

Tech-Enabled Flexible Work and Employee Productivity: The Role of Work–Life Balance and Islamic Work Ethic

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The current literature acknowledges that digital transformation has fundamentally altered Human Resource Management (HRM) practices globally. However, the adaptation of these digital practices within the Islamic public sector, which faces unique structural and cultural dynamics, remains underexplored. In Indonesia, Islamic Higher Education Institutions (PTKI) are currently navigating a "dual-disruption": a rapid technological shift necessitating flexible work arrangements (FWA) and the preservation of religious-bureaucratic traditions. This study investigates the effect of technology-based flexible working on employee productivity, with work-life balance as a mediating variable and the Islamic work ethic as a moderating variable. Employing a causal-correlational design and survey methodology, the study sampled 440 lecturers and educational staff from Islamic Higher Education Institutions in Indonesia, selected through simple random sampling method. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.1.1.4. The results indicate that technology-based flexible work arrangements increase employee productivity but negatively affect work-life balance. Work-life balance serves as a crucial mediator that bridges the relationship between flexibility and productivity. Additionally, the Islamic work ethic plays a dual role: it directly predicts work-life balance and moderates the relationship between work flexibility and balance, thereby strengthening this association. The findings imply that organizations must do more than merely adopt technology; they must also safeguard work-life balance and internalize the Islamic work ethic to achieve sustainable productivity in the long run. The limitations of this study include its cross-sectional design and focus on the Islamic cultural context, suggesting that generalization to other sectors requires longitudinal and cross-cultural research.

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Public Interest Statement

Digital transformation in public institutions often prioritizes efficiency over sustainability. This study reveals that within Indonesia's Islamic Higher Education Institutions, flexible work arrangements can unintentionally degrade work-life balance despite increasing productivity. We propose a radical shift in managing digital work by integrating the Islamic Work Ethic (IWE) as a core mechanism to mitigate 'technostress.' For the public and policymakers, this study provides a blueprint for a 'values-driven digitalization' model that harmonizes technological demands with spiritual and psychological well-being.



Introduction

Post-pandemic digital transformation has accelerated flexible work arrangements, which the ILO posits should enhance productivity and well-being (Thesing, 2023). However, a critical gap persists between the technological promise and global reality. Data reveal a disturbing paradox: despite greater flexibility, global employee engagement

remains low at 23%, contributing to US\$8.8 trillion in productivity losses, while 77% of professionals report burnout (Deloitte, 2018; Harter, 2023). This evidence strongly suggests that technology-enabled flexibility is not an automatic panacea; without a supportive value system, it cannot guarantee optimal engagement.

Indonesia's situation reflects a similar trend with unique characteristics. The Ministry of PANRB noted an increase in the engagement of the Aparatur Sipil Negara (State Civil Apparatus) from 14.05% in 2022 to 42.04% in 2023 (Santosa et al., 2025). Despite this significant increase, most ASNs remain only partially engaged in their work. The government is attempting to address this challenge through Presidential Regulation No. 21 of 2023 (State Secretariat, 2023), which provides a basis for Flexible Working Arrangements (FWA) to promote productivity and efficiency. However, its implementation is optional and highly dependent on the readiness of technological infrastructure. Many agencies, including Islamic religious universities, have not optimally implemented the FWA due to technological constraints, a bureaucratic culture that emphasizes physical presence, and a lack of integration of digital HR systems. This creates a practical gap between policy and effective implementation.

Empirical studies on FWA in the Indonesian public sector are limited. Most research on flexible work comes from developed countries; therefore, its validity in the context of developing countries with a collective-religious character is still weak (empirical gap). Work-life balance (WLB) has been proven to be an important mediator linking work policies and performance (Mandalahi et al., 2024). However, it has not been explicitly tested in relation to technology-enabled flexible work and public employee productivity. In contrast, Islamic Work Ethic (IWE), which emphasizes work as worship, integrity, and responsibility, has been proven to improve performance (Ateeq et al., 2025). However, its role as a moderator in the context of modern flexible work has rarely been explored. While the integration of technology, work-life balance (WLB), and ethics has been discussed in the general HRM literature, existing models often treat these variables as additive rather than interactive within a specific cultural framework. The reviewer correctly noted that merely combining these variables is theoretically indistinct. The critical gap lies not in the combination but in the lack of an adaptive Islamic HRM framework that explains how digital flexibility functions within a religiously normative environment. Standard Western models (e.g., boundary theory) often fail to account for how theological commitments—manifested as the Islamic Work Ethic (IWE)—alter the perception of "work" and "life" boundaries in a digital context.

Recent developments have revealed significant research opportunities. Global studies support the integration of work flexibility and technology to improve WLB and performance (Aziz-Ur-Rehman & Siddiqui, 2019), while Islam-based HRM research finds that IWE can moderate the relationship between work environment perception and positive work behavior (Syarif et al., 2019). However, to date, no model has combined tech-enabled flexible work, WLB, and IWE in a single framework to test public employees' productivity. The absence of this integrative model is a research gap that needs to be filled through contextual studies in Indonesia's Islamic public sector.

This study addresses this gap by proposing a Digital Religiosity-Based Productivity Framework." Unlike conventional models, where WLB is solely a secular negotiation of time, this framework posits that in an Islamic context, WLB is a spiritual equilibrium (*mizan*). Here, Tech-Enabled Flexible Work Arrangements (TEFWA) are conceptualized through the lens of the Job Demands-Resources (JD-R) model, but with a distinct modification: IWE is introduced not just as a variable but as a critical personal resource that moderates the "double-edged" nature of digital flexibility. This represents a theoretical advancement by shifting the discourse from "how technology affects productivity" to "how Islamic values recalibrate digital demands into productive resources."

This study moves beyond descriptive integration to test a specific theoretical mechanism: Does IWE buffer the potential role conflict inherent in flexible work, thereby transforming WLB from a source of stress into a driver of productivity? By answering this question, this study offers a novel measurement perspective on TEFWA in religious public institutions, contributing to the broader field of Islamic Management and Digital HRM.

Literature Review

Tech-Enabled Flexible Work Tech-Enabled Flexible Work refers to the application of digital technology that allows flexibility in the execution of work in terms of time, location, and work methods. The variable is operationalized through three key indicators: (1) the ability to work remotely via digital collaboration tools, (2) flexibility in determining working hours to adjust to personal needs, and (3) the availability of cloud-based infrastructure. While Western scholars like Coenen & Kok (2014) and Ghimire (2020) primarily frame these indicators as drivers of efficiency and autonomy, this study reinterprets them through the Islamic legal maxim of *Maslahah* (public interest) and *Taysir* (facilitation). Grounded in Ibn 'Ashūr's conception of *maqāṣid al-sharī'ah* as a framework aimed at safeguarding human dignity and reducing systemic hardship (Ashur, 2006), this study interprets digital infrastructure as a contemporary institutional mechanism through which these objectives can be operationalized. In this sense,

technology is not treated as an end in itself, but as a contextual means that can support the protection of human well-being (*hifz al-nafs*) by mitigating excessive burdens (*mashaqqab*) in modern work environments.

