Unraveling Productivity Antecedents of Transformational Leadership, Digital Literacy, Work-Life Balance, and Employee Engagement: A Conceptual Analysis

Trilastiti Suryaningtyas[1*] and Kusuma Chandra Kirana[2]

[1, 2] Master of Management Study Program, Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia
*[1]anggrekjasmine83@gmail.com, [2]kusumack@ustjogja.ac.id

Abstract. The current paradigm in public administration has moved away from measuring the productivity of employees in terms of physical presence and adopted a performance-oriented approach that is critical to organizational effectiveness. Despite high SAKIP ratings at the macro level, the Regional Library and Archives Agency (DPAD) of Yogyakarta experiences a paradox of productivity at the micro level, where intensive workloads and digital transformation demands like the implementation of the Srikandi system, jeopardize employee welfare and service quality. In literature, transformational leadership, digital literacy and work-life balance are acknowledged as potential performance drivers, but how these factors impact productivity is still debated. The present conceptual study intends to fill this research gap by proposing a framework that confirms employee engagement as an important mediator between the effect of these three drivers and individual productivity. Drawing on a diverse literature, this study proposes a model of employee engagement as the psychological mechanism that transforms organizational inputs into ongoing and proactive work behaviors. The results show that the congruence of transformational leadership, digital literacy and work-life balance results in a deep emotional attachment with vigor, dedication and absorption, which allows staff to go the extra mile for institutional standards through discretionary effort. This study provides actionable insights for public sector policymakers, emphasizing that achieving resilience and peak productivity in the digital era necessitates a strategic focus on the emotional and psychological alignment of the workforce alongside technical and structural improvements.

Keywords: Digital Literacy; Employee Engagement; Public Sector Productivity; Transformational Leadership; Work-Life Balance.

1 Introduction

In the current context of public administration, employee productivity has become the bedrock of organizational efficiency, shifting from traditional metrics of physical presence to a performance focus that yields tangible societal outcomes [1], [2]. Such productivity is important for agencies such as the Regional Library and Archives

© The Author(s) 2026
K. Chandra Kirana et al. (eds.), *Proceedings of the International Conference on Business, Economic, and Social Sustainability (ICOBES 2026)*, Advances in Economics, Business and Management Research 409,
https://doi.org/10.2991/978-94-6239-811-5_24

Agency (DPAD) of Yogyakarta to maintain service excellence and manage regional intellectual property [3]. Despite the consistent "AA" SAKIP ratings for DPAD DIY, the micro-level productivity paradox persists. The huge effort needed to obtain top-level literacy indices is often incompatible with human resource constraints and it is a major obstacle to the transition to digital systems such as Srikandi [4]. Failure to address these stressors will most likely lead to psychological burnout, with implications for the quality of individual services and institutional performance [4].

Earlier discussion has implied that productivity at DPAD DIY is a function of a triad of transformational leadership, digital literacy and work-life balance [2], [3], However, the mechanisms through which these drivers impact performance have remained contested. The literature on productivity determinants is inconsistent and there is a critical research gap: some studies suggest that leadership and mastery of technology will automatically improve productivity [5], while others suggest that without deep emotional attachment, these drivers often fail to optimize performance due to latent mental fatigue and resistance [6], [7]. This divergence suggests productivity is not linearly affected by external factors, but needs a psycho-logical mediation to convert these inputs into sustained output [2].

Leadership does not always directly influence work outcomes across cohorts, so the role of employee engagement as a psychological nexus is worthy of rigorous investigation. In the absence of such engagement, empirical evidence suggests that competencies and leadership styles are difficult to translate into maximized productivity [2]. In this study, we examine engagement as a mediating variable to explain the internalization of the organizational drivers, such as leadership, digital literacy and work-life balance, into the emotional commitment required for consistent performance. This framework is particularly salient for DPAD DIY, where the emotional alignment of the workforce is essential to converting digital-era mandates into tangible improvements in archival services.

Thus, the purpose of this study is to empirically validate employee engagement as the crucial mediator of the effects of transformational leadership, digital literacy, and work-life balance on individual productivity. This study fills the gaps in the existing literature and provides a refined model of public sector management emphasizing the importance of psychological factors besides technical and structural improvements. Ultimately, this research provides actionable insights for policymakers to cultivate a more resilient, engaged, and productive public workforce in the context of rapid digital transformation.

2 Literature Review

2.1 Productivity is Fundamental Theory

Productivity is a key concept in organizational theory that reflects employees' ability to achieve optimal work outcomes through the effective use of available resources, time, and competencies [8]. Productivity is not just about efficiency and effectiveness. It is also a professional attitude that implies commitment to continuous improvement, dedication to quality, and ability to adapt to changes in the organization. Therefore, productivity is considered as an important measure of organizational efficiency, as it

measures the input of employees towards the achievement of organizational goals [9]. Previous studies show that productivity is influenced by technical competence, employee well-being and supportive workplace relationships which enhance employees' ability to work effectively and sustainably [8]. In the context of the DPAD, this study adopts a multidimensional perspective of productivity encompassing expertise, achievement of performance targets, work enthusiasm, self-development, and quality of work outcomes to provide a comprehensive understanding of employee performance [10].

