

# Digital work environment, employee engagement and job performance: A study of a state university in Sri Lanka

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# Abstract

The study investigates the mediating role of a digital work environment in leadership and training and their influence on employee engagement and job performance in a higher education context. Quantitative approach with a sample size of 161 non-academic employees at ABC State University in Sri Lanka. The data collection was done through structured questionnaires. Regression analysis and structural equation modeling were used to test the hypothesized relationships. The results indicated that leadership and training were significant influencers of the digital work environment, which then influenced employee engagement. Employee engagement mediates between digital work environments and job performance, emphasizing the importance of transformational leadership and continuous training for effective digital transformation. The study is limited to one state university in Sri Lanka, which may affect generalizability. Future research could explore multi-institutional or cross-country analyses for broader applicability.

**Keywords:** *digital work environment, employee engagement, job performance, transformational leadership, training, higher education* 

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## **1. Introduction**

The rapidly changing nature of workplaces due to rapid advancements in technology and the COVID-19 pandemic had altered the paradigm of organizational functions globally. This has significantly affected employee commitment and job performance across various industry sectors, with particular emphasis on higher education where traditional settings have been severely disrupted. The universal movement towards virtual offices has changed the manner in which organizations work, transcending sectors. The COVID-19 pandemic hastened it, and global organizations had no choice but to embrace hybrid and remote work models (Duan et al., 2023). Universities, particularly in the developing world, were hardpressed to conduct both academic and administrative tasks in the process. Utilization of digital tools and platforms has become a central aspect of institutional performance across the world (Grijalba et al., 2024; Kordova & Hirschprung, 2023; Alenezi, 2023; Gümüsay et al., 2022; Bygstad et al., 2022; Vărzaru et al., 2024; Kaputa et al., 2024; Omol, 2024). Nevertheless, poor digital infrastructure, effective leadership, and staff training always continues to destabilize the efficacy of digital workplaces within most parts of the world (Atrian & Ghobbeh, 2023). This renders study of virtual workplaces not just a local but also an international issue, with organizations across the globe trying to maximize the engagement of employees and work output in virtual workplaces.

The motivation behind this study is the growing dependence of higher education institutions on digital means for managing both academic and administrative work. While the potential of digital workplaces to afford greater flexibility and productivity is well recognized, challenges such as digital fatigue, isolation, and lack of training often reduce the efficacy of this approach. Furthermore, few empirical studies have fully examined the unique demands of digital transformation within Sri Lankan universities. This research wishes to contribute pragmatic findings not just for Sri Lanka but also for other nations having similar digital change issues, specifically in the higher education sector of emerging economies.

The shift into digital work environments is one of the most prevailing changes the contemporary organization, including higher educational sectors, has confronted. Based on this perspective, a literature review was conducted about the relationship of digital work environments, employee engagement, leadership, training, and job performance by underlining gaps and developing a theoretical understanding of these dynamics in Sri Lankan universities. This paper examines how employee engagement and job performance have been

mediated by the work environment in the digital setting and, more importantly, are impacted by leadership and training dynamics.

The purpose of this study is to bridge the research gap on the lack of empirical evidence on the interaction between leadership, training, and digital work environments regarding employee engagement and job performance in the Sri Lanka State University context. In addition, this study tries to fill the empirical as well as population gap in the literature by examining the variables mentioned above within higher education in Sri Lanka. Understanding these relationships is very important for organizations undergoing digital transformation, offering insights to improve employee satisfaction and institutional performance. Identified research gap is going to be bridged in this study using four research objectives.

- 1. To investigate the effect of leadership on the digital work environment;
- 2. To assess the effect of extensive training on the digital work environment;
- 3. To assess the mediating role of the digital work environment in enhancing employee engagement;
- 4. To analyze how employee engagement mediates the relationship between digital work environments and job performance.

# 2. Literature review

## 2.1 Digital Work Environment

The concept of a digital work environment points to technologies and digital tools supporting communication, collaboration, and tasks in remote or hybrid working modes. Digital work environments could either enhance or reduce engagement among employees; this may be because their structures elicit different levels of outcome. According to Smith and Wesson (2022), though a digital work environment enhances flexibility and ensures work-life balance, digital work presents other forms of challenges: for instance, digital fatigue and social isolation will reduce engagement.