However, the adoption of such technology requires a mechanism to manage boundaries, leading to the concept of Work-Life Balance. This variable describes the equilibrium between work responsibilities and personal life, measured using indicators such as balanced time allocation, involvement in dual roles, role satisfaction, and the ability to reduce stress. This study challenges the secular dualism often found in Western models that view work and life as competing domains. Instead, referencing the Work-Life Balance in Islamic Perspective (WLBIP) developed by Muafi (2021), we adopt the concept of *Mizān* (cosmic equilibrium), where professional duties are integrated as part of holistic worship (*Ibadah*). As supported by Ghimire (2020) findings on psychological well-being, this Islamic perspective suggests that true balance is achieved not by separating roles, but when flexible arrangements facilitate the harmonization of *Hablum Minallah* (spiritual duties) and *Hablum Minannas* (social roles).

Islamic Work Ethic To sustain this balance amidst the blurring boundaries of the digital era, a strong internal value system is required. The Islamic Work Ethic (IWE) represents a moral framework grounded in Islamic values, encompassing individual, social, and transcendental dimensions. The specific indicators used in this study include: (1) the spiritual meaning of work as worship, (2) commitment to honesty (*amanah*), (3) hard work and discipline, (4) social concern, and (5) transcendental motivation toward the afterlife. These indicators synthesized from Suib and Said (2017), Usman et al. (2015), and Widana (2021) are grounded in Al-Ghazali's perspective in *Ihya Ulumuddin*, which elevates work to the status of *Fard Kifayah* (collective obligation). Furthermore, Syarif et al. (2019) and Ali and Al-Owaidan (2008) emphasize that these dimensions serve as an epistemological anchor; they reframe digital connectivity not as a burden but as a field for '*amal salih*' (righteous deeds), thereby acting as a buffer that improves integrity and prevents burnout.

Employee Productivity Ultimately, the interaction between flexible technology, a balanced life, and ethical values culminates in Employee Productivity. This variable refers to an individual's ability to produce quality work output efficiently, as measured by task completion efficiency, work quality, and personal initiative. In this integrative framework, productivity is redefined beyond capitalist output metrics to encompass the Prophetic concept of *Itqan* (striving for perfection). Productivity is thus viewed as the result of a synergistic relationship in which technology provides the means and ethics to ensure quality. Recent studies by Suryadi et al. (2022) and Suseno and Saifudin (2024) show that when workplace flexibility is aligned with Islamic work ethics, it contributes to better sustainable performance. Similarly, Ananda (2024) found that such alignment enables employees to meet organizational targets while preserving spiritual well-being, resulting in a holistic understanding of productivity rooted in the concept of *barakah* as a sustained and ethically grounded benefit.

The Influence of Technology-Based Flexible Work on Work-Life Balance

Empirical studies indicate that technology-supported flexible work arrangements, such as telecommuting, remote work, and flexible working hours, can enhance employees' work-life balance by increasing their control over when and where work is performed (Taibah & Ho, 2023). Evidence from Pakistan further shows that work flexibility is significantly associated with higher levels of work-life balance, particularly among university lecturers and staff with access to flexible work options (Aziz-Ur-Rehman & Siddiqui, 2019). Consistent with these findings, a recent literature review confirmed that flexible arrangements, including remote work and adjustable working hours, generally facilitate better work-life balance outcomes (Suseno & Saifudin, 2024). However, the benefits of this flexibility are not automatic. The culture of being "always on," enabled by constant digital connectivity, can blur the boundaries between work and private life and may undermine work-life balance if not accompanied by appropriate organizational norms and management practices (Vargas Llave and Weber, 2020).

H1. Tech-Enabled Flexible Work Aligned has a significant negative effect on Work-Life Balance

The Effect of Tech-Enabled Flexible Work on Employee Productivity

Numerous studies have indicated that technology-supported flexible work programs can enhance employee productivity. Flexible work options, such as flextime and remote work, provide employees with greater autonomy to adjust their work schedules to meet their personal needs, thereby improving performance and output (Taibah & Ho, 2023). Taibah and Ho (2023) further report that the implementation of flexible work and telecommuting in a higher education institution improved female employees' subjective experiences of productivity. From a mechanistic perspective, flexible work arrangements help reduce work-family conflict, increase job satisfaction, and foster stronger work engagement.

Empirical evidence also supports the indirect effects of flexibility on firm performance. Eshun and Segbenya (2024) find a significant relationship between work flexibility and employee performance, with work-life balance mediating

this relationship. In this sense, technology-enabled flexible work not only directly supports productivity through greater time efficiency and improved work morale, but also indirectly enhances performance by improving employees' work–life balance (Suseno & Saifudin, 2024). However, these benefits are contingent on the contextual factors. Evidence from India suggests that remote work alone does not necessarily improve work–life balance or productivity in the absence of adequate social and organizational support (Prasad & Satyaprasad, 2023). Overall, quantitative studies employing SEM consistently indicate that technology-enabled flexible work arrangements (e.g., WFA, telework, and hybrid models) are associated with higher productivity, particularly when supported by an enabling organizational culture and appropriate institutional backing.

H2: Technology-based flexible work has a significant positive effect on employee productivity

The Effect of Work–Life Balance on Employee Productivity

A healthy work–life balance is generally positively associated with employee productivity and performance. Employees who can maintain a balanced relationship between work and personal life tend to experience better mental well-being, greater focus, and higher motivation, which in turn enhances their productivity (Suseno & Saifudin, 2024). Quantitative evidence from Indonesia further confirms that work–life balance positively and significantly affects employee productivity. In a study involving 334 employees, those who reported higher levels of work–life balance demonstrated greater work output than employees experiencing imbalance (Suseno & Saifudin, 2024).

Consistent patterns have also been observed in other empirical studies, which show that maintaining harmony between work demands and personal life contributes to improved task and contextual performance. Conversely, work–life imbalance, such as excessive workload without sufficient flexibility, tends to increase stress and reduce performance. Accordingly, organizational strategies that support work–life balance, including flexible working hours, wellness programs, and leave policies, are likely to have positive implications for overall productivity (Eshun & Segbenya, 2024).

H3: Work–Life Balance has a significant positive effect on Employee Productivity

H4: Technology-Based Flexible Work has a significant positive impact on Employee Productivity through Work–Life Balance

The Role of Islamic Work Ethic as a Moderator

Research on Islamic work ethic (IWE) has thus far provided limited international quantitative evidence of its moderating role in the relationship between flexible work arrangements and work–life balance. Conceptually, IWE emphasizes moral values such as honesty, discipline, diligence, and balance between worldly responsibilities and spiritual obligations. From a theoretical perspective, employees with a strong adherence to IWE may be more prudent in utilizing workplace flexibility—for instance, by maintaining discipline while working remotely—thereby potentially strengthening the positive effects of flexible work on the work–life balance.