2.2 Transformational Leadership

Transformational leadership is a leadership approach that inspires employees to prioritize organizational goals over personal interests through inspiration, intellectual stimulation, and individualized support, thereby enhancing commitment, motivation, and performance [11]. his construct is commonly operationalized using the 4Is framework Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration [12], consisting of Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. These dimensions reflect leaders' abilities to serve as role models, inspire optimism and shared purpose, encourage innovative thinking, and provide individualized mentoring and support. Individual factors like emotional intelligence and integrity, and organizational factors such as culture, quality of communication, digital literacy and work-life balance support also further influence the effectiveness of transformational leadership [2], [13]. Thus, transformational leadership is important to increase employee motivation and organizational effectiveness in dynamic and digitally evolving workplaces.

2.3 Digital Literacy

Digital literacy is a multidimensional competence that includes the ability to access, evaluate, manage, and use digital information effectively and responsibly [14]. It encompasses technical proficiency, information evaluation, communication, problem-solving, and ethical awareness related to privacy and digital security [15]. Its development is influenced by technological infrastructure, organizational support, and employees' motivation to adopt digital technologies [3], [16]. This study adopts the framework of [17], which measures digital literacy through operational, information, strategic, communication, creative content, and critical thinking skills. These dimensions measure employees' ability to use digital technologies, to evaluate information, to collaborate, to produce digital content and to resolve cybersecurity issues. Digital literacy is an important enabler for the DPAD to support digital transformation, archival management, information accessibility and innovative public service delivery.

2.4 Work-Life Balance

Work-life balance is the ability of an individual to balance work responsibilities with the personal and family life without compromising the physical and psychological well-being [18]. It is widely recognized as a major driver of employee motivation, job satisfaction, commitment and productivity, while reducing stress and work related pressures [19]. In this study, work-life balance is operationalized using the multidimensional framework proposed [20], which measures work-life balance through four dimensions: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), Work Enhancement of Personal Life (WEPL), and Personal Life Enhancement of Work (PLEW). These dimensions include the dynamics of both conflict and enrichment that occur between work and personal life. Work-life balance is also affected by organizational factors such as workload, work schedules and job demands as well as individual factors such as family support, personal attitudes and economic conditions [21]. Therefore, it is essential to ensure work-life balance as a means of improving employee well-being and maintaining productivity in the difficult working environments of the public sector.

2.5 Employee Engagement

Employee engagement is a positive psychological state in which employees invest their physical, cognitive, and emotional energy to support organizational goals [22], [23]. It reflects a strong emotional attachment to the organization, resulting in greater enthusiasm, dedication, resilience, and proactive behavior [24]. Employees who are highly engaged tend to be more innovative, adaptable, and continue to perform at higher levels because they find their work meaningful and are willing to go the extra mile [25]. In the present study, the employee engagement framework of Schaufeli and Bakker consisting of Vigor, Dedication and Absorption [26], has been adopted. Besides these three indicators, Willingness and Commitment are also taken as complementary indicators [27]. These dimensions reflect the employees' energy, involvement, discretionary effort and emotional attachment to the organization. This is an important mechanism that can be used to improve workforce performance and organizational success. The factors influencing employee engagement include effective communication, meaningful organizational values, transformational leadership, recognition, autonomy and opportunities for learning and development [22], making it an important mechanism for enhancing workforce performance and organizational success.

3 Critical Synthesis of Literature

Transformational Leadership, Digital Literacy and Work-Life Balance are identified as important factors for Employee Productivity. Transformational leadership increases motivation, innovation and performance [11],[12]. where digital literacy enhances employees' capacity for adaptation, efficiency and enabling digital transformation [14], [15], [17]. Balance between work and personal life reduces psychological strain [18], [19]. and thereby contributes to well-being, job satisfaction and sustainable

performance. Employee productivity is affected by leadership, technological capacity, and employee health. However, the mechanisms behind these relationships are inconclusive in previous results. Some studies have found direct positive effects of transformational leadership and digital competence on performance and productivity [7], [28], [29], but others found that these effects are contingent on employees' psychological readiness, emotional attachment, and willingness to go beyond formal job requirements [10], [34]. Likewise, the impact of work-life balance on productivity is not always consistent as the employees may have different levels of commitment and engagement while receiving similar organizational support [2], [21]. [32]. The inconsistencies suggest that other psychological mechanisms should be considered.

