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Improving Employee Performance through IT Engagement: The Roles of Individual Experience and Management Support

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Abstract

Research aims: Employee IT engagement is a critical component in the successful implementation of digital transformation. Both prior IT experience and support from upper management significantly influence the extent of employee involvement in IT. This study aims to explore the relationship between employee IT engagement, management's support, and understanding of employees' IT experiences, and how these factors impact employee performance.

Design/Methodology/Approach: A quantitative method was employed through a survey involving 227 employees of PTNBH, examining the relationships between Individual IT Experience, Management Support, Employee IT Engagement, and Employee Performance.

Research findings: The analysis reveals a strong correlation between management support, employee IT engagement and experience; all of which positively influence employee performance. Employee performance is enhanced through both direct and indirect effects of management support and individual's experiences on IT engagement. The correlation between employees' IT involvement and performance is statistically significant. Furthermore, the study underscores the critical role of management in promoting IT utilization for optimal performance outcomes and highlights the substantial impact of employees' individual IT experiences on their performance.

Theoretical Contribution/Originality: This study contributes theoretically by presenting an integrative model and practically by providing recommendations for PTNBH managers to accelerate digital transformation success.

Practitioners/Policy Implications: The practical implications include recommendations for PTNBH managers to drive digital transformation successfully.

Research Limitations/Implications: The research is limited to personnel at legal entity universities. Future studies should expand the sample to include employees from universities, whether academic institutions or government agencies.

Keywords: Individual IT Experience; Management Support; Employee IT Engagement; Employee Performance

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Introduction

In the digital era, organizations increasingly rely on Information Technology (IT), particularly information systems, to enhance operational efficiency and maintain competitiveness. A critical element of this

reliance is Employee IT Engagement, which refers to the extent of employees' involvement in utilizing information systems. High levels of engagement can significantly boost productivity and job satisfaction (Sypniewska et al., 2023). As technology becomes integral to completing work tasks, it is essential for employees to engage actively in its use. Additionally, individual IT experience plays a crucial role, as employees with IT experience tend to adapt more quickly to various technologies, enabling effective utilization of information systems. Strong management support is equally important for maximizing the benefits of these technologies, with adequate training and resources significantly enhancing employee engagement and overall performance (Barlette & Baillette, 2022).

This study was conducted at a higher education institution in Indonesia which has obtained legal entity certification (PTNBH), selected for its unique autonomy in management. Universities, as institutions that handle vast amounts of data, must report this data to the government within specified timeframes. Thus, higher education institutions in Indonesia must effectively manage and secure their data, making the efficient use of internal information systems crucial.

Four interrelated variables (Individual IT Experience, Management Support, Employee IT Engagement, and Employee Performance) were examined. These factors collectively influence employee performance in utilizing information systems. Employee IT Engagement, which reflects the degree of employee involvement with the system, has the potential to enhance motivation and productivity. It directly contributes to individual performance, while Individual IT Experience encompasses employees' technical knowledge and skills, which affect their effective use of information systems (Deng et al., 2023). Management support, in the form of training and resources, plays a determining role in fostering engagement and experience, ultimately leading to improved performance (Stirpe et al., 2022). Coordination among these three factors is critical for achieving optimal individual performance in the context of information system implementation. Employee engagement, defined as the emotional commitment and level of involvement individuals have toward their work, colleagues, and organization, is essential for driving performance (So et al., 2021).

Nonetheless, significant gaps remain between employee's engagement and performance, particularly regarding the role of individual IT experience (So et al., 2021; Saks et al., 2021). Previous research on management support for increasing employee engagement has not adequately addressed IT-specific knowledge gaps (Podgorodnichenko et al., 2022). This knowledge gap necessitates further investigation into the interplay of these four factors and their influence on individual performance during the implementation of information systems.

This study contributes novel insights by examining the relationships and interactions among Individual IT Experience, Management Support, Employee's IT Engagement and Performance in the context of information technology—specifically, their implementation. Unlike prior research, this study integrates these variables into a unified model. By proposing a comprehensive interaction framework, the research seeks to

inform organizational strategies for optimizing information technology implementation within technology-driven work environments.

Literature Review and Hypotheses Development

IT Individual Experience

IT Individual Experience refers to the knowledge, skills, and familiarity an individual possesses in utilizing information technology. According to the Technology Acceptance Model (TAM), its two primary components—Perceived Usefulness (PU) and Perceived Ease of Use (PEOU)—are significantly shaped by an individual's prior interactions with IT (Davis, 1989). The breadth and diversity of an individual's IT experience influence their willingness to adopt and utilize new technologies, subsequently enhancing perceptions of the system's usefulness (PU) and ease of use (PEOU).

Such experiences bolster employee confidence and efficiency in completing tasks involving information systems, aligning with the principles of TAM and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Widodo et al., 2024). Moreover, prior IT experience fosters positive attitudes, which contribute to heightened engagement and improved performance. This reinforces the premise that previous exposure to technology plays a pivotal role in shaping technology acceptance and utilization, as theorized in both models (Pea-Assounga & Bindel Sibassaha, 2024).

Management Support

Management Support encompasses the guidance, training, and resources provided by organizational leadership to employees. It is a crucial element of "Facilitating Conditions," which significantly influences individuals' ability to adopt and effectively utilize technology (Venkatesh et al., 2003). By assisting employees in managing technology-related job demands, Management Support fosters higher levels of work engagement and ultimately enhances performance.

This type of support plays a pivotal role in promoting the successful adoption and optimal use of information technology. Without sufficient managerial assistance, employees may face challenges in fully leveraging IT systems, which can adversely affect their performance. Moreover, Management Support is recognized as one of the key determinants of successful change implementation (Oakland & Tanner, 2007).

Employee IT Engagement

According to the Unified Theory of Acceptance and Use of Technology (UTAUT) proposed by Venkatesh et al. (2003), Employee IT Engagement signifies the effective adoption and utilization of technology within an organization. UTAUT posits that an increase in employee engagement with IT is driven by factors such as performance expectancy, effort

expectancy, social influence, and facilitating conditions, which collectively shape behavioral intentions and technology usage.

Engaged employees actively participate in and demonstrate a commitment to utilizing information technology. Employee IT Engagement can be understood as the dynamic interplay between IT-related work expectations and the availability of resources to meet those demands (Bakker & Demerouti, 2007). This engagement is critical as it influences motivation, productivity, and job satisfaction in IT-driven environments. Moreover, employee involvement plays a substantial role in enhancing individual performance (Saks et al., 2021).

Aligned with the Job Demands-Resources (JD-R) model, employee's engagement encompasses cognitive, emotional, and behavioral dimensions, shaping how individuals interact with their work through technology and contributing to improved outcomes in IT-related tasks.