However, direct empirical support for this moderating hypothesis is scarce. Several studies suggest that IWE does not exert a significant moderating effect in comparable contexts. For example, Nurendra and Asmoko (2020) find that among Muslim Generation Y employees, IWE does not moderate the relationship between work–life balance and organizational commitment, even though both variables individually show positive associations with commitment. Similarly, Suseno and Saifudin (2024) reported that IWE does not moderate the effect of work–life balance on work productivity; while IWE has a direct positive influence on productivity, it does not significantly alter the relationship between work and life balance and productivity. These findings indicate that IWE alone may not necessarily amplify the effects of work–life balance on work outcomes.

Nevertheless, Islamic work ethic values remain relevant in organizational contexts. Empirical evidence indicates that IWE directly enhances performance by fostering discipline and framing work as worship (Suseno & Saifudin, 2024). Accordingly, further research is needed to examine whether IWE can strengthen the positive impact of technology-enabled flexible work on employees' work–life balance, particularly in settings where cultural and religious norms shape how work flexibility is perceived and utilized.

H5: Islamic Work Ethic has a significant positive effect on Work–Life Balance

H6: Islamic Work Ethic can significantly strengthen the influence of Tech-Enabled Flexible Work Aligned on Work–Life Balance

Conceptual Framework

Technology-enabled flexible work arrangements (TEFWA) have become an important feature of modern organizations, as they provide employees with greater autonomy to manage their work time and location, thereby improving the balance between work demands and their personal lives. Empirical evidence indicates that technology-based flexibility—through mechanisms such as remote work and flexible working hours—significantly enhances

work–life balance by enabling employees to manage multiple roles more effectively (Aziz-Ur-Rehman & Siddiqui, 2019; Suseno & Saifudin, 2024; Taibah & Ho, 2023). Improved work–life balance has been associated with positive productivity outcomes, including increased focus, motivation, and psychological well-being (Eshun & Segbenya, 2024; Suseno & Saifudin, 2024).

In addition to its indirect effects, technology-enabled flexible work directly influences productivity by reducing work–family conflict, enhancing employee satisfaction, and fostering work engagement (Eshun & Segbenya, 2024; Taibah & Ho, 2023). However, the effectiveness of work flexibility is often contingent upon contextual and cultural factors, which bring religious values, such as the Islamic work ethic (IWE), into analytical focus. IWE emphasizes hard work, honesty, discipline, and spiritual orientation, and is often theorized to strengthen the relationship between work flexibility and work–life balance. However, existing empirical evidence has not consistently supported this moderating role (Nurendra, 2020; Suseno & Saifudin, 2024).

Based on these theoretical considerations and empirical findings, this study formulates four main hypotheses, which are summarized in the conceptual framework presented in Figure 1.

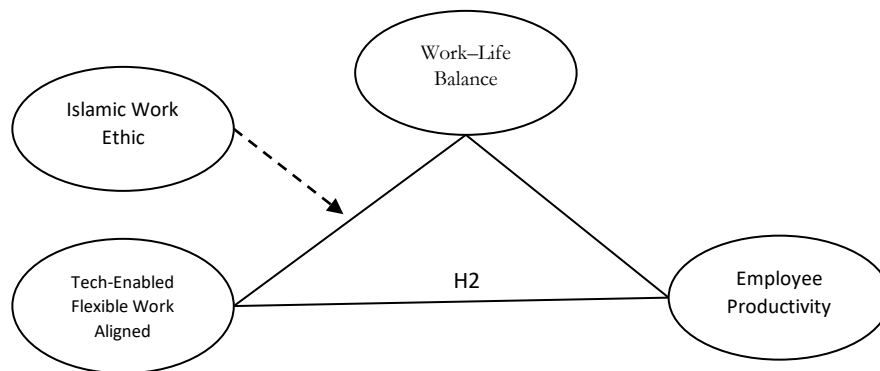


Figure 1. Conceptual Framework

Materials and Methods

Design, Approach, and Type of Research

This study employed a causal-correlational design with a quantitative approach and survey methodology to investigate the causal relationships between latent variables without experimental manipulation (Creswell and Creswell, 2023). We chose this design to explain how strongly exogenous latent constructs affect endogenous constructs, while surveys allow researchers to collect data across respondents efficiently and effectively.

Time and Place of Research

The research was conducted from June to September 2025 at Islamic Higher Education Institutions (PTKI) in Indonesia. The four-month period covered one academic work cycle, so that respondents (lecturers and educational staff) could assess flexible work practices and work-life balance under regular operational conditions. PTKI was chosen because it is a strategic locus for integrating technology-based work flexibility with Islamic values and norms. This context aligns with the research variables and is relevant for examining productivity in Islamic higher education organizations.

Population and Sample

The population included all employees (lecturers and educational staff) at PTKI in Indonesia. The simple random sampling technique (Scheaffer et al., 2011) was used to ensure equal selection opportunities for each member of the population and minimize selection bias, resulting in 440 representative respondents. This size exceeds the practical rule in PLS-SEM, which is 10 times the number of structural paths (Hair Jr., et al., 2021), and is sufficient to ensure estimation stability and good test power in simultaneous-path analysis.

Variables and Indicators

The study modelled four reflective latent variables. Tech-Enabled Flexible Work Aligned (TEFWA) is represented by three indicators: technology-based remote-working capabilities, work schedule flexibility, and the availability of supporting digital infrastructure. The literature shows that ICT-supported telework/flexible work increases efficiency and autonomy (Coenen and Kok, 2014; Ghimire, 2020). Work–Life Balance (WLB) is measured through time allocation balance, role engagement, satisfaction in performing dual roles, and the ability to reduce stress through

flexible time management; this framework is in line with the Work–Life Balance in Islamic Perspective approach (Muafi, 2021) and findings on the role of flexibility in psychological well-being (Ghimire, 2020). Islamic Work Ethic (IWE) encompasses work as worship, amanah/responsibility, hard work-discipline, social concern, and transcendental orientation. IWE scales and concepts have been developed and widely used to assess the Islamic work ethic that promotes integrity and performance (Ali and Al-Owaidan, 2008; Syarif et al., 2019). Employee Productivity (EP) is measured through task completion efficiency, output quality, and initiative and creativity. Recent studies have placed technology-based flexibility, which is in line with ethical values, as a lever for sustainable productivity (Ananda, 2024; Suryadi et al., 2022).

Types and Sources of Data

The primary data consisted of data collected directly from respondents through structured questionnaires. Secondary data (scientific literature) were used to develop the theoretical framework, define constructs, and formulate indicators; however, all hypothesis testing relied on primary data from the survey.

Data Collection Instrument

The research instrument was a closed questionnaire with a 4-point Likert scale (Batterton & Hale, 2017), namely, 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. A four-category scale was chosen to encourage clear responses (without neutral options), reduce central tendency bias, and increase response discrimination between the items. The instrument was compiled from the theoretical indicators of each variable, reviewed for content by experts in related fields, tested for clarity, and then distributed online to selected samples with informed consent and confidentiality. The instrument was validated by three experts in the fields of Human Resource Management, Psychology, and Statistics. It will then undergo construct validity testing and reliability estimation through a confirmatory factor analysis using PLS-SEM.