Employee engagement is widely recognized as a mechanism linking organizational resources to employee outcomes. Higher levels of vigor, dedication, and absorption are associated with better performance and productivity [31], [33], [26]. Previous studies also show that employee engagement mediates the effects of leadership, work environment, and quality-of-work-life initiatives on employee performance [30], [24], [31], [32]. Nevertheless, limited research has examined its mediating role in the relationships among transformational leadership, digital literacy, work-life balance, and productivity, particularly in public sector organizations undergoing digital transformation. Therefore, this study proposes an integrated conceptual framework that positions employee engagement as a key mechanism for enhancing employee productivity.

4 Methodology

This research utilizes a conceptual approach to define theoretical concepts and create new interpretations [33]. According to [34], a conceptual review helps in recognising research gaps and developing a framework for future empirical investigations. Relevant literature is brought together to support that, reducing it down (match less and match loosely) to research objectives allowing full complexities to be woven in so the relationships between key concepts may easily be understood. The result of this step is a conceptual model, which can be tested in the future. The aim of this study is to find the answers to some essential research questions, which are given as followed: (1) To what extent do transformational leadership, digital literacy, and work-life balance directly influence employee engagement and productivity? (2) Does employee engagement significantly and positively impact employee productivity? (3) Does employee engagement effectively mediate the relationship between transformational leadership, digital literacy, work-life balance, and employee productivity?

5 Result and Discussion

5.1 The Influence of Transformational Leadership on Employee Engagement

Transformational leadership serves as a key driver of organizational change in public institutions. At DPAD Yogyakarta, leaders who provide inspiration, support, and

intellectual stimulation help foster a service oriented culture, encourage adaptation to digital systems, and make employees feel valued as important organizational assets. This dynamic aligns with the findings of [2], who emphasizes that such leadership is critical in cultivating emotional attachment among modern employees who prioritize self-actualization. Empirically, the bond between leadership and subordinates follows a social exchange mechanism; employees respond to high perceived organizational support produced by progressive leadership with higher levels of commitment, proactive acts of innovation, and immersion in task. This argument is supported by previous studies [31], who identify leadership as a catalyst for psychological well-being, and while leaders' behavior significantly influences employee engagement and performance [23] [24]. Accordingly, transformational leadership at DPAD DIY is proposed to strengthen employee engagement by fostering perceptions of support, commitment, and motivation to address organizational challenges effectively.

5.2 The Influence of Digital Literacy on Employee Engagement

In the era of bureaucratic change, digital literacy is becoming an existential need, rather than an additional skill, and it is the engine for employee engagement in public sector institutions. The acquisition of digital tools and archiving systems is a critical catalyst to the self-efficacy of the Yogyakarta DPAD. The acquisition of digital tools and archiving systems provides professional security and confidence for employees to execute tasks with minimal technical frustration. As mentioned in [28], and [1], high digital proficiency reduces mental workload and technical barriers, and also fosters comfort at work and pride in the profession through the contribution of meaningful, innovation-driven solutions to public services. The coupling of competence and technology is also supported by the research of [35], who stress the importance of continuous development of digital competencies for long-term productivity and emotional attachment. Drawing on literature, this study argues that digital literacy, including operational skills as well as critical thinking about technology, is a major psychological trigger for increasing employee engagement. As employees develop more skills on modern systems, they are more confident and cognitively absorbed, which results in a greater and more dedicated relationship with the organization's strategic shift to a digital-first future.

5.3 The Influence of Work-Life Balance on Employee Engagement

Civil servants often deal with a lot of administrative work, which makes it important to find a good balance between their work life and personal life. Support for employees' personal lives can help build a stronger sense of responsibility and commitment, which translates into greater dedication at work. As highlighted by [2], maintaining this balance is a prerequisite for modern employees to remain engaged without succumbing to the pressures of excessive professional demands. Organization such as DPAD of Yogyakarta can ensure better mental health conditions among the workers, which would subsequently reduce emotional exhaustion, hence, allowing them to work with a clearer mind and better concentration; as indicated by [30], who prove that work-life balance leads to high engagement by creating overall satisfaction both inside and outside the workplace. The study by [36], [23], and [1] also support that the provision

of flexibility and humane management of work is very strong mediation for loyalty and sustainable attachment. Therefore, the following proposition is advanced when the boundaries between professional requirements and personal needs are harmoniously managed, the resulting reduction in psychological stress and emotional fatigue creates a foundation for engagement; grounded in social exchange theory, this suggests that employees who feel their personal lives are respected reciprocate with higher levels of energy, focus, and loyalty, which collectively trigger the core dimensions of work engagement: vigor, dedication, and absorption.