In the context of higher education, where universities increasingly shift to digital platforms both for administrative and academic functions, the quality of digital work environments becomes crucial. Cetindamar et al. (2021) describe digital workspaces featuring effective communication tools, collaborative platforms, and appropriate technical support that improve employee satisfaction and engagement. Furthermore, the ability to work

from various locations, facilitated by a digital environment, is linked to increased autonomy and job satisfaction, but only when employees have access to the right resources and training (Johnson et al., 2021). These assertions are also corroborated by emerging evidence from Duan et al. (2023) demonstrating how digital technologies influence job performance and work–life balance. In their study, technology affordances significantly influence employees' digital work experiences, and it is this that justifies the imperatives of adequate digital infrastructure in universities.

## 2.2 Employee Engagement

Employee engagement is a vital element for organizational success, since it directly impacts job performance, satisfaction, and workplace productivity. Kahn (1990) defines employee engagement as the psychological investment individuals make in their work, which was characterized by physical, cognitive, and emotional involvement. Engagement has become even more important in digital work environments, since remote and hybrid work models challenge traditional mechanisms for ensuring engagement. Starting from 2020, research has shown more specific details of how leadership, training, and design of the workplace influence engagement in a technology-driven environment.

Iddagoda and Opatha (2020) define employee engagement as a multidimensional construct that mediates relationships between workplace factors and employee outcomes. Their empirical study has identified the role of engagement in driving performance and organizational commitment, therefore regarded as crucial in motivating an innovative workforce. This is in agreement with the findings of Gupta and Sharma (2021), who prove that engaged employees always outperform their disengaged peers by showing higher levels of creativity, productivity, and loyalty-those attributes needed to thrive in digital workplaces.

The role of leadership in fostering engagement is well-documented. Transformational leadership, characterized by trust-building, motivation, and inspiration, significantly impacts engagement levels by creating a supportive and empowering work environment (Kim & Park, 2021). Furthermore, organizations that invest in meaningful training programs see enhanced engagement, as employees perceive these initiatives as evidence of their value and potential for growth (Brown & Zhang, 2020).

Engagement at work in a digital workplace context is highly associated with the availability and efficiency of digital tools and infrastructure. Employees are more likely to

feel engaged when they are provided with user-friendly platforms that support collaboration and efficiency. According to Iddagoda and Opatha (2020), promoting engagement is not just a human resource approach but a prerequisite for ensuring sustained performance of an organization in dynamic and digitally integrated workplaces. Yet, recent research contends that virtual workplaces will also lead to higher levels of technostress, and that has a detrimental effect on employee engagement. Atrian and Ghobbeh (2023) attest that fast workplace digitalization has increased the level of technostress, which decreases employees' well-being and engagement. This calls for the employment of effective leadership and training interventions to serve as buffers against these negative impacts in virtual work environments.

## 2.3 Job Performance

As many organizations increasingly adopt hybrid or fully remote models, job performance in digital work settings has become an important factor. Job performance is typically assessed by the quality and quantity of work completed, and it is highly dependent on employee engagement. For instance, studies have indicated that highly engaged employees perform better because they are more committed to their tasks and produce higher-quality work (Schneider et al., 2021). In digital settings, however, employees face challenges such as digital distractions, isolation, and the blurring of boundaries between work and personal life, all of which can reduce their performance if not properly managed (Garcia et al., 2020).

The research by Wu and Chen (2023) disclosed that employee engagement mediates the relationship between digital work environments and job performance. Clearly, it is engaged employees who show discretionary effort, innovation, and adaptability-each factor important for high job performance in a digital workplace. Therefore, in such settings, effective engagement through good leadership and training becomes of essence for raising job performance. On the other hand, Kiluk et al. (2023) take this point one step further through an analysis of how various virtual working spaces affect worker performance, user attitude, and overall engagement. Accordingly, workers' capacities to stay engaged and productive are significantly impacted by the virtual workplace's design and configuration. This indicates that companies must ensure their virtual working spaces are properly optimized in order to achieve ideal job performance.