Data Analysis Techniques

The analysis was conducted using partial least squares structural equation modeling (PLS-SEM) with SmartPLS version 4.1.1.4. The outer model evaluation assessed measurement quality through indicator loadings (target ≥ 0.70), convergent validity (AVE ≥ 0.50), composite reliability (CR ≥ 0.70), and discriminant validity using the Fornell–Larcker criterion and heterotrait–monotrait (HTMT) ratio (Ab Hamid et al., 2017; Fornell & Larcker, 1981; Hair et al., 2021).

The inner model evaluation examined path coefficients (β) using bootstrapping, coefficient of determination (R^2 ; ≈ 0.25 = weak, ≈ 0.50 = moderate, ≈ 0.75 = substantial), effect size (f^2 ; 0.02 = small, 0.15 = medium, 0.35 = large) (Cohen, 1988), and predictive relevance (Q^2 ; values greater than zero indicate predictive relevance) (Hair et al., 2021). Model fit was assessed using the standardized root mean square residual (SRMR < 0.08), normed fit index (NFI > 0.80), and d_{ULS} and d_G indices as additional fit measures.

Robustness checks included assessing indicator multicollinearity using the variance inflation factor (VIF < 5), testing for potential non-linearity using quadratic effects (Hair et al., 2023), evaluating endogeneity using the Gaussian copula approach (Hult et al., 2018), and identifying unobserved heterogeneity through FIMIX-PLS by examining variations in R^2 across latent segments (Hult et al., 2018). All inferential decisions were based on a significance threshold of $p < 0.05$, with the direction of the estimated coefficients used to interpret the significant positive or negative effects.

Results

The research model positions technology-enabled flexible work alignment (TEFWA) as the primary predictor of both work–life balance (WLB) and employee productivity (EP). Within the conceptual framework, WLB functions as a mediating variable in the relationship between TEFWA and EP, while the Islamic work ethic (IWE) is specified as a moderating variable that may strengthen or weaken the effect of TEFWA on WLB. All constructs were operationalized using reflective indicators based on the assumption that the latent variables are causal and that variations in the constructs are consistently reflected in their indicators, following Jarvis et al. (2003) and Hair et al. (2022).

Data analysis was conducted using partial least squares structural equation modeling (PLS-SEM) with SmartPLS version 4.1.1.4. The analytical procedure comprised several stages: specification of the measurement and structural models; development of a path diagram to visually represent the relationships among constructs; evaluation of the outer model to assess reliability and validity; and evaluation of the inner model through the examination of path coefficients, coefficients of determination (R^2), effect sizes (f^2), predictive relevance (Q^2), and model fit indices, such as the standardized root mean square residual (SRMR) and normed fit index (NFI). The significance of the path was assessed using a bootstrapping procedure.

The robustness of the findings was further strengthened through additional diagnostic tests, including the quadratic effect (QE) to identify potential non-linear relationships, the Gaussian copula (GC) approach to assess endogeneity and potential causality bias, and finite mixture PLS (FIMIX-PLS) to explore unobserved heterogeneity across data segments, as recommended by Hair et al. (2021) and Becker et al. (2013). Figure 2 presents the path diagram, illustrating the indicator outer loadings, structural path coefficients between latent variables, and R² values for the endogenous constructs.

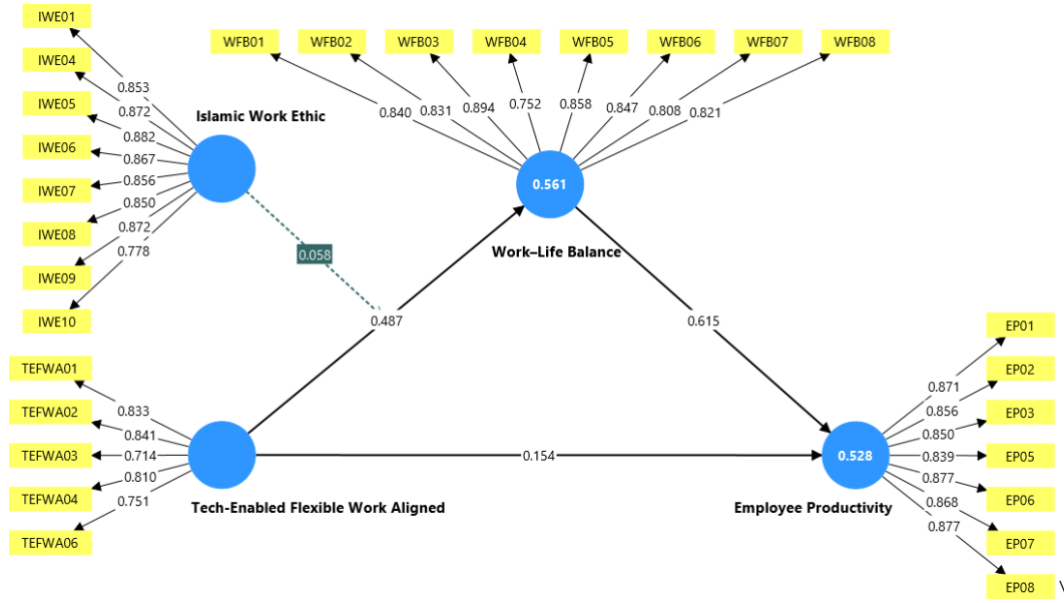


Figure 2. PLS-SEM Path Diagram

Outer Model Evaluation

Based on the outer model estimation results in Figure 2, all indicators reflecting latent constructs show factor loading values above the minimum threshold of 0.70, except for TEFWA05 in the Tech-Enabled Flexible Work Aligned (TEFWA) construct, which was removed. Because the loading factor value of TEFW05 was below 0.70, this indicator was eliminated from the model to maintain convergent validity, as recommended by Hair et al. (2022), who emphasized that indicators with low loadings do not optimally contribute to representing latent constructs. The removal of TEFWA05 made the TEFWA construct more consistent, with the remaining indicators (TEFWA01, TEFWA02, TEFWA03, TEFWA04, and TEFWA06) showing adequate and reliable contributions to measuring technology-based work flexibility.

After confirming the indicator contributions to the latent constructs through factor loading evaluation (see Figure 1), the next step was to assess construct reliability and convergent validity. Reliability was evaluated using Cronbach's alpha (α) and composite reliability (ρ_c), with values ≥ 0.70 indicating satisfactory internal consistency. Convergent validity was assessed using the average variance extracted (AVE), with values greater than 0.50 indicating that the construct adequately explained the variance of its indicators.

Discriminant validity was further examined using the Fornell–Larcker criterion, which requires that the square root of the AVE for each construct (on the diagonal) exceeds the inter-construct correlations within the corresponding rows and columns. Table 1 presents a summary of the measurement model evaluation results.