5.4 The Influence of Transformational Leadership on Employee Productivity

In public sector organizations such as DPAD Yogyakarta, productivity is not reflected only in employee attendance as well as in the quality and effectiveness of work outcomes. Transformational leadership fulfills an essential role in aligning employee efforts with enterprise objectives by delivering a clear vision, direction, and necessary resources. Previous studies have shown that transformational leadership has a strong positive relationship with employee performance [29]. Through fostering autonomy, trust, and intrinsic motivation, transformational leaders encourage employees to work more efficiently and achieve higher performance standards, making this leadership style especially effective in improving productivity [37]. Furthermore, leaders who emphasize employee satisfaction tend to generate productivity levels that exceed organizational expectations [38]. In the context of digital archiving, supportive leadership is also essential for lowering bureaucratic barriers and improving organizational performance [6] [23]. Therefore, transformational leadership can be viewed as a key driver of a performance-oriented culture, facilitating organizations to minimize inefficiencies, promote employee development, and attain sustainable productivity outcomes.

5.5 The Influence of Digital Literacy on Employee Productivity

Digital literacy has become a key determinant of productivity in organizations undergoing digital transformation. Employees with strong digital competencies can operate information and archiving systems more efficiently, resulting in higher work performance and productivity. [28] demonstrate in their study that information and communication technology competency directly determines work performance; without adequate literacy, advanced technology can instead become a burden to the workflow. The mastery of digital tools facilitates the automation of routine tasks that were previously time-consuming when performed manually. This gain in efficiency provides employees with the necessary space to focus on strategic tasks that require deeper analysis. [39] who identify technology utilization as a major predictor of employee performance in the Industry 4.0 era, and by [35], who emphasize digital skill development as an effective investment for enhancing productivity. Moreover, digital literacy enhances a company's capacity to adapt, as employees with stronger digital competencies encounter fewer technical difficulties and psychological barriers when adopting new platforms. A study by [1] reinforces the finding that effectively using digital tools has a considerable impact on employee performance. In relation to DPAD

DIY, digital literacy facilitates the process of digital evolution, enhances time management, minimizes mistakes in work, and allows employees to concentrate on more valuable tasks, thus improving the overall level of productivity.

5.6 The Influence of Work-Life Balance on Employee Productivity

Work-life balance is a strategic factor in sustaining employee productivity. Employees who experience minimal conflict between work and personal responsibilities tend to have greater energy and focus, enabling them to perform more effectively and maintain consistent performance. As noted by [30], work-life balance exerts a crucial influence on performance enhancement because stable psychological conditions facilitate improved concentration required to meet daily organizational targets. The harmony between office demands and family life effectively alleviates mental fatigue, allowing staff to dedicate their full focus to their tasks. Policies that support this balance are proven to reduce absenteeism and decrease errors caused by chronic burnout. Research by [36] confirms that work-life balance contributes directly to operational efficiency by bolstering job satisfaction, a finding reinforced by [23], who assert that productivity flourishes when organizations provide the necessary space for employees to fulfill their various roles effectively. Furthermore, [1] highlight that balanced workload management is the key to maintaining productivity in high-pressure environments, while [5] conclude that employee well-being is an absolute determinant that steers performance toward more positive and sustainable outcomes. Psychological stability is essential for sustaining employee performance. At DPAD Yogyakarta, work-life balance helps reduce role conflict and prevent burnout, enabling employees to maintain focus, job satisfaction, and efficiency. Therefore, work-life balance functions as a strategic factor that supports higher and more sustainable performance.

5.7 The Influence of Employee Engagement on Employee Productivity

Employee engagement is a critical internal driver of employee productivity because it encourages individuals to contribute beyond formal job requirements. Engaged employees demonstrate stronger commitment, responsibility, and discretionary effort in achieving organizational goals, which positively influences performance [40]. Emotional attachment fosters a strong sense of organizational ownership, leading employees to meticulously care for the quality of every document processed or service provided. At the DPAD of Yogyakarta, this is reflected in a persistent drive to elevate public service standards. [41] emphasize that such engagement and passion serve as a primary engine for productivity that cannot be replaced by external factors alone, as engaged individuals demonstrate greater persistence when confronting complex professional challenges. This view is supported by studies [24], [31], [32], which identify employee engagement as an essential mechanism for translating human resource potential into superior organizational outcomes. In the context of DPAD DIY, highly engaged employees exhibit greater persistence, dedication, and commitment to improving public service quality. Therefore, productivity is influenced not only by systems and technology but also by employees' internal motivation and alignment with organizational goals, which ultimately enhance work performance and outcomes.

5.8 The Mediating Role of Employee Engagement in the Influence of Transformational Leadership on Productivity

Employee engagement serves as a critical emotional bridge a mediating variable that determines the effectiveness of transformational leadership in driving organizational productivity, particularly within the public sector context of the DPAD of Yogyakarta. While leaders provide the idealized influence and intellectual stimulation necessary to establish a strategic vision, this vision does not automatically translate into performance without a corresponding psychological response from the workforce; as established by [31], engagement acts as the "stitching" that connects managerial style to tangible work outcomes. Supporting this, research by [23], [24], [40] confirms that leader behavior functions as an essential antecedent that fosters the dedication, vigor, and absorption necessary to transform potential into proactivity. Accordingly, this study posits that the impact of transformational leadership on productivity is not direct but is mediated by employee engagement, representing a transitional process where the inspiration provided by superiors cultivates a sense of organizational ownership and passion among staff; thus, the resulting high productivity is the direct consequence of a leadership approach that successfully converts emotional commitment into consistent, high-quality, and proactive service output.