Employee Performance

Employee performance is a multifaceted concept that encompasses the outcomes achieved by employees in fulfilling their roles and responsibilities within an organization. It is typically assessed based on specific criteria, such as the quality, quantity, and timeliness of work outcomes (Sadikoglu & Zehir, 2010). In the context of information technology (IT), employee performance refers to how effectively employees utilize IT tools and systems to enhance efficiency, effectiveness, and productivity in their tasks. The proficient use of IT can significantly improve performance by providing greater access to information, fostering collaboration, and reducing the time required to complete tasks (Aral et al., 2012).

The effectiveness and trust in information system technologies are critical factors influencing individual performance, with trust in technology serving as a key determinant (Tam et al., 2020). Furthermore, the integration of IT into work processes not only aids employees in achieving their individual objectives but also contributes to the realization of broader organizational goals. This underscores the importance of IT as a strategic enabler of both personal and collective performance.

Literature Review and Hypothesis Development

IT Experience, Employee IT Engagement, and Employee Performance.

Individual IT Experience positively influences Employee IT Engagement in using information systems and information technology, as demonstrated by previous studies. IT professionals with prior experience in the field or familiarity with information technology exhibit higher levels of engagement when granted the autonomy to select and utilize technologies that align with their needs (Nurfitriansyah et al., 2023). The relationship between IT experience and engagement is evident in individuals' ability to

innovate and harmonize personal and organizational values, which are fundamental to job satisfaction and engagement (Gupta & Sharma, 2016).

The significance of IT experience is further highlighted by findings indicating that experienced IT professionals are more likely to be engaged due to their capacity to positively influence their work environment through competencies such as achievement orientation (Molino et al., 2020). Collectively, these studies suggest that individual IT experience not only enhances employees' technical capabilities but also fosters engagement by providing autonomy, task identity, and a supportive work environment—factors essential for sustaining high engagement levels in the IT sector. Based on these insights, the following hypothesis is proposed:

***H_1**: Individual IT Experience has a positive influence on Employee IT Engagement.*

To increase productivity and efficiency, employees must possess the requisite knowledge and skills to effectively utilize information technology systems. This is where individual IT performance comes into focus. Investments in human resources, particularly through training, significantly enhance employee performance, with training contributing a 2.14% increase per unit, particularly benefiting employees with extensive experience due to the evolving nature of IT competencies (Bapna et al., 2013). Several factors impact individual performance, including the effectiveness of IT systems and managerial support, which collectively exert a positive influence on performance, particularly in the domain of accounting information systems (Jarvenpaa & Ives, 1991).

A key determinant of employee performance is Employee IT Engagement, which reflects the level of interest and involvement employees exhibit in utilizing IT to support their roles. Enthusiastic employees, who are committed to organizational goals, contribute to a 21% improvement in organizational outcomes (Jarvenpaa & Ives, 1991). Additionally, the use of IT in workplace settings, notably the size and quality of internal email networks, shows a strong correlation with productivity (Tiwari et al., 2024). Aligning IT integration with task-technology fit further enhances employee performance (Nazir & Islam, 2017).

In summary, the intricate relationship among IT experience, engagement, and performance requires a strategic approach encompassing training initiatives, system implementation, and employee engagement to maximize outcomes. As established, individual IT experience influences both employee IT engagement and performance. The following hypothesis is therefore proposed, recognizing the moderating role of engagement in shaping the relationship between IT experience and performance:

***H_2**: Individual IT Experience has a positive impact on Employee Performance.*

Management Support, Employee IT Engagement and Employee Performance

The relationship between Management Support and Employee IT Engagement is multifaceted, shaped by various organizational and individual factors. Management support, particularly in the form of organizational support, plays a critical role in fostering employee engagement among IT professionals. This type of support is essential for addressing challenges in remote work environments, where conventional management approaches may prove insufficient (Grzesiak & Ulrych, 2024). Additionally, key elements such as supervisor support, work-life balance, and organizational commitment have been identified as significant contributors to the performance of IT employees. These findings highlight the need for management support to extend beyond basic oversight to cultivating a supportive and inclusive workplace culture (Talukder et al., 2018).

Integrating IT into Human Resource Management (HRM) enhances communication and streamlines processes, thereby boosting employee engagement, job satisfaction, and productivity (Stone et al., 2015). When management support is closely aligned with organizational objectives and employee expectations, it substantially improves Employee IT Engagement, ultimately driving enhanced organizational performance and employee commitment. Based on these insights, the following hypothesis is proposed:

***H_3**: Management Support has a positive influence on Employee IT Engagement.*

Individual IT Experience, Management Support, Employee IT Engagement, and Employee Performance are interconnected factors that play a crucial role in driving organizational success. Performance Organizational Support (POS) is closely linked to psychological empowerment, which enhances work performance by encouraging employees to engage more deeply with their tasks (Abdullahi et al., 2021). In the IT sector, organizational support is particularly vital as it helps employees navigate the challenges of rapid technological advancements while sustaining high levels of performance (Venkatesh & Bala, 2008).

In addition, IT capabilities are indispensable for improving employee performance, enabling organizations to allocate tasks more effectively and fostering innovation, which is critical for team success (Verkijika & De Wet, 2014). Employee engagement, especially within the IT industry, serves as a key driver of productivity, profitability, and customer satisfaction. Higher levels of engagement are associated with lower turnover rates and enhanced organizational performance (Park & Shaw, 2013). The integration of IT capabilities with robust organizational support further strengthens employee engagement by providing the necessary resources and environment for employees to thrive (Mansor et al., 2023).

Ultimately, the synergy between Management Support, IT capabilities, and Employee Engagement strategies creates a compound effect that significantly boosts both individual and organizational performance, particularly in technology-driven environments. Employee Engagement—defined by qualities such as dedication, absorption, and

enthusiasm—has consistently been shown to positively impact individual performance across various sectors, including IT and manufacturing. Therefore, the proposed hypothesis is:

***H_4** : Management Support has a positive influence on Employee Performance.*

Employee IT Engagement and Employee Performance

Employee engagement, characterized by dedication, absorption, and enthusiasm, has been shown to significantly enhance individual performance across various industries, including IT and manufacturing (Gupta & Sharma, 2016). In the rapidly evolving field of information technology, engagement is particularly critical due to the necessity for continuous skill development and adaptability to technological advancements (Bapna et al., 2013). Effective implementation of IT in the workplace can amplify the positive effects of employee engagement, leading to increased productivity and profitability (Bapna et al., 2013).