Table 1. Evidence of Construct Validity and Reliability Estimates

Construct	Reliability and Convergent Validity			Fornell-Larcker Criterion			
	α	ρ_c	AVE	EP	IWE	TEFWA	WLB
EP	0.953	0.961	0.755	0.869	-	-	-
IWE	0.961	0.966	0.741	0.763	0.861	-	-
TEFWA	0.851	0.893	0.626	0.559	0.452	0.791	-
WLB	0.936	0.947	0.693	0.716	0.606	0.663	0.832

Based on the results in Table 1, all constructs met the criteria for reliability and convergent validity. Cronbach's alpha (α) and Composite Reliability (ρ_c) values for TEFWA, WLB, IWE, and EP were all above the threshold of 0.70, confirming good internal consistency. The AVE values also exceeded 0.50, meaning that each construct could explain

more than half of the variance in its indicators. Discriminant validity was confirmed using the Fornell-Larcker Criterion, where the diagonal values (AVE square roots) were higher than the correlation values below the diagonal. For example, EP has a diagonal value of 0.869, IWE is 0.861, TEFWA is 0.791, and WLB is 0.832, all of which are higher than the correlations between the corresponding constructs. These findings confirm that each construct better represents its indicators than the indicators of other constructs. Thus, the four constructs were proven to be reliable, convergent, and discriminant valid, and therefore suitable for use in subsequent structural model analysis.

Robustness Test

Before estimating the inner model (structural model), we conducted a robustness test to ensure that the measurement model and data used were feasible and free from potential analysis distortion. The first test was the Variance Inflation Factor (VIF), which was used to assess the multicollinearity of the indicator blocks. VIF values below the threshold of 5 confirmed that there was no high correlation between indicators, and the model remained stable. The next test, the Quadratic Effect (QE), was used to detect possible nonlinear relationships between latent constructs, ensuring that the patterns formed were not purely linear. Next, the Gaussian Copula (GC) is run to identify potential endogeneity while minimizing causality bias and estimating relationships between constructs more validly. The final test is the finite mixture PLS (FIMIX), which examines data heterogeneity through latent class segmentation, with variations in R² values within each segment serving as an indicator of model strength. Table 2 presents a summary of the results of the overall robustness test, which serves as the basis for the structural model analysis stage.

Table 2. PLS-SEM Robustness Test (VIF, QE, GC, and FIMIX)

Analysis	Effect	β	t	p
QE	TEFWA → EP	-0.013	0.287	0.774
	TEFWA → WLB	0.088	2.184	0.029
	WLB → EP	0.004	0.058	0.953
GC	TEFWA → EP	-0.438	5.486	0.000
	TEFWA → WLB	0.151	1.719	0.086
	WLB → EP	-0.500	8.021	0.000
FIMIX	EP: Original R ² = 0.528; Weighted = 0.588.			
	Seg.1 = 0.901; Seg.2 = 0.058			
	WLB: R ² Original = 0.561; Weighted = 0.587.			
	Seg.1 = 0.832; Seg.2 = 0.171			
Multicollinearity (Only VIF > 5)	EP04 = 5.652; IWE02 = 5.523; IWE03 = 5.983			

Based on the robustness test results in Table 2, the multicollinearity evaluation indicates that almost all indicators are within acceptable limits, except for three items: EP04 (VIF = 5.652), IWE02 (VIF = 5.523), and IWE03 (VIF = 5.983), whose values exceed the threshold of five. Referring to the criteria of J. Hair Jr et al. (2023), indicators with high VIF have the potential to cause multicollinearity problems that can disrupt the stability of model estimation. Therefore, these three items were eliminated to ensure that the model was free from multicollinearity. The QE test results show that the TEFWA path to WLB is non-linearly significant ($\beta = 0.088$; $t = 2.184$; $p = 0.029$), whereas the TEFWA → Employee Productivity (EP) and WLB → EP relationships are insignificant. Nevertheless, the model can still be continued because the linear path structural hypothesis test was significant. GC analysis confirmed a significant effect on the TEFWA → EP path ($\beta = -0.438$; $t = 5.486$; $p < 0.001$) and WLB → EP path ($\beta = -0.500$; $t = 8.021$; $p < 0.001$), while the TEFWA → WLB path was not significant. These results indicate the potential for endogeneity; however, GC violations can be tolerated because of the conservative nature of GC testing, the potential for endogeneity commonly occurring in cross-sectional survey data, and the primary purpose of PLS-SEM being prediction. Therefore, the model remains valid for use as long as it is consistent with the theoretical frameworks. Furthermore, the FIMIX results indicate data heterogeneity. The R² value for EP was recorded at 0.528 (original) and 0.588 (weighted), with relatively sharp variations between segments, namely 0.901 in segment 1 and 0.058 in segment 2. A similar pattern was observed in the WLB with R² of 0.561 (original) and 0.587 (weighted), and distributions between segments of 0.832 and 0.171, respectively. These findings suggest that the model's explanatory power is extreme for certain respondent groups but relatively weak for others. Overall, the robustness test results prove that the model has been improved through the elimination of problematic indicators, remains consistent in most structural paths, and reveals variations in the relationship patterns between segments in the research sample.

Model Fit Criteria

After the measurement model was proven valid and reliable, the next step was to evaluate the inner model to assess the strength of the relationship between constructs and the overall predictive power of the model. This evaluation covered four main aspects. First, the coefficient of determination (R^2) shows the proportion of endogenous construct variance that can be explained by exogenous constructs, with categories of weak (0.25), moderate (0.50), and substantial (0.75), as suggested by Hair et al. (2022). Second, the effect size (f^2), which measures the relative contribution of each exogenous construct to the endogenous construct, has thresholds of 0.02 (small), 0.15 (medium), and 0.35 (large). Third, predictive relevance (Q^2), obtained through the blindfolding procedure, with a positive value indicating that the model has good predictive power. Fourth, fit indices such as SRMR, d_ULS, d_G, NFI, and chi-square provide an overall suitability of the model, where SRMR < 0.08 and NFI > 0.80 are considered adequate. A summary of the results of testing these four aspects is presented in Table 3.

Table 3. Model Fit Criteria (R^2 , f^2 , Q^2 , and Fit Indices)

Criteria	Results
Coefficient of Determination (R^2 / R^2 adjusted):	
Employee Productivity	0.528 / 0.526
Work–Life Balance	0.561 / 0.558
Effect Size (f^2):	
Islamic Work Ethic → Work–Life Balance	0.248
Islamic Work Ethic × Tech-Enabled Flexible Work Aligned → Work–Life Balance	0.016
Tech-Enabled Flexible Work Aligned with → Employee Productivity	0.028
Tech-Enabled Flexible Work Aligned with → Work–Life Balance	0.425
→ Work–Life Balance Aligned with Employee Productivity	0.449
Blindfolding (Q^2 predict):	
Employee Productivity	0.505 (RMSE=0.708; MAE=0.555)
Work–Life Balance	0.548 (RMSE=0.678; MAE=0.512)
Fit Indices:	
SRMR	0.061 (saturated), 0.106 (estimated)
d_ULS	1.517 (saturated), 4.538 (estimated)
d_G	0.628 (saturated), 0.740 (estimated)
Chi-square	1574.522 (saturated), 1811.805 (estimated)
NFI	0.859 (saturated), 0.838 (estimated)