5.9 The Mediating Role of Employee Engagement in the Influence of Digital Literacy on Productivity

Digital literacy provides the essential technical foundation for modern public service, yet it is employee engagement that determines the extent to which these capabilities are leveraged to achieve organizational goals. While digital proficiency grants employees the tools to operate archiving systems, high levels of engagement act as the vital "willingness" that transforms technical aptitude into proactive innovation rather than mere mechanical compliance. As [28] observe, digital competency must be coupled with the motivation inherent in engagement to yield maximum performance. In the context of the DPAD of Yogyakarta, digitalization often risks inducing technostress; however, engagement functions as a psychological catalyst that allows staff to navigate systemic transitions with positive persistence. [39], [41] emphasize that engagement ensures sustained focus on productivity even amidst drastic technological shifts, while [35] suggest that investment in technical skills only achieves true ROI when accompanied by efforts to maintain a deeply committed workforce. Taken together, these findings indicate that employee engagement mediates the relationship between digital literacy and productivity; in this model, engagement serves as the emotional filter that mitigates technology-related anxiety and converts technical knowledge into dedicated problem-solving. This hypothesis suggests that digital proficiency alone is insufficient to achieve peak performance. When employees are fully engaged and aligned with organizational goals, digital literacy promotes responsible and proactive technology use, ultimately enhancing organizational productivity.

5.10 The Mediating Role of Employee Engagement in the Influence of Work-Life Balance on Productivity

Work–life balance serves as an important foundation for fostering employee engagement by enabling employees to maintain personal well-being while strengthening their commitment to the organization. In the context of the DPAD of Yogyakarta, organizational support for employees' personal lives can encourage employees to reciprocate with higher levels of engagement, which subsequently enhances performance [30]. Although work–life balance contributes to employee satisfaction, employee engagement functions as the key mechanism that transforms satisfaction into productive work behaviors [2]. Previous studies have highlighted engagement as the central factor through which employee well-being is translated into sustained performance and organizational outcomes [23], [32], [36]. Therefore, employee engagement is expected to mediate the relationship between work–life balance and productivity at DPAD Yogyakarta by converting the psychological support and appreciation derived from a balanced work and personal life into stronger commitment, discretionary effort, and improved job performance. As a result, employee well-being can be effectively translated into higher productivity and the achievement of DPAD Yogyakarta's strategic objectives.

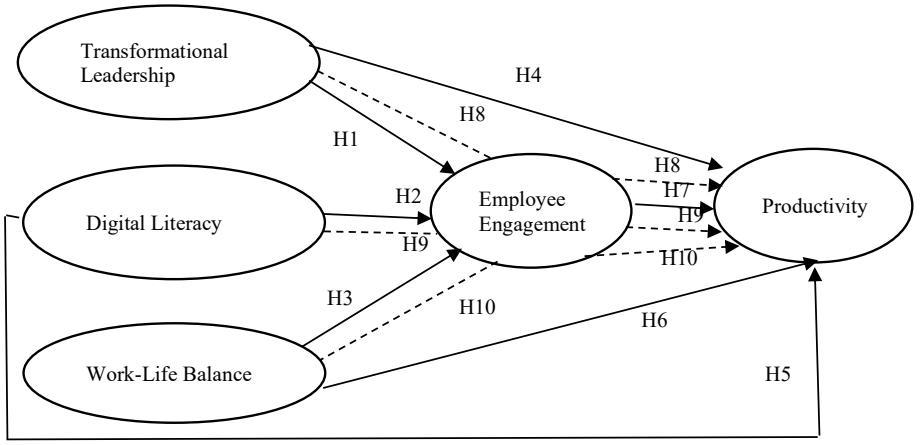


Fig 1. Conseptual Framework

This conceptual framework proposes that Transformational Leadership, Digital Literacy, and Work-Life Balance positively influence Employee Productivity both directly and through Employee Engagement. Grounded in Social Exchange Theory, the framework positions employee engagement as a key mechanism that translates supportive leadership, digital competence, and work-life balance into greater commitment, motivation, and productivity, ultimately enhancing organizational performance.