Key competencies such as achievement orientation and the ability to influence others are especially valuable in the IT sector, as they contribute to the cultivation of an engaging work environment that bolsters employee performance (Bakker, 2011). Collectively, the findings emphasize the importance of strategically investing in employee engagement initiatives to maximize individual performance and drive organizational success in a dynamic and competitive business landscape (Arshad & Ming, 2023). Based on these insights, the following hypothesis is proposed:

***H_5**: Employee IT Engagement has a positive impact on Employee Performance.*

Individual IT Performance, Employee Performance and Employee IT Engagement

The relationship between individual IT performance and organizational performance, as reflected in employee IT engagement, is influenced by a complex interplay of variables. Employee engagement plays a critical role in determining organizational effectiveness, particularly within the information technology (IT) sector (Al-dalahmeh et al., 2018). It often acts as a mediator between the successful integration of IT into work processes and employees' performance outcomes. For instance, enterprise resource planning (ERP) systems, when implemented effectively and supported by motivated employees, can significantly enhance individual performance in areas such as safety, quality, and efficiency (Matende & Ogao, 2013). Employee engagement serves as a pivotal factor in amplifying the positive impacts of IT by fostering a supportive work environment and enhancing employee well-being (Rasool et al., 2021).

Moreover, factors such as organizational culture, leadership effectiveness, and communication are essential in shaping employee engagement, which in turn drives performance outcomes (Meng & Berger, 2019). Training and motivation are also vital;

while training directly improves performance by increasing engagement, motivation requires a more nuanced approach to achieve optimal results (Capatina et al., 2024). This research emphasizes that organizations aiming to enhance employee performance through IT must prioritize employee engagement as a strategic objective. Achieving this requires robust engagement initiatives that foster dedication and involvement among employees (Gandrita, 2023).

***H_6**: Individual IT Experience has a positive impact on Employee Performance through Employee IT Engagement.*

Management Support, Employee Performance, and Employee IT Engagement

The relationship between management buy-in and organizational success, as reflected in Employee IT Engagement, involves a complex interplay of factors. Enhancing employee performance through the creation of a supportive work environment that fosters engagement relies heavily on Management Support, commonly referred to as perceived organizational support (POS) (Rhoades & Eisenberger, 2002). Employee Engagement serves as a critical mediator, linking managerial support to improved performance outcomes. Engaged employees are more likely to demonstrate higher levels of productivity, commitment, and job satisfaction, which collectively contribute to enhanced performance (Barrick et al., 2015).

Within the IT engagement framework, the functionality of IT systems and the support provided by management in leveraging these systems are crucial. IT capabilities significantly impact employee performance by facilitating improved task organization and fostering innovation, both of which are vital for team success (Chen & Tsou, 2012). Moreover, the integration of IT systems with Employee Engagement initiatives further strengthens performance outcomes, particularly in the IT sector, where technological expertise plays a pivotal role (Gruman et al, 2015).

The synergy between management support, IT capabilities, and employee engagement cultivates an environment where employees feel valued and empowered, resulting in enhanced performance. Studies show a positive correlation between management support, IT engagement, and employee performance, underscoring the need for organizations to prioritize these areas to maximize employee output (Meng & Berger, 2019). In conclusion, the interaction between management support and IT engagement is essential for driving employee performance, emphasizing the importance of investments in human resources and technology to achieve optimal organizational outcomes.

***H_7**: Management Support has a positive impact on Employee Performance through Employee IT Engagement.*

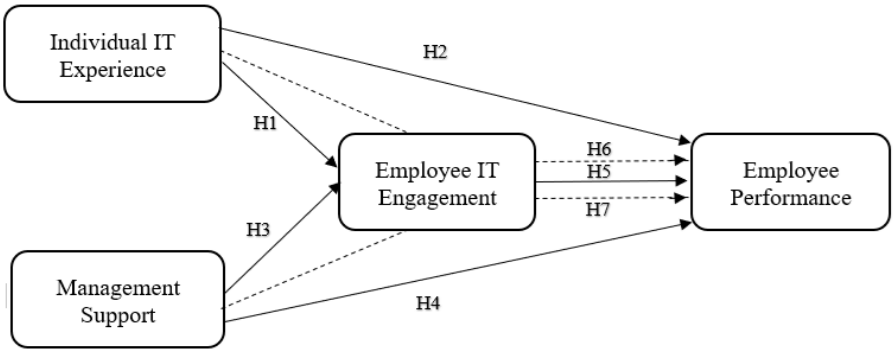

Figure 1 illustrates the relationship between the proposed research hypotheses:

Research Methods

Research Design

This study employed a quantitative methodology grounded in survey research. Indicators corresponding to each core variable—Individual IT Experience, Management Support, Employee IT Engagement, and Employee Performance—guided the development of the study instrument, a questionnaire. The questionnaire consisted of Likert-scale items to capture respondents' perceptions of the variables under investigation. The model was designed to examine how Individual IT Experience and Management Support influence Employee Performance, both directly and indirectly, through Employee IT Engagement, within the context of the digital transformation era at PTNBH. The overarching objective of this exploratory research was to investigate the relationship between employees' IT involvement and the managerial support they receive.

Data Analysis

This study employed Structural Equation Modeling (SEM), a multivariate analysis technique that allows researchers to simultaneously examine multiple interrelated dependent relationships. SEM incorporates elements of multiple regression and factor analysis, enabling researchers to model unobservable variables indirectly measured through indicators (Sarstedt et al., 2021). The application of SEM was justified for two reasons. First, SEM effectively estimates multiple relationships among variables (Hair & Alamer, 2022). Specifically, it models the structural relationships between dependent and independent constructs. Second, SEM elucidates the patterns of correlation between observed variables (indicators) and latent constructs (unobserved factors).

Population and Sample

The study focused on the educational sector, specifically Indonesian universities with legal entity status. Under Law No. 12 of 2012 on higher education, universities designated as legal entities (PTNBH) in Indonesia operate as state institutions with administrative

authority. The study population comprised employees of PTNBH institutions in Indonesia who were involved in implementing digital transformation. A purposive sampling technique was employed to select participants actively engaged in the organization's digitalization initiatives and those with prior experience in workplace IT.

This sampling approach ensured that respondents had a comprehensive understanding of information technology and its implications for their professional roles. The adequacy of the sample was guaranteed through the application of a formula specifically designed for quantitative research to determine an appropriate sample size. Table 1 presents demographic information on the respondents, covering variables such as age, gender, occupation, educational attainment, employment status, and length of service.

