15(1(I)SI), 164-175. [https://doi.org/10.22610/imbr.v15i1\(i\)si.3396](https://doi.org/10.22610/imbr.v15i1(i)si.3396)
15. Hsieh, Y., Wang, H., & Ma, S. (2019). The mediating role of self-efficacy in the relationship between workplace bullying, mental health and an intention to leave among nurses in Taiwan. *International Journal of Occupational Medicine and Environmental Health*, 32(2), 245-254. <https://doi.org/10.13075/ijomeh.1896.01322>
16. Islatince, A. (2023). Digital transformation in the banking sector; An analysis of the evaluation of acceptance levels of bank employees. *International Journal of Business and Applied Social Science*, 9(3), 32-50. <https://doi.org/10.33642/ijbass.v9n3p5>
17. Kemer, E., & Tekeli, E. K. (2022). The mediating role of trait anxiety in the impact of digital competence perception on job insecurity: an application for hotel managers. *Management Research Review*, 46(6), 914-930. <https://doi.org/10.1108/mrr-08-2021-0603>
18. Khine, M. S. (2013). *Application of structural equation modeling in educational research and practice*. Australia: Sense Publisher.
19. Mohsin, M. I. A., Ahmad, R., & Chan, W. M. (2022). Exploring digitalization of Malaysian banking and fintech companies' services from the customer's perspective. *International Journal of Management and Applied Research*, 9(2), 140-160. <https://doi.org/10.18646/2056.92.22-007>
20. Monteiro, R., Monteiro, D., Torregrossa, M., & Travassos, B. (2021). Career planning in elite soccer: The mediating role of self-efficacy, career goals, and athletic identity. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.694868>
21. Muliyanto, M., Indrayani, I., Satriawan, B., Ngaliman, N., & Ca-trayasa, I. W. (2023). The influence

- of competence, motivation, and work culture on employee performance through self-efficacy as an intervening variable for medical support employees Regional General Hospital Tanjungpinang City. *Journal of Multidisciplinary Academic Business Studies*, 1(1), 1-12. <https://doi.org/10.35912/jomabs.v1i1.1777>
22. Nikou, S., Reuver, M., & Kanafi, M. (2022). Workplace literacy skills – How information and digital literacy affect adoption of digital technology. *Journal of Documentation*, 78(7), 371-391. <https://doi.org/10.1108/jd-12-2021-0241>
 23. Öngel, V., Günsel, A., Gençer Çelik, G., Altındağ, E., & Tatlı, H. S. (2023). Digital leadership's influence on individual creativity and employee performance: A view through the generational lens. *Behavioral Sciences*, 14(1), Article 3. <https://doi.org/10.3390/bs14010003>
 24. Pangarso, A., Winarno, A., Aulia, P., & Ritonga, D. (2022). Exploring the predictor and the consequence of digital organizational culture: A quantitative investigation using sufficient and necessity approach. *Leadership & Organization Development Journal*, 43(3), 370-385. <https://doi.org/10.1108/loj-11-2021-0516>
 25. Pradhan, R. K., Panigrahy, N. P., & Jena, L. K. (2021). Self-efficacy and workplace well-being: Understanding the role of resilience in manufacturing organizations. *Business Perspectives and Research*, 9(1), 62-76. <https://doi.org/10.1177/2278533720923484>
 26. Procházka, J., Gilová, H., & Vaculík, M. (2017). The relationship between transformational leadership and engagement: Self-efficacy as a mediator. *Journal of Leadership Studies*, 11(2), 22-33. <https://doi.org/10.1002/jls.21518>
 27. Ruijia, Z., Talib, O., Burhanuddin, N., & Li, W. (2022). The effect of math self-concept and self-efficacy on the math achievement of sixth-grade primary school students: The mediating role of math anxiety. *International Journal of Academic Research in Progressive Education and Development*, 11(3), 767-778. <https://doi.org/10.6007/ijarped.v11-i3/14721>
 28. Saputra, N., & Saputra, A. M. (2020). Transforming into the digital organization by orchestrating culture, leadership, and competence in a digital context. *GATR Global Journal of Business Social Sciences Review*, 8(4), 208-216. [https://doi.org/10.35609/gjbsr.2020.8.4\(2\)](https://doi.org/10.35609/gjbsr.2020.8.4(2))
 29. Shin, J., Mollah, M., & Choi, J. (2023). Sustainability and organizational performance in South Korea: The effect of digital leadership on digital culture and employees' digital capabilities. *Sustainability*, 15(3), Article 2027. <https://doi.org/10.3390/su15032027>
 30. Son, Y., Kwon, H., Tayi, G., & Oh, W. (2020). Impact of customers' digital banking adoption on hidden defection: A combined analytical – Empirical approach. *Journal of Operations Management*, 66(4), 418-440. <https://doi.org/10.1002/joom.1066>
 31. Sudaryono. (2023). *Research methodology: Quantitative, qualitative, and mix methods*. Depok: Rajawali Pers.
 32. Sugihyanto, T., & Arsajah, R. J. (2023). The effect of digital banking and digital transformation on the efficiency of commercial banks in Indonesia. *International Journal of Islamic Education Research and Multiculturalism (IJIERM)*, 5(2), 387-408. <https://doi.org/10.47006/ijierm.v5i2.242>
 33. Tomczak, M. T., Ziemiański, P., & Gawrycka, M. (2023). Do the young employees perceive themselves as digitally competent and does it matter? *Central European Management Journal*, 31(4), 522-534. <https://doi.org/10.1108/cej-04-2022-0226>
 34. Tran, L., Phan, D., Herdon, M., & Kovács, L. (2022). Assessing the digital transformation in two banks: Case study in Hungary. *AGRIS on-line Papers in Economics and Informatics*, 14(2), 121-134. <https://doi.org/10.7160/aol.2022.140210>
 35. Tsareva, N., & Omelyanenko, S. (2020). Remote work: Development of employee digital competence. *Revista De La Universidad Del Zulia*, 11(31), 131-140. <https://doi.org/10.46925/rdluz.31.10>
 36. Wang, Q., & Shao, Z. (2024). Linking transformational leadership and digital creativity from the lens of social cognitive theory. *Industrial Management & Data Systems*, 124(6), 2312-2332. <https://doi.org/10.1108/imds-07-2023-0444>
 37. Wijaya, A. (2023). Digital culture: The conception of young citizens. *International Journal of Education and Humanities*, 3(1), 99-111. <https://doi.org/10.58557/ijeh.v3i1.142>
 38. Xu, P. (2023). Impact of digital technology on employee wellbeing in the context of teleworking during Covid-19. *Advances in Economics Management and Political Sciences*, 33(1), 219-224. <https://doi.org/10.54254/2754-1169/33/20231643>
 39. Zamilah, E. (2024). The influence of transformational leadership, work environment and digital technology on plant department employee performance PT. Kalimantan Prima Persada. *At-Tadbir Jurnal Ilmiah Manajemen*, 8(1). <https://doi.org/10.31602/atd.v8i1.13173>
 40. Zhu, J., Zhang, B., Xie, M., & Cao, Q. (2022). Digital leadership and employee creativity: The role of employee job crafting and person-organization fit. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.827057>