The results of the analysis in Table 3 show that the Employee Productivity (EP) construct has a coefficient of determination (R^2) of 0.528, with an adjusted R^2 of 0.526. In contrast, Work–Life Balance (WLB) shows an R^2 value of 0.561 with an adjusted R^2 of 0.558. Both values are classified as moderate according to the criteria of Hair et al. (2022), which means that the exogenous variables in the model can adequately explain more than half of the variation in the endogenous constructs. The effect size (f^2) provides a more detailed picture of the strength of each pathway's contribution, where the effect of Islamic Work Ethic (IWE) on WLB is 0.248 (moderate), and the interaction of IWE × Tech-Enabled Flexible Work Aligned (TEFWA) on WLB is minimal (0.016). The effect of TEFWA on EP was also relatively small (0.028). In contrast, the effect of TEFWA on WLB was significant (0.425), and WLB had a strong effect on EP (0.449). This pattern confirms that WLB plays the most dominant role in mediating the relationship between the main variables in this study. Furthermore, the Q^2 results show positive predictive values for both EP (0.505) and WLB (0.548), confirming that the model has good predictive relevance because the Q^2 value exceeds zero. The model fit indices also provide acceptable results: the SRMR value of 0.061 in the saturated model is below the threshold of 0.08, although in the estimated model it is recorded at 0.106, which is still considered tolerable; the d_ULS value of 1.517 (saturated) and 4.538 (estimated) and d_G of 0.628 (saturated) and 0.740 (estimated) remain within an acceptable range; while NFI shows a value of 0.859 (saturated) and 0.838 (estimated), both above the minimum threshold of 0.80. The chi-square values of 1574.522 (saturated) and 1811.805 (estimated) reflect the complexity of the model rather than being the primary measure in the PLS-SEM. Overall, these findings confirm that the model has moderate explanatory power, varying effect contributions with WLB dominance, strong predictive relevance, and adequate model fit, making it feasible to proceed to structural hypothesis testing.

Inner Model Evaluation

After evaluating the outer model and assessing the PLS-SEM model fit in this study, the next step was to test the structural hypotheses to confirm the direction and significance of the relationships between the latent constructs. This test covers three forms of influence: direct effects, indirect effects through mediation mechanisms, and total effects that represent a combination of the two. The assessment was based on the path coefficient (β), $t > 1.96$, and significance level ($p < 0.05$), with positive or negative coefficients indicating the nature of the relationship between variables. A summary of the results of the structural hypothesis testing is provided in Table 4.

Table 4. Direct Effect, Indirect Effect, and Total Effect

Type of Effect	β	t	p	Description
Direct Effect:				
TEFWA \rightarrow WLB	-0.487	11.072	0.000	H1 Accepted
TEFWA \rightarrow EP	0.154	2,776	0.006	H2 Accepted
WLB \rightarrow EP	0.615	9,596	0.000	H3 Accepted
IWE \rightarrow WLB	0.444	7,775	0.000	H5 Accepted
IWE \times TEFWA \rightarrow WLB	0.058	2,550	0.011	H6 Accepted
Indirect Effect:				
TEFWA \rightarrow WLB \rightarrow EP	0.299	9.194	0.000	H4 Accepted
Total Effect:				
IWE \rightarrow EP	0.273	4.724	0.000	-
IWE \rightarrow WLB	0.444	7.775	0.000	-
IWE \times TEFWA \rightarrow EP	0.036	2,463	0.014	-
IWE \times TEFWA \rightarrow WLB	0.058	2.550	0.011	-
TEFWA \rightarrow WLB	-0.487	11,072	0.000	-
TEFWA \rightarrow EP	0.454	10,326	0.000	-
WLB \rightarrow EP	0.615	9,596	0.000	-

The results in Table 4 indicate that technology-enabled flexible work alignment (TEFWA) has a significant negative effect on work–life balance (WLB) ($\beta = -0.487$, $t = 11.072$, $p < 0.001$), thereby supporting H1. This finding suggests that higher levels of technology-based work flexibility are associated with lower work–life balance, consistent with concerns about boundary blurring and the “always-on” culture. In addition, TEFWA has a significant positive effect on employee productivity (EP) ($\beta = 0.154$, $t = 2.776$, $p = 0.006$), supporting H2. This result indicates that technology-enabled flexibility directly enhances productivity. Furthermore, WLB has a significant positive effect on EP ($\beta = 0.615$, $t = 9.596$, $p < 0.001$), supporting H3, which implies that a better work–life balance is associated with higher employee productivity.

Regarding indirect effects, TEFWA exerts a significant indirect effect on EP through WLB ($\beta = -0.299$, $t = 9.194$, $p < 0.001$), thus supporting H4. Given the negative TEFWA \rightarrow WLB path and the positive WLB \rightarrow EP path, this mediation indicates that technology-based flexibility may indirectly reduce productivity when it undermines employees’ work-life balance. Conversely, productivity gains are more likely to be realized when flexible work practices are implemented in a manner that protects or enhances work–life balance.

Islamic work ethic (IWE) also shows a significant positive effect on WLB ($\beta = 0.444$, $t = 7.775$, $p < 0.001$), supporting H5, indicating that stronger IWE is associated with better work–life balance. Moreover, the interaction term (IWE \times TEFWA) has a significant positive effect on WLB ($\beta = 0.058$, $t = 2.550$, $p = 0.011$), thus supporting H6. This suggests that IWE moderates the relationship between TEFWA and WLB, such that employees with higher IWE can utilize technology-enabled flexibility in a balanced manner.

The total effect analysis was consistent with these findings. IWE has a significant positive total effect on EP ($\beta = 0.273$, $t = 4.724$, $p < 0.001$), indicating that stronger IWE is associated with higher productivity. TEFWA also had a significant positive total effect on EP ($\beta = 0.454$, $t = 10.326$, $p < 0.001$), despite its negative association with WLB. Finally, WLB remained the strongest predictor of EP ($\beta = 0.615$, $t = 9.596$, $p < 0.001$), underscoring that employee productivity is strongly linked to maintaining a healthy balance between work and personal life.

Discussion

Is flexibility a resource or demand? The findings indicate that technology-based flexible work is associated with a significant reduction in work–life balance (WLB). This result reveals an important paradox: flexibility, which is often promoted as a mechanism for improving balance, may generate adverse outcomes when poorly regulated. Interpreted

through the lens of boundary theory, continuous digital connectivity exposes employees to an “always-on” condition in which the boundaries between professional and domestic domains become increasingly blurred.

This finding contrasts with the results of prior studies by Aziz-Ur-Rehman and Siddiqui (2019) and Taibah and Ho (2023), which reported the positive effects of flexible work on work–life balance. The divergence in results suggests that in the absence of clear organizational boundaries and norms, technology-enabled flexibility may shift from functioning as a job resource that facilitates work to a job demand that depletes psychological energy. Accordingly, the present findings underscore that flexibility is not inherently liberating; rather, its effects depend on how organizations regulate digital practices and manage work rhythms to prevent the encroachment of work into employees’ private lives.