Table 1 Participants' Demographics

Tenure	Educational Background					
	Doctoral	Master	Diploma 3	Bachelor's Degree	High School	Grand Total
1 to 5 year		5		24		29
11 to 15 year	3	20	12	29		64
6 to 10 year	2	15	8	34	4	63
<1 year		4				4
>15 year	2	26	9	26	4	67
Grand Total	**7**	**70**	**29**	**113**	**8**	**227**

Operational Definitions of Variables

Individual IT Experience (IIE):

Individual IT Experience encompasses indicators such as computer usage experience (IIE1), familiarity with specific applications (IIE2), experience with emerging technologies (IIE3), and experiences with applications (IIE4), as conceptualized by Venkatesh et al. (Dirgantari, 2023).

Employee IT Engagement (EIE):

Employee IT Engagement represents a novel concept that integrates employee engagement and IT engagement, emphasizing its critical role in digital transformation implementation. This construct includes indicators such as dependence on applications or information systems (EIE1), interaction quality (EIE2), frequency of use (EIE3, EIE4), user satisfaction (EIE5), and emotional impact (EIE6, EIE7), as derived from Brodie's research (Balycheva & Golichenko, 2020).

Management Support (MS):

Management Support refers to the assistance provided by an organization or institution to its employees. The construct includes indicators of Usage Support (MS1, MS2), Usage Encouragement (MS3, MS4), and Resource Assistance (MS5, MS6), as outlined in Tarafdar's research (Tanjung, 2020).

Employee Performance (EP):

Employee Performance is characterized by indicators such as timeliness in task completion (EP1), productivity (EP2), responsibility (EP3), and quality of work (EP4), based on the framework developed by Torkzadeh and Goodhue (Rambulangi et al., 2024).

Results and Discussion

Results

This study adheres to Hair's guidelines and evaluates two key components of the research: structured modeling methodology, encompassing the model and its associated methods for hypothesis testing and evaluation (Fu et al., 2022). Indicators were used to measure variables to ensure accurate and comprehensive data collection.

The indicators measuring Individual IT Experience include experience using computers (IIE1), experience with applications or information systems assessed through two items (IIE2, IIE3), and experience with emerging technologies (IIE4). The indicators for Employee IT Engagement include dependence on applications or information systems captured by two items (EIE1, EIE2), interaction quality (EIE3), usage frequency assessed through two items (EIE4, EIE5), user satisfaction (EIE5), and emotional impact (EIE7). Management Support was measured through indicators assessing usage support (MS1, MS2), usage encouragement (MS3, MS4), and resource assistance (MS5, MS6), with each category addressed by two items. Employee Performance indicators include productivity (EP1), responsibility (EP2), and work quality assessed through two items (EP3, EP4).

Confirmatory Structural Equation Modeling (SEM) and factor analysis were conducted using the SmartPLS version 3 application. To evaluate the measurement model's convergent validity, Average Variance Extracted (AVE), Composite Reliability (CR), and factor loadings were calculated, as summarized in Table 2. Factor loadings exceeding 0.70 represent the first criterion (Sarstedt et al., 2021). The reflective design demonstrated strong internal consistency, with most CR values close to 0.700 and all exceeding the threshold of 0.500. Additionally, all AVE values, which serve as a benchmark for assessing convergent validity, were above 0.5. Table 2 confirms that all constructs satisfy the convergent validity criteria, indicating the validity of the model. Furthermore, an additional assessment of discriminant validity was performed.

Table 2 Results of The Measurement Model

Construct	Item Code	Item Loading	CR	AVE
Individual IT Experience	IIE1	0.723	0.844	0.575
	IIE2	0.788		
	IIE3	0.753		
	IIE4	0.766		
Employee IT Engagement	EIE1	0.783	0.939	0.687
	EIE2	0.836		
	EIE3	0.785		
	EIE4	0.856		
	EIE5	0.866		
	EIE6	0.848		
	EIE7	0.821		
Management Support	MS1	0.856	0.934	0.704
	MS2	0.844		
	MS3	0.891		
	MS4	0.837		
	MS5	0.763		
	MS6	0.41		
Employee Performance	EP1	0.843	0.925	0.756
	EP2	0.855		
	EP3	0.903		
	EP4	0.875		

Table 3 Fornell-Larcker Criterion

Construct	Employee IT Engagement	Employee Performance	Individual IT Experience	Management Support
Employee IT Engagement	0.829			
Employee Performance	0.648	0.870		
Individual IT Experience	0.640	0.623	0.758	
Management Support	0.712	0.680	0.569	0.839

Table 4 Heterotrait-Monotrait Ratio (HTMT)

Construct	Employee IT Engagement	Employee Performance	Individual IT Experience	Management Support
Employee IT Engagement				
Employee Performance	0.711			
Individual IT Experience	0.767	0.751	0.683	
Management Support	0.771	0.750		

The objective is to establish whether the construct under examination is sufficiently distinct from other constructs, thereby enabling a more precise understanding of phenomena not adequately addressed by existing constructs (Sarstedt et al., 2021). Discriminant validity was assessed using cross-loading values, presented in Table 3, following the Fornell-Larcker criterion. Typically, each construct demonstrates the strongest correlation with its own indicators and weaker associations with other

constructs. Consequently, the findings confirm that discriminant validity has been achieved in this investigation.

As shown in Table 4, all constructs exhibit values below the threshold of 0.85, further supporting discriminant validity. The tests for discriminant validity, including the Fornell-Larcker criteria and the heterotrait-monotrait (HTMT) ratio, are both satisfied. Additionally, the HTMT ratio test results affirm the achievement of discriminant validity. This study successfully demonstrates both convergent and discriminant validity.

Following the validation of the measurement model, the research hypotheses were evaluated using path coefficients as part of the structural model assessment. The results, illustrated in Figure 2, emphasize calculations conducted in SmartPLS through bootstrapping procedures. The test results indicate that the model explains 56.1% of the variance in employee performance and 58.9% of the variance in employee IT engagement.