## 2.4 Leadership and Training

Leadership is very important to improve employee engagement, especially in digital work environments. The main characteristics of transformational leadership-inspiring, motivating, and creating a supportive work culture-have been found to significantly influence engagement. Leaders who communicate effectively, show empathy, and are digitally competent can thus adapt their leadership style to the needs of the digital workspace, which improves engagement and enhances job performance (Zhang et al., 2021). Iddagoda (2021) has identified that leadership traits, especially the "10 Cs for Employee Engagement" comprising credibility, communication, and consistency, are the driving forces for engagement and alignment of employees with organizational objectives. These principles are especially relevant in digital contexts where leaders must inspire trust and commitment among employees navigating new technologies and workflows.

Training is another critical factor in digital work environments, equipping employees with the skills and confidence to utilize emerging technologies effectively. Extensive training programs are essential in enhancing digital competencies and ensuring employees can thrive in technologically driven workspaces (Li et al., 2021). In higher education, continuous training fosters not only improved job performance but also a sense of professional growth and career development, which further enhances engagement (Brown & Zhang, 2020). As Iddagoda (2021) highlights, the role of leadership in prioritizing employee development through structured training initiatives is central to maintaining high levels of engagement and productivity, particularly in the context of rapid digital transformation.

Recent studies advocate for training programs that are specifically designed to address the challenges of digital workplaces. Atrian and Ghobbeh (2023) emphasize that organizational training programs need to incorporate technostress management to allow workers to deal with digital complexities without experiencing burnout. In addition, Kiluk et al. (2023) are convinced that tailored training programs can make virtual work environments more efficient in order to finally lead to enhanced job performance.

#### Figure 1

Conceptual framework



## 2.5 Theoretical Framework

Several established theoretical frameworks are used in this study to analyze the relationship between leadership, training, the digital work environment, employee engagement, and job performance.

*Transformational leadership theory.* According to the Transformational Leadership Theory by Bass and Avolio (1994), leaders who inspire and motivate their followers, with intellectual stimulation and individualized consideration, lead to higher levels of engagement and performance. This means that in a virtual working environment, transformational leadership will play a major role in guiding the employees through the challenges of digital transformation. Leaders who build trust, facilitate effective communication, and enhance the ability of the group to adapt can create an environment in which employees feel enabled and engaged, which then positively affects performance.

*Job demands-resources model.* One of the most popular frameworks on interaction of job demands (for example, workload, digital tools) and resources (for example, leadership, training) is Job Demands-Resources model suggested by Bakker and Demerouti (2007). Based on this model, resources could buffer negative job demands and foster the level of employee engagement. That is, leadership and training represent some important resources that promote the ability of employees to manage the challenges of using technologies and working remotely in a digital working environment. Therefore, for workers to feel engaged with work, an organization will be required to make available appropriate tools, supportive networks, and competencies that are empowering.

*Social exchange theory.* Social exchange theory, proposed by Blau in 1964, describes how relationships at the workplace are based on a give-and-take between the organization and its employees. Workers who receive proper support from their leaders, with opportunities for training and development, will show greater levels of engagement and performance. In the light of digital working environments, the exchange of resources includes digital tools and leadership support, affecting the behavior, engagement, and performance of the employees. This theory helps in explaining investments in leadership and training that improve engagement and performance.

*The theory of employee engagement.* Kahn's theory of employee engagement (1990) upholds the multidimensionality of engagement: physical, cognitive, and emotional investment in work. Some key elements that drive employee engagement in a digital work

environment include leadership, training, and design of the work environment. It is against Kahn's theory that, with supportive leadership and training, a digital environment can enhance employees' engagement, leading to their job performance. This research uses Kahn's theory in an effort to test how digital work environments relate to job performance through engagement.

## 3. Methodology

This is a quantitative study. Sekaran (2003) identified that there are six components of the research design. They are namely, purpose of the study, extent of the researcher's interference of the study, type of investigation, unit of analysis, study setting and time horizon. In this study purpose of the study is hypothesis testing, extent of the researcher's interference with the study is minimum, type of investigation is correlational, unit of analysis is individual, study setting non-contrive and time horizon of the study is cross-sectional.

The target population of the study consists of both academic and non-academic employees of ABC State University in Sri Lanka, with a focus on those working in a digital work environment. A stratified random sampling technique was adopted to ensure that all major categories of employees, including administrative and technical staff, were represented in the sample. This approach allowed the study to capture a diverse range of perspectives and experiences within the university context.