6 Conclusion

The conceptual analysis concludes that employee productivity in public sector institutions especially in DPAD of Yogyakarta is not only a result of technical output, but a complex outcome of psychological and organizational drivers. This study proposes that transformational leadership, digital literacy, and work-life balance are the major antecedents in creating an organizational environment where employee engagement is an important mediating mechanism that acts as an emotional bridge to transform external drivers into proactive, consistent and high-quality work performance.The findings show that transformational leadership builds trust and motivation, digital literacy curtails technical irritation, and work-life balance provides psychological stability for continuous effort. When these three pillars are in alignment, this results in a higher level of engagement that is marked by energy, commitment and absorption, which enables employees to exert discretionary effort and perform above established performance benchmarks. This model therefore provides a clear roadmap for public sector policymakers, highlighting that sustainable productivity in the digital age requires going beyond structural changes to address the emotional and psychological fit of the workforce, and future empirical work should focus on confirming these hypothesized routes to further hone management strategies for a resilient and engaged public service.

7 Research Limitations and Suggestions for Further Research

This study is conceptual, limited to the public sector context, and focuses solely on employee engagement as a mediator. Future research should empirically test the framework across diverse organizational settings and incorporate additional mediating or moderating variables.

References

[1] Dava Aji Pratama, Sonny Subroto Maheri Laksono, and Nuril Aulia Munawaroh, "Pengaruh Semangat Kerja, Disiplin Kerja, dan Beban Kerja Terhadap Produktivitas Kerja Karyawan PT. Trigon Scientific Indonesia.," *J. Manaj. Dan Ekon. Kreat.*, vol. 2, no. 1, pp. 220–230, Dec. 2023, doi: 10.59024/jumek.v2i1.296.

[2] D. Safria, "Pengaruh Work Life Balance, Kepemimpinan Transformasional, dan Budaya Organ-isasi Terhadap Employee Engagement dalam Membentuk Kinerja Pada Karyawan Generasi Y," *J. Ekon. Manaj. Dan Perbank. J. Econ. Manag. Bank.*, vol. 8, no. 2, p. 53, Aug. 2022, doi: 10.35384/jemp.v8i2.269.

[3] A. A. Baihaqy and A. Masruri, "Kompetensi Pustakawan Dalam Menciptakan Pelayanan Prima Di Perpustakaan," *J. Perpust.*, vol. 15, no. 2, 2024.

[4] D. G. Kim and C. W. Lee, "Exploring the Roles of Self-Efficacy and Technical Support in the Relationship between Techno-Stress and Counter-Productivity," *Sustainability*, vol. 13, no. 8, p. 4349, Apr. 2021, doi: 10.3390/su13084349.

[5] A. M. Ramadhana, R. S. Karhab, and V. Anitra, "Pengaruh Pengembangan Sumber Daya Manusia Terhadap Kinerja Pegawai pada Dinas Perhubungan Kota Samarinda," *J. Ris. Manaj. Dan Akunt.*, vol. 5, no. 2, pp. 439–452, Aug. 2025, doi: 10.55606/jurima.v5i2.5413.