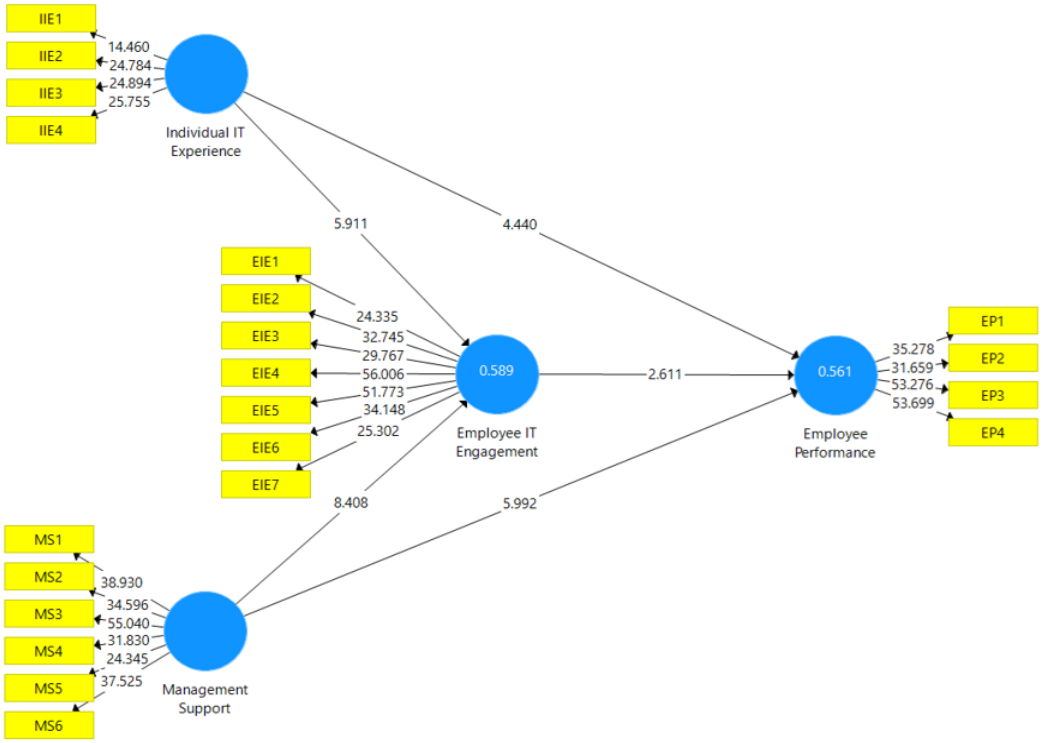

Figure 2 PLS Result

Table 5 Result of Path Coefficients

	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Employee IT Engagement -> Employee Performance	0.073	2.718	0.007
Individual IT Experience -> Employee IT Engagement	0.056	6.168	0.000
Individual IT Experience -> Employee Performance	0.062	4.536	0.000
Management Support -> Employee IT Engagement	0.057	8.961	0.000
Management Support -> Employee Performance	0.061	6.228	0.000

All tested hypotheses were found to be statistically significant, as indicated by the p-values presented in Table 5. In examining the relationships among individual IT experience, management support, employee IT engagement, and employee performance, a p-value of less than 0.05 was observed, signifying that each relationship is both significant and influential. For example, the 0.007-point correlation between employee IT engagement and performance, and the 0.012-point correlation between individual IT experience and employee IT engagement, underscore that employee IT engagement in utilizing information systems positively impacts performance. Furthermore, the p-value of 0.000 for management support highlights the pivotal role of management in enhancing employee performance.

These findings demonstrate that the three variables—Individual IT Experience, Management Support, and Employee IT Engagement—are closely interrelated and collectively contribute to substantial improvements in employee performance within the context of the digital era.

Table 6 Result of Hypothesis Testing

Hypothesis	Relationships	T Statistics	P Values	Remarks
H1	Employee IT Engagement -> Employee Performance	2.705	0.007	Accepted
H2	Individual IT Experience -> Employee IT Engagement	5.738	0.000	Accepted
H3	Individual IT Experience -> Employee Performance	4.613	0.000	Accepted
H4	Management Support -> Employee IT Engagement	8.452	0.000	Accepted
H5	Management Support -> Employee Performance	5.999	0.000	Accepted
H6	Management Support -> Employee IT Engagement -> Employee Performance	2.490	0.013	Accepted
H7	Individual IT Experience -> Employee IT Engagement -> Employee Performance	2.527	0.012	Accepted

Based on Table 6, all seven hypotheses proposed in this study were accepted. At the 5% significance level, as indicated in Table 6, a relationship under investigation is deemed significant if the p-value is less than 0.05. The first and second hypotheses confirm that employees' IT involvement is positively influenced by their level of personal IT expertise in the workplace. Similarly, the third and fourth hypotheses demonstrate that both employee involvement with IT and performance are positively impacted by management support. According to the fifth hypothesis, there is a positive and statistically significant relationship between employee IT engagement and performance. Furthermore, the sixth and seventh hypotheses establish that the mediation of employee IT engagement has a beneficial effect on employee performance.

Following the hypothesis tests, an analysis of the coefficient of determination (R^2) was conducted. The R^2, or Coefficient of Determination, evaluates the extent to which the independent variables explain variance in the dependent variables, thereby assessing the model's validity. The R^2 values for employee performance and employee IT engagement were 56.1% and 58.9%, respectively. According to Cohen's guidelines for the behavioral and social sciences, an R^2 value of 26% represents a substantial effect, 13% a moderate effect, and 2% a minor effect. The findings indicate that the R^2 values significantly exceed 23%, demonstrating a substantial effect. Cohen further asserts that the constructs of employee IT engagement and employee performance exert a significant influence within the model (Abdullahi et al., 2021).

Firstly, the analytical findings indicate that individual IT experience positively influences employee IT engagement. A supportive organizational environment, often associated with IT experience, fosters employee engagement by enabling job crafting and encouraging innovation (Sharma & Nambudiri, 2020). Employees with prior experience in information technology are more likely to effectively engage with organizational information systems. Furthermore, individuals with higher levels of self-efficacy and openness to experience tend to demonstrate greater work engagement, which subsequently enhances their innovative behavior and job performance (Gelaidan et al., 2024).

This study further confirms that employees' IT engagement is significantly shaped by their individual IT experiences. Work engagement is further amplified by psychological capital and organizational resources, which support change-oriented behavior among IT professionals in corporate settings (Kataria et al., 2022), reinforcing the importance of individual IT experience.

Additionally, the second finding reveals that employees' performance is positively impacted by their IT experience. IT professionals with previous exposure to IT or information technology demonstrate higher levels of engagement when provided with the autonomy to select and utilize technologies that meet their specific needs (Nurfitriansyah et al., 2023). Employees with IT expertise are adept at leveraging information technology to enhance their overall performance.

The third finding demonstrates that management support plays a pivotal role in encouraging employees to utilize IT systems effectively. When upper-level management actively supports IT initiatives, employees' engagement with IT and their commitment to organizational goals and values are positively influenced (Almaaitah et al., 2024). Organizational support significantly enhances employee engagement among IT professionals by fostering a work environment conducive to innovation and streamlined processes. Consistent with prior research, management support facilitates IT integration within human resource management, improving communication, increasing job satisfaction, and enhancing productivity (Shakir et al., 2024). This study affirms that perceived management support and executive involvement significantly improve employee IT engagement by creating a supportive and motivating workplace.