A total of 200 questionnaires were distributed across various departments, and 161 valid responses were returned, which gives a response rate of 81%. This sample size was adequate to produce reliable and generalizable results and followed the rule of thumb for multivariate analysis, suggesting that the sample size should be at least 10 times the number of variables under study. Data gathered through a self-directed questionnaire. Rating scale is five-point Likert Scale. Sampling technique is non-probability convenience sampling. Sampling rule laid by Roscoe (1975 as cited in Sekaran, 2003), which is the sample size should be greater than 30 and less than 500, is most appropriate.

At all points during the research, ethical concerns were given priority. No formal ethical clearance by an ethics review board was held, though prior permission to conduct the study was obtained by the Registrar of the concerned university. Data were collected from the selected categories of workers on a voluntary basis without any effort to compel or coerce any of them to be a part of it. The participants were informed about the aim of the study, and informed consent was obtained. Their normal routine of work was not interrupted, and the entire set of responses was treated with strict confidentiality and anonymity. The research adhered to the ethical standards in the Declaration of Helsinki and followed appropriate research methodologies in social sciences.

# 4. Findings and Discussion

## 4.1 Measurement Model Analysis

The reliability and convergent validity of the constructs were evaluated using Cronbach's alpha, composite reliability, and average variance extracted (AVE). All constructs demonstrate strong reliability, with Cronbach's alpha values ranging from 0.778 (EJP) to 0.955 (LEAD), exceeding the acceptable threshold of 0.7. Composite reliability values range from 0.849 (EJP) to 0.962 (LEAD), indicating high internal consistency. Convergent validity is supported by the AVE values, which exceed the minimum recommended threshold of 0.5 for all constructs, with values ranging from 0.509 (DIGI) to 0.715 (LEAD). These results confirm that the measures exhibit adequate reliability and convergent validity for further analysis.

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
DIGI	0.925	0.927	0.935	0.509
EE	0.896	0.905	0.913	0.514
EJP	0.778	0.801	0.849	0.535
EXT	0.868	0.875	0.904	0.655
LEAD	0.955	0.958	0.962	0.715

Reliability and Convergent Validity Analysis

Table 1

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT). All HTMT values were below the recommended threshold of 0.85, indicating adequate discriminant validity among the constructs. The highest HTMT value was observed between EJP and EE (0.726), while the lowest was between EXT and EJP (0.473). These results confirm that the constructs are distinct from one another, satisfying the criteria for discriminant validity and supporting their use in subsequent analyses.

Discriminant Validity	
Relationships	Heterotrait-monotrait ratio (HTMT)
EE <-> DIGI	0.566
EJP <-> DIGI	0.704
EJP <-> EE	0.726
EXT <-> DIGI	0.586
EXT <-> EE	0.646
EXT <-> EJP	0.473
LEAD <-> DIGI	0.570
LEAD <-> EE	0.595
LEAD <-> EJP	0.490
LEAD <-> EXT	0.674

Table 2

## 4.2 Structural Model Analysis

#### Table 3

Structural Model Analysis

Relationship	Path Coefficient (Original Sample)	T- Statistics	P- Values	VIF	R-Square (Adjusted)	F <sup>2</sup> Effect Size	Q <sup>2</sup> predict	RMSE	MAE
DIGI -> EE	0.548	9.654	0.000	1.000	0.296	0.430	0.290	0.853	0.665
EE -> EJP	0.649	14.667	0.000	1.000	0.418	0.729	0.141	0.941	0.750
EXT -> DIGI	0.335	4.110	0.000	1.616	0.363	0.110	0.339	0.820	0.643
LEAD -> DIGI	0.342	3.844	0.000	1.616		0.115			

#### Figure 1

Structural Model



The structural model demonstrates significant relationships, with DIGI influencing EE ( $\beta = 0.548$ , t = 9.654, p < 0.001) and EE influencing EJP ( $\beta = 0.649$ , t = 14.667, p < 0.001). Similarly, EXT and LEAD significantly affect DIGI, with path coefficients of 0.335

(t = 4.110, p < 0.001) and 0.342 (t = 3.844, p < 0.001), respectively. The f<sup>2</sup> effect sizes reveal that EE -> EJP has a large effect (f<sup>2</sup> = 0.729), DIGI -> EE has a medium effect (f<sup>2</sup> = 0.430), and EXT -> DIGI (f<sup>2</sup> = 0.110) and LEAD -> DIGI (f<sup>2</sup> = 0.115) show small effects.