[6] V. P. M. Amey, N. Afridah, A. Indriyani, B. Riono, and D. Harini, "Pengaruh Gaji, Kepemimpinan, dan Motivasi terhadap Kinerja Karyawan SPPBE PT Mitha Jaya Kusuma Siasem, Wanasari - Brebes," vol. 5, no. 3, 2025.
[7] S. Roisyah and A. O. Viyani, "Pengaruh Gaya Kepemimpinan Transformasional Terhadap Kinerja Karyawan Yang Di Mediasi Oleh Pemberdayaan Karyawan (Studi Kasus Dinas Perindustrian dan Perdagangan Sleman)," vol. 2, no. 1, 2024.
[8] E. Sutrisno, *Manajemen Sumber Daya Manusia*. Jakarta: Kencana, 2023.
[9] P. V. Wulandari, "Gaya Kepemimpinan Dan Kesejahteraan Karyawan Terhadap Kinerja Karyawan Melalui Komitmen Organisasi," *J. Sci. Educ. Manag. Bus.*, vol. 3, no. 1, pp. 102–117, Mar. 2024, doi: 10.62357/joseamb.v3i1.276.
[10] Matias Yoq, Didik E Subiyanto, and Syamsul Hadi, "THE INFLUENCE OF TRAINING ON WORK PRODUCTIVITY THROUGH WORK ENGAGEMENT AND COMPETENCE OF OIL PALM FARMERS," vol. 13, 2025.
[11] A. S. Hidayat and R. Rofaida, "Peran Kepemimpinan Transformasional dan Knowledge Sharing dalam Menstimulasi Perilaku Inovatif di Institusi Pendidikan," *J. Ilmu Manaj.*, vol. 9, no. 2, p. 768, Jun. 2021, doi: 10.26740/jim.v9n2.p768-778.
[12] B. Satriawan, N. P. Dewi, S. Yanti, and Y. Yuliansyah, "Transformational Leadership: How Intrinsic Motivation and Innovation at Workplace," *IJBE Integr. J. Bus. Econ.*, vol. 9, no. 3, Aug. 2025, doi: 10.33019/ijbe.v9i3.1192.
[13] I. E. Telaumbanua, F. Hulu, S. A. Mendrofa, and M. H. Waruwu, "THE EFFECT OF WORKLOAD ON STRESS LEVELS EMPLOYEES AT THE NIAS HERITAGE MUSEUM," *J. Ilm. METADATA*, vol. 8, no. 2, pp. 45–55, Feb. 2026, doi: 10.47652/metadata.v8i2.988.
[14] P. Reddy, B. Sharma, and K. Chaudhary, "Digital Literacy: A Review of Literature," *Int. J. Technoethics*, vol. 11, no. 2, pp. 65–94, Jul. 2020, doi: 10.4018/IJT.20200701.oa1.
[15] Vuorikari, Kluzer, and Punie, *DigComp 2.2, The Digital Competence framework for citizens: with new examples of knowledge, skills and attitudes.* Luxembourg: Publications Office, 2022. doi: 10.2760/115376.
[16] B. Nugroho, "PENGARUH KEPEMIMPINAN TRANSFORMASIONAL TERHADAP KINERJA PEGAWAI DENGAN MEDIASI EMPLOYEE ENGAGEMENT DI KANTOR PELAYANAN PAJAK MADYA DUA SEMARANG," UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG, 2025.
[17] I. Osimetha, "DIGITAL LITERACY SKILLS INDICATORS AND SERVICE DELIVERY OF LIBRARIANS IN NORTH-CENTRAL NIGERIAN PUBLIC UNIVERSITIES," *LAFIA J. Libr. Inf. Sci.*, vol. 6, no. 1, 2024.
[18] L. Muliawati, "Work-Life Balance And Its Impact On Employee Performance: A Study In Various Industries.," *J. Sumber Daya Mns.*, vol. 15, no. 3, pp. 78–95, 2020.
[19] B. W. Respati, M. Ihwanudin, and M. Kurniawati, "Pengaruh Kualitas Kehidupan Kerja dan Keseimbangan Kehidupan Kerja Terhadap Performa Karyawan: Peran Mediasi Kepuasan Kerja," *J. Manajerial*, vol. 10, no. 02, p. 179, May 2023, doi: 10.30587/jurnalmanajerial.v10i02.5363.
[20] I. Ahakwa, J. Yang, E. Agba Tackie, and S. Atingabili, "The Influence of Employee Engagement, Work Environment and Job Satisfaction on Organizational Commitment and Performance of Employees: A Sampling Weights in PLS path Modelling," *SEISENSE J. Manag.*, vol. 4, no. 3, pp. 34–62, May 2021, doi: 10.33215/sjom.v4i3.641.
[21] O. D. Wulansari, "Studi Literatur: Faktor-Faktor yang Mempengaruhi Work-Life Balance," *Psychopreneur J.*, vol. 7, no. 1, pp. 15–28, May 2023, doi: 10.37715/psy.v7i1.3404.
[22] Nienaber and Martins, "Exploratory study: Determine which dimensions enhance the levels of employee engagement to improve organisational effectiveness," *TQM J.*, vol. 32, no. 3, pp. 475–495, 2020.

[23] P. B. Katili, W. Wibowo, and M. Akbar, "The Effects of Leaderships Styles, Work-Life Balance, and Employee Engagement on Employee Performance," *Quant. Econ. Manag. Stud.*, vol. 2, no. 3, pp. 199–205, Mar. 2021, doi: 10.35877/454RI.qems319.

[24] T. Obuobisa-Darko, "Leaders' Behaviour as a Determinant of Employee Performance in Ghana: the Mediating Role of Employee Engagement," *Public Organ. Rev.*, vol. 20, no. 3, pp. 597–611, Sep. 2020, doi: 10.1007/s11115-019-00460-6.

[25] A. Noviardy, "Pengaruh Employee Engagement dan Komitmen Organisasi Terhadap Kinerja Karyawan di Bidang Perkebunan Kelapa Sawit (Studi Empiris Pada PT. Suryabumi Agrolanggeng, Sumatera Selatan)," *J. Manag. Bus. Account.*, vol. 19, no. 3, Dec. 2020.

[26] R. D. Thalia, S. Aliya, M. Gunarto, and S. Helmi, "The Influence of Employee Engagement and Work Environment on Employee Performance at PT. Agronusa Alam Perkasa," *J. Ekon.*, vol. 13, no. 01, pp. 2278–2290, 2024, doi: DOI 10.54209/ekonomi.v13i01.

[27] M. Coetzee, D. Veldsman, I. L. Potgieter, and N. Ferreira, "Measuring enablers and indicators of employee engagement: Internal validity of the Flow@Work engagement survey," *Heliyon*, vol. 11, no. 3, p. e42386, Feb. 2025, doi: 10.1016/j.heliyon.2025.e42386.

[28] D. K. Ratri, A. Timan, and A. Y. Sobri, "Pengaruh Literasi Digital, Kompetensi TIK dan Motivasi Kerja terhadap Performa Mengajar Guru SMP di Kabupaten Banyuwangi," *J. Pendidik. Hum.*, vol. 10, no. 2, pp. 44–61, 2023.