This study also found that technology-based flexible work increases productivity of employees. These results are consistent with the findings of Taibah and Ho (2023) and E. N. K. Eshun and Segbenya (2024), which highlight flexibility’s role in creating efficiency and reducing role conflict. However, a critical synthesis reveals a potential “Pseudo-Productivity.” The increase in productivity may not stem solely from efficiency but from the extension of working hours due to unlimited access. In other words, productivity is achieved at a high price: degradation of the employees’ quality of life. These findings assert that productivity metrics must evolve beyond *output quantity* to include *sustainability*, ensuring that short-term gains do not lead to long-term burnout, a concern that is often overlooked in purely mechanistic productivity models.

WLB as a Critical Resource Work–life balance positively affects productivity. These results align with the literature, emphasizing balance as the foundation of mental health and focus (E. N. K. Eshun & Segbenya, 2024; Suseno & Saifudin, 2024). However, linking this with the first finding reveals a strategic dilemma: increasing flexibility boosts productivity but erodes WLB, WLB is required to sustain that productivity. This paradox confirms that treating flexibility and balance as zero-sum games is dangerous. Organizations face the risk that the erosion of WLB will eventually collapse the productivity gains that technology sought to achieve. Therefore, WLB must be viewed not just as a “benefit” but as a “critical resource caravan” that must be replenished to maintain the human engine of the organization.

WLB as the “Gatekeeper” of Flexible Work Success This study confirms the mediating role of WLB, supporting E. N. K. Eshun & Segbenya (2024). However, deepening this analysis, WLB functions as a critical filter or “gatekeeper” that determines whether flexibility becomes a blessing (autonomy) or a curse (exploitation). Even if flexibility inherently exerts pressure on balance, productivity can still rise if and only if the organization intervenes to restore that balance through a supportive culture and policy. Without WLB acting as a structural channel, flexibility risks producing fragile productivity that is susceptible to digital stress.

This study finds that Islamic work ethic (IWE) contributes positively to work–life balance (WLB), thereby reinforcing earlier findings by Ali and Al-Owaihan (2008) and Syarif et al. (2019). Moving beyond a purely normative interpretation, IWE is conceptualized as an internal ethical orientation that supports self-regulation in digitally mediated work environments. In increasingly borderless work settings, where external supervision tends to diminish, the Islamic concept of *murāqabah* (the awareness of being accountable before God) operates as an internal behavioral control mechanism. Employees with strong adherence to the IWE tend to perceive the fulfillment of family rights (*ḥaqq al-ahl*) as an integral part of their religious responsibility, which helps prevent excessive work intrusion into their personal lives. In this sense, IWE provides a form of moral capital that enables employees to sustain equilibrium, transforming work–life balance from an abstract managerial ideal into an ethically meaningful practice.

Moreover, the findings indicate that IWE strengthens the relationship between technology-enabled work flexibility and WLB. This result contrasts with those of previous studies by Suseno and Saifudin (2024) and Nurendra (2020), which reported the insignificant moderating role of IWE. This divergence suggests that contextual factors are critical. Within an Islamic higher education setting, IWE appears to function as a cognitive buffer that shapes employees’ interpretations of and approaches to flexibility. Drawing on Islamic epistemology, work undertaken with *niyyah* (intentionality) and *itqān* (quality and excellence) allows individuals to integrate professional and personal roles with reduced psychological tension. Furthermore, values such as *qanā‘ah* (contentment) and *tawakkul* (reliance on God) help mitigate the stress associated with constant digital availability. Taken together, these findings help reconcile empirical inconsistencies by showing that flexible work arrangements are most effective when technical autonomy is accompanied by ethical commitment, enabling employees to engage with technology in a more balanced and reflective manner.

Overall, this study reveals the dual nature of technology-based flexibility: it accelerates productivity but threatens the balance. The novelty of this discussion lies in identifying the solution to this paradox: while WLB provides the

"psychological state" for sustainability, Islamic Work Ethic provides the "spiritual mechanism" to achieve it. Organizations cannot simply pursue productivity through technology; they must integrate ethical values into their work culture to achieve sustainable productivity. Without the moral correction provided by the IWE, flexibility will remain a paradox: seemingly liberating but ultimately shackling.

Conclusion

The results reveal a critical "productivity paradox" in the digital era: technology-based flexible work successfully increases employee productivity while simultaneously degrading work-life balance. Work-life balance is proven to be not merely a benefit but a strategic pathway that bridges the relationship between flexibility and sustainable performance. Crucially, the Islamic Work Ethic (IWE) acts as a "spiritual anchor," playing a dual role as a direct predictor of balance and a moderator that strengthens the positive impact of flexibility while mitigating its intrusive nature. Theoretically, this study extends the Job Demands-Resources (JD-R) model by introducing "spiritual resources" (values/ethics) as a critical personal resource. This demonstrates that in a high-demand digital environment, technical resources (apps/devices) are insufficient without the buffering effect of ethical values. This implies that the effectiveness of digital transformation is not solely dependent on technological infrastructure but also on the integration of a strong value system that guides employees' digital behavior. Practically, the findings suggest a shift toward "Value-Based Digital HRM." Organizations must move beyond adopting technology for efficiency and actively build "digital guardrails" to protect employees' well-being. Although this study is rooted in Islamic values, the underlying mechanism of using ethical frameworks to manage digital boundaries is universally applicable beyond Islamic contexts. Secular or multicultural organizations can adapt this model by reinforcing universal professional ethics (e.g., integrity, mindfulness, and respect for personal time) as a "moral compass" to replace external supervision in remote work settings. Thus, instilling a strong ethical culture is a prerequisite for organizations aiming to prevent digital burnout.

The limitations of this study lie in its cross-sectional design, which prevents causal inference over time, and its specific sample of Islamic Higher Education Institutions in Indonesia. While this context offers deep insights into religious bureaucracy, generalizations to secular private sectors or different cultural settings should be made cautiously. Future research should employ longitudinal designs to track the long-term impact of "technostress" and use mixed-method approaches to explore how different ethical frameworks function in diverse cultural contexts.