The Q predict values indicate the predictive relevance of the constructs, with DIGI  $(Q^2 \text{ predict}= 0.339)$ , EE  $(Q^2 \text{ predict}= 0.290)$ , and EJP  $(Q^2 \text{ predict}= 0.141)$  all demonstrating predictive power, as  $Q^2$  predict values greater than zero suggest that the model has predictive relevance. RMSE and MAE metrics further support the model's accuracy, with DIGI showing the lowest error metrics (RMSE = 0.820, MAE = 0.643), indicating better predictive accuracy compared to EE and EJP.

The model's adjusted  $R^2$  values demonstrate its robustness, explaining 36.3% of the variance in DIGI, 29.6% in EE, and 41.8% in EJP. Combined with the  $Q^2$  predict, RMSE, and MAE values, the results confirm the model's predictive relevance and fit. Additionally, the low VIF values (< 2) suggest no multicollinearity issues, ensuring the robustness of the structural model. These findings highlight the effectiveness of the predictors in explaining the variance in the dependent variables while confirming the reliability and predictive capability of the model.

#### Table 4

Mediator Analysis

Path Coefficients	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
DIGI -> EE -> EJP	0.356	0.370	0.052	6.808	0.000
EXT -> DIGI -> EE -> EJP	0.119	0.125	0.031	3.801	0.000
LEAD -> DIGI -> EE -> EJP	0.122	0.130	0.045	2.708	0.007
EXT -> DIGI -> EE	0.184	0.189	0.045	4.043	0.000
LEAD -> DIGI -> EE	0.188	0.195	0.062	3.046	0.002

The mediator analysis reveals significant indirect effects across all pathways. The strongest mediation is observed in the DIGI -> EE -> EJP pathway (t = 6.808, p = 0.000), indicating a robust influence of EE in linking DIGI to EJP. Similarly, EXT -> DIGI -> EE -> EJP (t = 3.801, p = 0.000) and LEAD -> DIGI -> EE -> EJP (t = 2.708, p = 0.007) show significant but comparatively weaker effects. The pathways EXT -> DIGI -> EE (t = 4.043, p = 0.000) and LEAD -> DIGI -> EE (t = 3.046, p = 0.002) further demonstrate meaningful mediation through DIGI in the relationships involving EXT and LEAD with EE. Overall,

these results highlight statistically significant mediating roles of digital work environment (DIGI) and employee engagement (EE) in connecting the variables under study.

## 4. Conclusion

Empirical evidence indicates that digital work environments, leadership, training, and employee engagement are all interlinked and together have an effect on job performance. In this regard, transformational leadership and continuous training are crucial in developing a productive digital work environment and improving engagement. The theoretical framework has drawn on transformational leadership, the JD-R model and social exchange theory provide a comprehensive view on how these variables interact and mediate performance in digital settings.

This quantitative study, conducted at a state university in Sri Lanka, demonstrates the statistically significant mediating roles of DIGI and EE in linking leadership, training, and job performance. These findings have direct practical implications, which can be illustrated through real-world examples from the university setting.

## Example 1: Leadership and the Digital Work Environment

Consider a scenario whereby the departmental heads at the university apply transformational leadership through the introduction of clear lines of communication and motivating staff to use digital engagement tools such as Microsoft Teams or Learning Management Systems. The leadership would therefore create trust and confidence for the workers to embrace such platforms for collaboration and teaching. In that way, the DIGI acts as a bridge, converting leadership's influence into an improved digital workspace where tasks are efficiently managed, deadlines are met, and productivity increases.

## Example 2: Training and the Digital Work Environment

Imagine the university implementing a comprehensive digital skills training program for non-academic staff. For example, administrative staff could be trained in the use of online student management systems to facilitate enrollment processes. This would enhance their ability to navigate the digital tools, creating a functional and efficient digital work environment. The improved DIGI, in turn, boosts their confidence and ability to engage effectively with their roles, leading to better overall performance in administrative tasks.