The fourth finding highlights that employees' performance improves when they perceive strong managerial support. Previous studies demonstrate that management support positively impacts organizational performance, with employee autonomy acting as a mediator to amplify this effect (Trifunovic, 2024). Employees' perceptions of managerial assistance positively influence their dedication and productivity. The critical role of supervisor participation in boosting engagement and motivation is further emphasized by management's involvement in performance management strategies, which directly correlate with organizational success (Tenakwah et al., 2023). Additionally, perceived organizational support (POS) positively affects employee performance through the mediating role of intrinsic motivation (Zhang et al., 2020).

The fifth finding shows that employee involvement with IT positively influences individual performance. Research across various industries, including manufacturing and information technology, underscores that employees who are highly engaged—devoting themselves fully to their tasks and exhibiting genuine enthusiasm—achieve superior individual performance (Fu et al., 2022). At PTNBH, employees' IT engagement positively impacts their performance, with highly engaged IT professionals demonstrating a proactive approach to adopting new technologies. Engagement in the IT sector is crucial due to the continuous need for skill development and technological adaptation (Sarstedt et al., 2021). Proper implementation of IT systems amplifies employee engagement, resulting in enhanced productivity and profitability (Malik et al., 2022). Employee engagement also mediates the relationship between electronic human resource management (e-HRM) strategies and performance, aligning employee behaviors with organizational objectives to optimize outcomes (Nyathi & Kekwaletswe, 2023).

The sixth finding establishes that individual IT experience enhances employee effectiveness through IT engagement. Information technology acts as a significant predictor of work success by improving productivity, job satisfaction, and organizational commitment (Selimović et al., 2021). Employees with IT expertise demonstrate higher levels of engagement with technology, significantly enhancing their performance. Employee engagement, characterized as a relational and dynamic construct, is integral to maintaining workplace satisfaction and performance in the IT industry, where innovation and adaptation are vital (Boccoli et al., 2023).

The seventh finding uncovers that management support positively influences employee performance through IT engagement. This study confirms that management support significantly enhances performance by fostering engagement facilitated by IT systems. The presence of organizational regulations and resource support strengthens employees' commitment to using information systems and technology, which directly impacts their efficiency and effectiveness. Organizational IT support promotes knowledge-sharing behaviors, which subsequently drive service innovation performance (Kumar et al., 2022). The integration of IT systems, such as e-HRM, promotes employee engagement and has a direct effect on performance outcomes (Alomari, 2023). Furthermore, management practices, including AI-enabled leadership and training, significantly influence employee engagement by reducing workloads and increasing motivation, ultimately enhancing organizational performance (Rožman et al., 2023).

In summary, these findings collectively illustrate that management support, combined with IT engagement, creates a work environment that elevates employee performance by fostering greater engagement, satisfaction, and productivity. To maximize employee potential and improve productivity, organizations must ensure robust management involvement and active IT integration. This study investigates the impact of individual IT experience and management support on employee performance at PTNBH in Indonesia, both directly and through IT engagement. All hypotheses were supported by the analysis. Conducted at an Indonesian higher education institution with legal entity status (PTNBH), the conclusions of this research are also applicable to other universities with similar structural and administrative characteristics, despite several limitations that will be discussed in the following section.

Conclusion

To demonstrate the impact of management support and individual IT experience on employee performance, this study constructs and supports a conceptual framework that identifies IT engagement as a mediating factor between these variables. The findings indicate that high levels of employee IT engagement, coupled with individual IT expertise and robust management support, play a pivotal role in enhancing employee performance. The theoretical contribution of this research lies in its model, which illustrates how IT engagement serves as an intermediary linking employees' IT experience, managerial support, and their overall performance.

The practical implications of this study offer a strategic guide for universities and organizations aiming to develop technology-driven approaches to improve their employees' performance. These strategies may involve fostering IT experience among employees and implementing effective management support mechanisms.

Future research is encouraged to examine additional determinants of employee IT engagement, such as organizational culture and individual characteristics. Furthermore, testing this framework across diverse industry settings is recommended to assess its applicability and generalizability. Exploring the influence of emerging technologies could

also yield valuable insights into adaptation and innovation within information systems management.

References

Abdullahi, M., Raman, K., & Solarin, S. (2021). Effect of organizational culture on employee performance: A mediating role of employee engagement in Malaysia educational sector. *International Journal of Supply and Operations Management, 8*(3), 232–246. https://doi.org/10.22034/IJSOM.2021.3.1

Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage. *Journal of Organizational Effectiveness: People and Performance, 2*(1), 7–35. https://doi.org/10.1108/joepp-08-2014-0042

Al-dalahmeh, M., Masa'deh, R., Abu Khalaf, R. K., & Obeidat, B. Y. (2018). The Effect of Employee Engagement on Organizational Performance Via the Mediating Role of Job Satisfaction: The Case of IT Employees in Jordanian Banking Sector. *Modern Applied Science, 12*(6), 17. https://doi.org/10.5539/mas.v12n6p17

Almaaitah, M. F., Al-Rwaidan, R. M., Al-Adamat, A. M., Enaizan, O., & Alserhan, A. F. (2024). The impact of e-human resource management on employee performance: The mediating role of employee engagement in Jordanian service and public administration commission. *Journal of Infrastructure, Policy and Development, 8*(9), 6763. https://doi.org/10.24294/jipd.v8i9.6763

Alomari, A. M. (2023). Exploring the impact of e-HRM on organizational performance: A mediated model. *International Journal of Data and Network Science, 7*(4), 1913–1920. https://doi.org/10.5267/j.ijdns.2023.7.002

Aral, S., Brynjolfsson, E., & Van Alstyne, M. (2012). Information, Technology, and Information Worker Productivity. *Information Systems Research, 23*(3-part-2), 849–867. https://doi.org/10.1287/isre.1110.0408

Arshad, M. A. B., & Ming, P. N. (2023). Effects of Leadership Styles on Employee Performance During Crisis: In the Background of COVID-19 in China. *International Journal of Academic Research in Business and Social Sciences, 13*(12). https://doi.org/10.6007/ijarbss/v13-i12/19489

Bakker, A. B. (2011). An Evidence-Based Model of Work Engagement. *Current Directions in Psychological Science, 20*(4), 265–269. https://doi.org/10.1177/0963721411414534

Bakker, A. B., & Demerouti, E. (2007). The Job Demands ‐ Resources model: state of the art. *Journal of Managerial Psychology, 22*(3), 309-328. https://doi.org/10.1108/02683940710733115

Balycheva, Y., & Golichenko, O. (2020). Innovation activities and employment level: an empirical assessment of Russian manufacturing companies. In Proceedings of the European *Conference on Innovation and Entrepreneurship, ECIE*.