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References

1. Ab Hamid, M. R., Sami, W., & Sidek, M. H. M. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker Criterion Versus HTMT Criterion. *Journal of Physics: Conference Series*, 890(1), 12163.
2. Ali, A. J., & Al-Owaidan, A. (2008). Islamic Work Ethic: A Critical Review. *Cross Cultural Management: An International Journal*, 15(1), 5–19. <https://doi.org/10.1108/13527600810848791>

3. Ananda, A. (2024). The Influence of Flexible Work on Work-Life Balance and Employee Performance in Human Resource Management. *Devotion: Journal of Research and Community Service*, 5(2), 335–340. <https://doi.org/10.59188/devotion.v5i2.689>
4. Ateeq, A., Alzoraiki, M., Milhem, M., Al-Absy, M., & Ateeq, R. (2025). Islamic Work Ethics and Employee's Task Performance: The Mediation Role Of Affective Commitment. *Problems and Perspectives in Management*, 23(1), 413.
5. Aziz-Ur-Rehman, M., & Siddiqui, D. A. (2019). Relationship Between Flexible Working Arrangements and Job Satisfaction Mediated by Work-Life Balance: Evidence from Public Sector Universities' Employees of Pakistan. *International Journal of Human Resource Studies*, 10(1), 104. <https://doi.org/10.5296/ijhrs.v10i1.15875>
6. Batterton, K. A., & Hale, K. N. (2017). The Likert Scale What It is and How to Use It. *Phalanx*, 50(2), 32–39.
7. Coenen, M., & Kok, R. A. W. (2014). Workplace Flexibility and New Product Development Performance: The Role of Telework and Flexible Work Schedules. *European Management Journal*, 32(4), 564–576.
8. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Lawrence Erlbaum Associates. Hillsdale, NJ, 20–26.
9. Creswell, J. W., & Cresswell, J. D. (2023). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (Sixth). SAGE Publications Ltd.
10. Deloitte. (2018). *Workplace Mental Health - Infographic: Beating Burnout at Work*. American Psychiatric Association Foundation.
11. Eshun, E. N. K., & Segbenya, M. (2024). Modelling the Mediating Role of Work-Life Balance on the Relationship Between Work Arrangement and Employee Performance in Higher Education. *Sage Open*, 14(3). <https://doi.org/10.1177/21582440241263447>
12. Eshun, E., & Segbenya, M. (2024). Modelling the Mediating Role of Work-Life Balance on the Relationship Between Work Arrangement and Employee Performance in Higher Education. *SAGE Open*, 14, 1–16. <https://doi.org/10.1177/21582440241263447>
13. Fornell, C., & Larcker, D. F. (1981). *Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics*. Sage Publications Sage CA: Los Angeles, CA.
14. Ghimire, B. (2020). Achieving Work-Life Balances through Flexible Work Practices. *Pravaha*, 26(1), 31–38.
15. Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). Evaluation of Reflective Measurement Models. *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*, 75–90.
16. Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, Marko., Danks, N. P., & Ray, Soumya. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer Nature.
17. Hair Jr, J., Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2023). *Advanced Issues in Partial Least Squares Structural Equation Modeling*. SAGE publications.
18. Harter, J. (2023). Globally, Employees are More Engaged—and More Stressed. *Gallup Workplace*.
19. Hult, G. T. M., Hair Jr, J. F., Proksch, D., Sarstedt, M., Pinkwart, A., & Ringle, C. M. (2018). Addressing Endogeneity in International Marketing Applications of Partial Least Squares Structural Equation Modeling. *Journal of International Marketing*, 26(3), 1–21.
20. Jamieson, S. (2004). Likert Scales: How to (ab) Use Them? *Medical Education*, 38(12), 1217–1218.
21. Mandalahi, S. H., Damayanti, S., Prasanti, T. A., & Maharani, A. (2024). Impact of Flexible Work Environments on Employee Performance: Mediating Roles of Stress and Work-Life Balance. *Ilomata International Journal of Management*. <https://doi.org/10.61194/Ijgm.V5i3.1235>.
22. Muafi, M. (2021). Investigating the Dimensionality of Work Life Balance in Islamic Perspective (WLBIP): An Insight from Indonesia. *Journal of Islamic Business and Management*, 11(01), 198–216.
23. Nurendra, A. M. (2020). Work Life Balance and Organizational Commitment among Muslim Generation Y: The Effect of Islamic Work Ethic. *International Journal of Psychosocial Rehabilitation*, 24(1), 1427–1438. <https://doi.org/10.37200/ijpr/v24i1/pr200241>
24. Prasad, K., & Satyaprasad, V. (2023). The Relationship between Remote Working and Work-life Balance with Mediating and Moderating Effects of Social Support: An Empirical Study of Information Technology Employees. *International Journal of Organizational Leadership*, 0(0), 235–253. <https://doi.org/10.33844/ijol.2023.60366>

25. Santosa, I. S., Purwanto, E. A., Sumaryono, S., & Utomo, P. P. (2025). Understanding Work Engagement in Public Administration: A Comprehensive Bibliometric and Systematic Review of the Past Decade. *Social Sciences & Humanities Open*, 11, 101479.
26. Scheaffer, R. L., Mendenhall III, W., Ott, R. L., & Gerow, K. G. (2011). *Elementary Survey Sampling*. Cengage Learning.
27. Sekretariat Negara. (2023). Perpres Nomor 21 Tahun 2023 tentang Hari Kerja dan Jam Kerja Instansi Pemerintah dan Pegawai Aparatur Sipil Negara. In *Sekretariat Negara (21 Tahun 2023)*. <https://peraturan.bpk.go.id/Details/247257/perpres-no-21-tahun-2023>.
28. Suib, F. H., & Said, M. F. (2017). A Review of Islamic Work Ethics and Spirituality Concepts in Service Industry. *Journal of Nusantara Studies (JONUS)*, 2(2), 282. <https://doi.org/10.24200/jonus.vol2iss2pp282-294>
29. Suryadi, Y., FoEh, J. E. H. J., & Manafe, H. (2022). Employee Productivity Determination: Work Life Balance (WLB), Work from Home (WFH), Information Technology (IT) and Work Flexibility. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 5(2), 731–751. <https://doi.org/10.31538/ijse.v5i2.2533>
30. Suseno, G., & Saifudin, S. (2024). The Influence of Work-Life Balance, Superior Pressure, and Cyberloafing on Employee Productivity: The Moderating Role of Islamic Work Ethic. *Journal of Islamic Economics Management and Business (JIEMB)*, 6(1), 1–22.
31. Syarif, A. H., Rahmawati, A., & Fasa, M. I. (2019). The Effect of Islamic Work Ethic and Productivity on Work Quality through the Employee Performance. *Review of Islamic Economics and Finance*, 2(2), 40–52. <https://doi.org/10.17509/rief.v2i1.22375>
32. Taibah, D., & Ho, T. C. F. (2023). The Moderating Effect of Flexible Work Option on Structural Empowerment and Generation Z Contextual Performance. *Behavioral Sciences*, 13(3), 266. <https://doi.org/10.3390/bs13030266>
33. Thesing, G. (2023, January 26). *Why Flexible Working is Good for Workers and Companies*. World Economic Forum.
34. Usman, M., Shahzad, K., & Khan, K. (2015). Islamic Work Ethics (IWE) : A Review of Literature and Directions for Future Research. *Journal of Islamic Business and Management*, 5(2), 135–162. <https://doi.org/10.12816/0026421>
35. Vargas Llave, Oscar., & Weber, Tina. (2020). *Regulations to Address Work-Life Balance in Digital Flexible Working Arrangements*. Publications Office of the European Union.
36. Widana, G. O. (2021). The Measurement Model of Islamic Work Ethics for Muslim Employees in the Banking Industry. *International Journal of Research in Business and Social Science (2147- 4478)*, 10(5), 66–71. <https://doi.org/10.20525/ijrbs.v10i5.1297>