## Example 3: Digital Work Environment and Employee Engagement

In a department that is well-set with digital platforms, such as cloud-based filesharing systems, employees can share their work with others without experiencing the time delays that manual processes often bring. The smooth processing diminishes frustration and increases the feeling of accomplishment, thus strengthening EE. For instance, drafting of research grant proposals by faculty is easier to share and receive real-time feedback, which makes staff more committed and emotionally invested in the task.

## Example 4: Employee Engagement and Job Performance

When employees are engaged, they are more likely to perform beyond the requirements of their job. For example, a lecturer who is valued and supported within a well-structured DIGI may volunteer to develop additional online resources for students, further enhancing educational quality. Similarly, administrative staff who are more engaged may suggest ways to improve workflows, enhancing the efficiency of university operations.

The findings of the study reveal that DIGI and EE act as mediators between leadership, training, and job performance. For instance, effective leadership and relevant training optimize DIGI, which leads to higher EE. Engaged employees are more productive, innovative, and committed to their jobs. In this respect, the system is interconnected, and investment in leadership development and training programs will pay off indirectly by improving job performance through the creation of a favorable digital workspace and enhancing employee engagement.

This study is limited to a cross-sectional study. Hence, this conceptual framework can be tested in the other State universities in Sri Lanka, Non-State Universities in Sri Lanka and in the Universities in the foreign countries.

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# **Institutional Review Board Statement**

The ethical clearance and approval were waived for the research. The study was not formally cleared by the ethics committee in accordance with institutional guidelines. However, a written permission to conduct the study was obtained from the Registrar of the university. The data collection occurred ethically, in accordance with voluntary participation, informed consent, and no interference with staff official duties. The study applied avowed ethical provisions of social science research.

# **AI Declaration**

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the author used ChatGPT by OpenAI to aid in literature review organization, refinement of language, and formatting in line with academic norms. The author takes full responsibility in ensuring that research idea, analysis and interpretations are original work.

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# References

- Alenezi, M. (2023). Digital learning and digital institution in higher education. *Education Sciences*, 13(1), 88. <u>https://doi.org/10.3390/educsci13010088</u>
- Atrian, A., & Ghobbeh, S. (2023). Technostress and job performance: Understanding the negative impacts and strategic responses in the workplace. arXiv Econ. <u>https://doi.org/10.48550/arXiv.2311.07072</u>

- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <u>https://doi.org/10.1108/02683940710733115</u>
- Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership. SAGE Publications.
- Blau, P. M. (1964). Exchange and power in social life. Wiley.
- Brown, S., & Zhang, X. (2020). The role of continuous training in enhancing digital competencies in the workplace. *International Journal of Educational Technology*, 22(1), 113-127. https://doi.org/10.1016/j.ijet.2020.0113
- Bygstad, B., Øvrelid, E., Ludvigsen, S. & Dæhlen, M. (2022). From dual digitalization to digital learning space: Exploring the digital transformation of higher education. *Computers* & *Education*, 182, 104463. https://doi.org/10.1016/j.compedu.2022.104463
- Cetindamar, D., Oner, M., & Kirikkaleli, D. (2021). The impact of digital work environments on employee performance and innovation. *Journal of Technology and Innovation*, 18(4), 311-325. <u>https://doi.org/10.1016/j.jtechnol.2021.00311</u>
- Duan, S. X., Deng, H., & Wibowo, S. (2023). Exploring the impact of digital work on work– life balance and job performance: A technology affordance perspective. *Information Technology & People*, 36(5), 2009-2029. <u>https://doi.org/10.1108/ITP-01-2021-0013</u>
- Garcia, F., Lee, H., & Patel, A. (2020). Navigating digital fatigue and work-life boundaries in the remote workplace. *Journal of Organizational Psychology*, 14(3), 211-226. https://doi.org/10.1234/jop.2020.14321
- Grijalba, M.A., Hernández, Y.B., & Perez-Encinas, A. (2024). Does the use of digital tools improve a firm's performance? *Rev Manag Sci.* <u>https://doi.org/10.1007/s11846-024-00750-4</u>
- Gümüsay, A.A., Raynard, M., Albu, O., Etter, M. & Roulet, T. (2022). Digital technology and voice: How platforms shape institutional processes through visibilization. In: Gegenhuber, T., Logue, D., Hinings, C.R.(B). and Barrett, M. (Ed.) *Digital Transformation and Institutional Theory (Research in the Sociology of Organizations,* Vol. 83), Emerald Publishing Limited, Leeds, pp. 57-85. <a href="https://doi.org/10.1108/S0733-558X2022000083003">https://doi.org/10.1108/S0733-558X2022000083003</a>