Bapna, R., Langer, N., Mehra, A., Gopal, R., & Gupta, A. (2013). Human Capital Investments and Employee Performance: An Analysis of IT Services Industry. *Management Science, 59*(3), 641–658. https://doi.org/10.1287/mnsc.1120.1586

Barlette, Y., & Baillette, P. (2022). Big data analytics in turbulent contexts: towards organizational change for enhanced agility. *Production Planning and Control, 33*(2–3), 105–122. https://doi.org/10.1080/09537287.2020.1810755

Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective Organizational Engagement: Linking Motivational Antecedents, Strategic

Implementation, and Firm Performance. *Academy of Management Journal, 58*(1), 111–135. https://doi.org/10.5465/amj.2013.0227

Boccoli, G., Gastaldi, L., & Corso, M. (2023). The evolution of employee engagement: Towards a social and contextual construct for balancing individual performance and wellbeing dynamically. *International Journal of Management Reviews, 25*(1), 75–98. https://doi.org/10.1111/ijmr.12304

Capatina, A., Juarez-Varon, D., Micu, A., & Micu, A. E. (2024). Leveling up in corporate training: Unveiling the power of gamification to enhance knowledge retention, knowledge sharing, and job performance. *Journal of Innovation & Knowledge, 9*(3), 100530. https://doi.org/10.1016/j.jik.2024.100530

Chen, J.-S., & Tsou, H.-T. (2012). Performance effects of IT capability, service process innovation, and the mediating role of customer service. *Journal of Engineering and Technology Management, 29*(1), 71–94. https://doi.org/10.1016/j.jengtecman.2011.09.007

Deng, H., Duan, S. X., & Wibowo, S. (2023). Digital technology driven knowledge sharing for job performance. *Journal of Knowledge Management, 27*(2), 404–425. https://doi.org/10.1108/JKM-08-2021-0637

Dirgantari, P. (2023). Does Individual IT Experience Affect Shadow IT Usage? Empirical Evidence from Universities with Legal Entities in Indonesia. *Organizacija, 56*(3), 265–277. https://doi.org/10.2478/orga-2023-0018

Fu, Q., Abdul Rahman, A. A., Jiang, H., Abbas, J., & Comite, U. (2022). Sustainable Supply Chain and Business Performance: The Impact of Strategy, Network Design, Information Systems, and Organizational Structure. *Sustainability, 14*(3), 1080. https://doi.org/10.3390/su14031080

Gandrita, D. M. (2023). Improving Strategic Planning: The Crucial Role of Enhancing Relationships between Management Levels. *Administrative Sciences, 13*(10), 211. https://doi.org/10.3390/admsci13100211

Gelaidan, H. M., Al-Swidi, A. K., & Al-Hakimi, M. A. (2023). Servant and authentic leadership as drivers of innovative work behaviour: the moderating role of creative self-efficacy. European *Journal of Innovation Management, 27*(6), 1938–1966. https://doi.org/10.1108/ejim-07-2022-0382

Grzesiak, L., & Ulrych, W. (2024). How management support and diversity factors affect employee performance within the digital workplace. *Central European Management Journal, 33*(1), 20–39. https://doi.org/10.1108/cemj-06-2023-0238

Gupta, N., & Sharma, V. (2016). Exploring Employee Engagement—A Way to Better Business Performance. *Global Business Review, 17*(3_suppl), 45S-63S. https://doi.org/10.1177/0972150916631082

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics, 1*(3), 100027. https://doi.org/10.1016/j.rmal.2022.100027

Jarvenpaa, S. L., & Ives, B. (1991). Executive Involvement and Participation in the Management of Information Technology. *MIS Quarterly, 15*(2), 205–227. https://doi.org/10.2307/249382

Kataria, A., Rashmi, K., & Rastogi, M. (2022). Fostering change-oriented OCBS: an analysis of India's IT talent. *Journal of Asia Business Studies, 17*(1), 57–78. https://doi.org/10.1108/jabs-03-2021-0135

Kumar, M., Mamgain, P., Pasumarti, S. S., & Singh, P. K. (2022). Organizational IT support and knowledge sharing behaviour affecting service innovation performance: empirical evidence from the hospitality industry. *VINE Journal of Information and Knowledge Management Systems, 54*(2), 256–279. https://doi.org/10.1108/vjikms-07-2021-0124

Malik, A., Budhwar, P., Mohan, H., & Srikanth, N. R. (2022). Employee experience –the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management, 62*(1), 97–115. https://doi.org/10.1002/hrm.22133

Mansor, F. A., Mat Jusoh, Y. H., Hashim, M. Z., Muhammad, N., & Omar, S. N. Z. (2023). Employee engagement and organizational performance. *International Journal of Accounting, Finance and Business (IJAFB), 8*(50), 69–80.

Matende, S., & Ogao, P. (2013). Enterprise Resource Planning (ERP) System Implementation: A Case for User Participation. *Procedia Technology, 9*, 518–526. https://doi.org/10.1016/j.protcy.2013.12.058

Meng, J., & Berger, B. K. (2019). The impact of organizational culture and leadership performance on PR professionals' job satisfaction: Testing the joint mediating effects of engagement and trust. *Public Relations Review, 45*(1), 64–75. https://doi.org/10.1016/j.pubrev.2018.11.002

Molino, M., Cortese, C. G., & Ghislieri, C. (2020). The Promotion of Technology Acceptance and Work Engagement in Industry 4.0: From Personal Resources to Information and Training. *International Journal of Environmental Research and Public Health, 17*(7), 2438. https://doi.org/10.3390/ijerph17072438

Nazir, O., & Islam, J. U. (2017). Enhancing organizational commitment and employee performance through employee engagement. *South Asian Journal of Business Studies, 6*(1), 98–114. https://doi.org/10.1108/sajbs-04-2016-0036

Nurfitriansyah, Munir, Disman, & Dirgantari, P. (2023). Does Individual IT Experience Affect Shadow IT Usage? Empirical Evidence from Universities with Legal Entities in Indonesia. *Organizacija, 56*(3), 265–277. https://doi.org/10.2478/orga-2023-0018

Nyathi, M., & Kekwaletswe, R. (2023). Electronic human resource management (e-HRM) configuration for organizational success: inclusion of employee outcomes as contextual variables. *Journal of Organizational Effectiveness: People and Performance, 11*(1), 196–212. https://doi.org/10.1108/joepp-08-2022-0237

Oakland, J. S., & Tanner, S. (2007). Successful Change Management. *Total Quality Management & Business Excellence, 18*(1–2), 1–19. https://doi.org/10.1080/14783360601042890