[29] D. Marlius and R. A. Melaguci, "PENGARUH KEPEMIMPINAN TRANSFORMASIONAL DAN KEPUASAN KERJA TERHADAP KINERJA KARYAWAN PT SEMEN PADANG DEPARTEMENT SUMBER DAYA MANUSIA," *J. Bina Bangsa Ekon.*, vol. 17, no. 2, 2024.

[30] N. Fabanyo, A. W. Hasyim, and F. M. Alhadar, "PENGARUH WORK-LIFE BALANCE TERHADAP PENINGKATAN EMPLOYEE PERFORMANCE MELALUI EMPLOYEE ENGAGEMENT DAN JOB SATISFACTION SEBAGAI VARIABEL MEDIASI," *J. Ilm. Manaj. BISNIS DAN Inov. Univ. SAM RATULANGI*, vol. 12, no. 2, 2024.

[31] H. Suryomedianto and Z. Kisman, "THE MEDIATING ROLE OF EMPLOYEE ENGAGEMENT IN LINKING TRANSFORMATIONAL LEADERSHIP AND EMPLOYEE WELL-BEING TO EMPLOYEE PERFORMANCE (Evidence from a State-Owned Enterprise Subsidiary)," vol. 6, no. 1, 2026.

[32] I. M. D. J. Temaja and I. M. Sara, "The Role of Employee Engagement in Mediating the Effect of Turnover Intention and Quality of Work Life on Employee Performance at BPR Padma, Sesetan Head Office," *J. Tour. Econ. Policy*, vol. 5, no. 3, pp. 564–584, Jul. 2025, doi: 10.38142/jtep.v5i3.1519.

[33] T. Br. Sembiring, Irmawati, M. Sabir, and I. Tjahyadi, *BUKU AJAR METODOLOGI PENELITIAN (TEORI DAN PRAKTIK)*, Cetakan Pertama,. Karawang Barat: Saba Jaya Publisher, 2024.

[34] I. W. Astawa, G. Wirata, S. Sulandari, I. N. Suargita, and I. K. D. Junaedy, *REFERENSI METODE PENELITIAN*, Cetakan I,. Kota Medan: PT Media Penerbit Indonesia, 2025. [Online]. Available: https://mediapenerbitindonesia.com

[35] F. Azkananda, M. Veronica, and Y. Yeni, "Pelatihan dan Pengembangan Karir Terhadap Produktivitas Pegawai Pada Dinas Komunikasi dan Informatika Provinsi Sumatera Selatanle found]," *J. Ekon. Manaj. Sist. Inf.*, vol. 6, no. 4, Apr. 2025, doi: doi.org/10.38035/jemsi.v6i4.

[36] A. Aruldoss, K. Berube Kowalski, M. L. Travis, and S. Parayitam, "The relationship between work–life balance and job satisfaction: moderating role of training and development and work environment," *J. Adv. Manag. Res.*, vol. 19, no. 2, pp. 240–271, Apr. 2022, doi: 10.1108/JAMR-01-2021-0002.

[37] A. Adittya, L. Andini, and L. Sa'adah, "Pengaruh Kompetensi dan Motivasi terhadap Kinerja dengan Pengembangan Karier sebagai Variabel Mediasi," *JMK J. Manaj. Dan Kewirausahaan*, vol. 1, 2021.
[38] S. Yunus, "Analisis Pengaruh Pengembangan Karir Dengan Kompetensi dan Kompensasi Sebagai Mediasi Terhadap Produktivitas Kerja Jurnalis Media Masa di Maluku Utara," *Balance J. Akunt. Dan Manaj.*, vol. 4, no. 2, 2025.
[39] M. Damayanti, D. Hadiwijaya, and P. Susilo, "The Influence of Workload, Work Environment and Use of Technology on Employee Performance at the Tangerang Regency Fisheries Service Office," *Eduvest - J. Univers. Stud.*, vol. 4, no. 6, pp. 4897–4918, Jun. 2024, doi: 10.59188/eduvest.v4i6.1285.
[40] P. T. Cahyandani, "Pengaruh Kepemimpinan Transformasional dan Employee Engagement terhadap Kinerja Karyawan PT Taspen (Persero) Kantor Cabang Utama Surabaya," *J. Ilmu Manaj.*, vol. 9, no. 1, p. 19, Mar. 2021, doi: 10.26740/jim.v9n1.p19-27.
[41] O. D. Ananda, W. Hidayat, and A. E. Prihatini, "Pengaruh Employee Engagement dan Passion terhadap Kinerja Karyawan PT Telkom Indonesia Kantor Regional IV Semarang," *J. Ilmu Adm. Bisnis*, vol. 12, no. 1, pp. 11–21, Mar. 2023, doi: 10.14710/jiab.2023.36456.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