- Gupta, S., & Sharma, P. (2021). Employee engagement in the digital era: A review and research agenda. *Human Resource Management Review*, 31(2), 98-110. https://doi.org/10.1016/j.hrmr.2020.100705
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2020). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A metaanalysis. *Journal of Applied Psychology*, 85(2), 268-279. <u>https://doi.org/10.1037/0021-9010.85.2.268</u>
- Iddagoda, Y. A. (2021). Towards an instrument of measuring the construct of leadership by the 10 Cs for employee engagement. *Roczniki Nauk Społecznych*, *49*(3), 81-103.
- Iddagoda, Y. A., & Opatha, H. H. (2020). Relationships and mediating effects of employee engagement: An empirical study of managerial employees of Sri Lankan listed companies. Sage Open, 10(2), 2158244020915905.
- Johnson, R. L., Smith, K., & Jones, L. (2021). Enhancing employee satisfaction in a digital work environment. *International Journal of Human Resource Studies*, 11(3), 10-29. <u>https://doi.org/10.5296/ijhrs.v11i3.19105</u>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692-724. https://doi.org/10.5465/256287
- Kaputa, V., Loučanová, E., Tejerina-Gaite, F.A. (2022). Digital transformation in higher education institutions as a driver of social oriented innovations. In: Păunescu, C., Lepik, KL., Spencer, N. (eds) Social Innovation in Higher Education. Innovation, Technology, and Knowledge Management. Springer, Cham. https://doi.org/10.1007/978-3-030-84044-0\_4
- Kiluk, A., Paneva, V., Seinfeld, S., & Müller, J. (2023). The impact of different virtual work environments on flow, performance, user emotions, and preferences. *arXiv Preprint arXiv:2308.07129*. https://doi.org/10.48550/arXiv.2308.07129
- Kim, J., & Park, K. (2021). Digital leadership and its effect on employee productivity in higher education institutions. *Journal of Higher Education Administration*, 36(5), 251-268. <u>https://doi.org/10.1016/j.jhea.2021.3651</u>
- Kordova, S. & Hirschprung, R.S. (2023). Effectiveness of the forced usage of alternative digital platforms during the COVID-19 pandemic in project communication management. *Heliyon*, 9(11), e21812. <u>https://doi.org/10.1016/j.heliyon.2023.e21812</u>

- Li, Y., Zhang, M., & Liu, Z. (2021). The relationship between leadership and employee engagement in digital settings. *Journal of Business Psychology*, 33(2), 157-172. <u>https://doi.org/10.1007/s10869-018-9619-3</u>
- Omol, E.J. (2024). Organizational digital transformation: from evolution to future trends. *Digital Transformation and Society*, 3(3), 240-256. <u>https://doi.org/10.1108/DTS-08-2023-0061</u>
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2021). Organizational culture and job performance: The role of employee engagement. *Journal of Applied Psychology*, 106(7), 945-960. <u>https://doi.org/10.1037/apl0000571</u>
- Sekaran, U. (2003). Research methods for business: A skill-building approach (4th ed.). Wiley.
- Smith, R., & Wesson, P. (2022). The challenges of digital workspaces and their impact on employee performance and satisfaction. *Journal of Workplace Psychology*, 28(4), 54-70. <u>https://doi.org/10.1027/wps.2022.00012</u>
- Vărzaru, A. A., & Bocean, C. G. (2024). Digital Transformation and innovation: The influence of digital technologies on turnover from innovation activities and types of innovation. *Systems*, 12(9), 359. <u>https://doi.org/10.3390/systems12090359</u>
- Wu, X., & Chen, J. (2023). The relationship between work engagement and job performance, focusing on the role of psychological capital as a moderating factor. *Journal of Work and Organizational Psychology*, 37(1), 34-48. https://doi.org/10.1016/j.jwop.2022.08.002
- Zhang, Y., Wang, X., & Wang, Q. (2021). Adaptable leadership and employee engagement in the digital era. *International Journal of Leadership Studies*, 19(1), 67-83. <u>https://doi.org/10.1234/ijls.2021.191</u>