Park, T.-Y., & Shaw, J. D. (2013). Turnover rates and organizational performance: A meta-analysis. *Journal of Applied Psychology, 98*(2), 268–309. https://doi.org/10.1037/a0030723

Pea-Assounga, J. B. B., & Bindel Sibassaha, J. L. (2024). Impact of technological change, employee competency, and law compliance on digital human resource practices: Evidence from congo telecom. *Sustainable Futures, 7*, 100195. https://doi.org/10.1016/j.sftr.2024.100195

Podgorodnichenko, N., Edgar, F., & Akmal, A. (2022). An integrative literature review of the CSR-HRM nexus: Learning from research-practice gaps. *Human Resource Management Review, 32*(3), 100839. https://doi.org/10.1016/j.hrmr.2021.100839

Rambulangi, V., Tampi, Jony. R. E., & Tulusan, F. M. G. (2024). Analysis of Employee Performance at the Bahu Subdistrict Office: Study on Aspects of Quality, Quantity, Timeliness, Effectiveness and Work Independence. *Journal La Bisecoman, 5*(1), 32–41. https://doi.org/10.37899/journallabisecoman.v5i1.1029

Rasool, S. F., Wang, M., Tang, M., Saeed, A., & Iqbal, J. (2021). How Toxic Workplace Environment Effects the Employee Engagement: The Mediating Role of Organizational Support and Employee Wellbeing. *International Journal of Environmental Research and Public Health, 18*(5), 2294. https://doi.org/10.3390/ijerph18052294

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698–714. https://doi.org/10.1037//0021-9010.87.4.698

Rožman, M., Oreški, D., & Tominc, P. (2023). Artificial-Intelligence-Supported Reduction of

Employees' Workload to Increase the Company's Performance in Today's VUCA Environment. *Sustainability, 15*(6), 5019. https://doi.org/10.3390/su15065019

Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms. *International Journal of Production Economics, 127*(1), 13–26. https://doi.org/10.1016/j.ijpe.2010.02.013

Saks, A. M., Gruman, J. A., & Zhang, Q. (2021). Organization engagement: a review and comparison to job engagement. *Journal of Organizational Effectiveness: People and Performance, 9*(1), 20–49. https://doi.org/10.1108/joepp-12-2020-0253

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. *Handbook of Market Research*, 587–632. https://doi.org/10.1007/978-3-319-57413-4_15

Selimović, J., Pilav-Velić, A., & Krndžija, L. (2021). Digital workplace transformation in the financial service sector: Investigating the relationship between employees' expectations and intentions. *Technology in Society, 66*, 101640. https://doi.org/10.1016/j.techsoc.2021.101640

Shakir, M., Al Farsi, M. J., Al-Shamsi, I. R., Shannaq, B., & Ghilan Al-Madhagy, T.-H. (2024). The Influence of Mobile Information Systems Implementation on Enhancing Human Resource Performance Skills: An Applied Study in a Small Organization. *International Journal of Interactive Mobile Technologies (IJIM), 18*(13), 37–68. https://doi.org/10.3991/ijim.v18i13.47027

Sharma, A., & Nambudiri, R. (2020). Work engagement, job crafting and innovativeness in the Indian IT industry. *Personnel Review, 49*(7), 1381–1397. https://doi.org/10.1108/pr-11-2019-0607

So, B. H., Kim, J. H., Ro, Y. J., & Song, J. H. (2021). Developing a measurement scale for employee engagement: a validation study in a South Korean context. *European Journal of Training and Development, 46*(5/6), 585–606. https://doi.org/10.1108/ejtd-11-2020-0155

Stirpe, L., Profili, S., & Sammarra, A. (2022). Satisfaction with HR practices and employee performance: A moderated mediation model of engagement and health. *European Management Journal, 40*(2), 295–305. https://doi.org/10.1016/j.emj.2021.06.003

Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review, 25*(2), 216–231. https://doi.org/10.1016/j.hrmr.2015.01.002

Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. *International Entrepreneurship and Management Journal, 19*(3), 1069–1100. https://doi.org/10.1007/s11365-023-00834-9

Talukder, A. K. M., Vickers, M., & Khan, A. (2018). Supervisor support and work-life balance. *Personnel Review, 47*(3), 727–744. https://doi.org/10.1108/pr-12-2016-0314

Tanjung, B. N. (2020). Human Resources (HR) In Education Management. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 3*(2), 1240–1249. https://doi.org/10.33258/birle.v3i2.1056

Tenakwah, E. S., Erdiaw-Kwasie, M. O., Asiedu, E., & Al Aina, R. (2023). Unleashing the power of support: how co-worker and supervisor support mediate firm performance through performance management. *Benchmarking: An International Journal, 31*(6), 1922–1940. https://doi.org/10.1108/bij-06-2022-0402

Tiwari, R., Babu T, N. S., Marda, K., Mishra, A., Bhattar, S., & Ahluwalia, A. (2024). The Impact of Artificial Intelligence in the Workplace and its Effect on the Digital Wellbeing of Employees. *Journal for Studies in Management and Planning, 10*(4). https://doi.org/10.5281/zenodo.10936348

Trifunovic, B. (2024). Examining the impact of managerial support on the performance of healthcare organizations: The mediating role of employee autonomy. *Srpski Arhiv Za Celokupno Lekarstvo, 152*(11–12), 579–586. https://doi.org/10.2298/sarh240424080t

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences, 39*(2), 273–315. Portico. https://doi.org/10.1111/j.1540-5915.2008.00192.x

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly, 27*(3), 425–478. https://doi.org/10.2307/30036540

Verkijika, S. F., & De Wet, L. (2014). The effect of perceived ease of use and perceived usefulness on customer satisfaction: An empirical investigation of self-service technology adoption in the banking sector. In Proceedings of the 2014 Americas *Conference on Information Systems (AMCIS 2014).* https://aisel.aisnet.org/amcis2014/EndUserIS/GeneralPresentations/7/

Widodo, S. D., Rubiyanti, N., Widodo, A., & Silvianita, A. (2024). The Role of Digital Transformation in Improving Employee Performance. *Journal of International Conference Proceedings, 7*(1), 109–118. https://doi.org/10.32535/jicp.v7i1.3181

Zhang, M. F., Dawson, J. F., & Kline, R. B. (2020). Evaluating the Use of Covariance‐Based Structural Equation Modelling with Reflective Measurement in Organizational and Management Research: A Review and Recommendations for Best Practice. *British Journal of Management, 32*(2), 257–272. https://doi.org/10.1111/1467-8551.12415