EMPLOYEE COMMITMENT, QUALITY MANAGEMENT, AND TECHNOLOGY: EFFECTS ON PERFORMANCE AND SUSTAINABILITY

Muhamad Ferdian Saputra^{1*}, Andi Harmoko Arifin², Muhammad Nasir Hamzah³, Abdul Rahman Rahim⁴

^{1, 2, 3, 4}Universitas Terbuka, Tangerang Selatan, Indonesia *ferdian1001@gmail.com

ABSTRACT

This study investigates the influence of Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP) on Employee Performance (EP) and Organizational Sustainability (OS) at the Statistics Indonesia office of West Sulawesi Province, utilizing the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The data analysis confirms that the measurement model meets the required validity and reliability criteria. Within the structural model, EC, QM, and TP are found to have a significant positive influence on EP. Conversely, EP does not exhibit a significant effect on OS and fails to function as an effective mediator between the three exogenous variables and OS. In contrast, EC demonstrates a significant direct impact on OS. The coefficient of determination values for both EP and OS indicate a moderate to strong predictive power of the model. This case study reveals that while enhancements in technological competence and quality management can improve employee performance, their direct effect on organizational sustainability remains limited. These findings underscore the critical role of strengthening employee commitment as a primary strategy for achieving long-term organizational sustainability. The practical implications of this research highlight the need for policies focused on enhancing EC, as well as a reexamination of the mechanisms through which EP influences OS. For future research, it is recommended to incorporate additional mediating or moderating variables to deepen the understanding of the dynamics between these factors within public sector organizations.

Keywords: Employee commitment, employee performance, organizational sustainability, quality management, technological proficiency

ABSTRAK

Penelitian ini mengkaji pengaruh Komitmen Karyawan, Manajemen Mutu, dan Penguasaan Teknologi terhadap Kinerja Karyawan dan Keberlanjutan Organisasi di Badan Pusat Statistik Provinsi Sulawesi Barat dengan menggunakan Partial Least Squares Structural Equation Modeling. Hasil analisis data menunjukkan bahwa model pengukuran memenuhi kriteria validitas dan reliabilitas. Pada model struktural, Komitmen Karyawan, Manajemen Mutu, dan Penguasaan Teknologi terbukti memiliki pengaruh positif yang signifikan terhadap Kinerja Karyawan. Namun, Kinerja Karyawan tidak berpengaruh signifikan terhadap Keberlanjutan Organisasi dan gagal berperan sebagai mediator yang efektif antara ketiga variabel eksogen dan Keberlanjutan Organisasi. Sementara itu, Komitmen Karyawan memiliki dampak langsung yang signifikan terhadap Keberlanjutan Organisasi. Nilai determinasi untuk Kinerja Karyawan dan Keberlanjutan Organisasi mengindikasikan kekuatan prediksi model yang moderat hingga kuat. Studi kasus ini menunjukkan bahwa meskipun peningkatan kompetensi teknologi dan manajemen kualitas mampu meningkatkan kinerja karyawan, dampaknya terhadap keberlanjutan organisasi masih terbatas. Temuan ini menggarisbawahi peran kritis dari penguatan komitmen karyawan sebagai strategi utama untuk mencapai keberlanjutan organisasi jangka panjang. Implikasi praktis dari penelitian ini mencakup

perlunya kebijakan yang berfokus pada peningkatan komitmen karyawan serta meninjau ulang mekanisme dimana kinerja karyawan mempengaruhi keberlanjutan organisasi. Untuk penelitian mendatang, disarankan untuk memasukkan variabel mediasi atau moderasi tambahan guna memperdalam pemahaman mengenai dinamika hubungan antar faktor-faktor tersebut dalam organisasi sektor publik.

Kata Kunci: Keberlanjutan Organisasi, Kinerja Karyawan, Komitmen Karyawan, Manajemen Mutu, Penguasaan Teknologi.

PENDAHULUAN

Organizational Sustainability (OS) is a primary goal for public sector institutions, requiring a balance between Employee Performance (EP) and long-term strategic objectives. Previous research has identified Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP) as critical factors influencing EP and OS. However, the role of EP as a mediator in this relationship remains underexplored, particularly in government agencies (Ordieres-Meré et al., 2020).

A study by Isensee et al. (2020) revealed that organizational sustainability tends to drive technology adoption, particularly when combined with an organizational culture that emphasizes leadership quality. The COVID-19 pandemic underscored the critical lesson that continuous technological advancement is imperative for achieving organizational sustainability (Narayanamurthy & Tortorella, 2021). The OECD (2021) report further highlights that modern public sector organizations must adapt to change and enhance employee performance, where technological proficiency and employee performance play pivotal roles. Similarly, quality management practices and employee commitment in government institutions require thorough analysis to ensure organizational sustainability (World Bank, 2020).

Previous research has established a robust theoretical foundation demonstrating that employee performance (EP) significantly mediates the relationship between employee commitment (EC), quality management (QM), technological proficiency (TP), and organizational sustainability (OS). For instance, Meyer & Maltin, (2010)concluded that EP serves as a critical mechanism through which EC enhances organizational sustainability, particularly in the public sector. Extending this finding, a study by Loor-Zambrano et al. (2022) found that employee commitment boosts organizational performance, which is a key dimension of sustainability, by fostering intrinsic motivation and trust.

In the realm of quality management, research by Bahri et al. (2012); Modarres & Pezeshk (2017) indicates that QM practices achieve their long-term sustainability outcomes largely through the enhancement of employee performance, facilitated by organizational learning and innovation. Similarly, Ali AlShehail et al. (2022)demonstrated that in public service sectors, service innovation—a direct outcome of enhanced employee performance—mediates the relationship between TQM and sustainability. Concerning technology, Tasleem et al. (2019) empirically confirmed that technology management improves corporate sustainability performance, with TQM and employee performance acting as sequential mediators. Furthermore, Ahmad et al. (2023) highlighted that Green HRM practices elevate environmental performance by strengthening employee environmental commitment, which subsequently boosts performance toward sustainability goals.

However, the consistency of EP's mediating role remains underexplored, especially in specific public sector institutions like statistical organizations, where operational context may alter these dynamics. Moreover, limited studies have simultaneously tested the integrated direct and indirect effects of EC, QM, and TP on OS within a single model. This study,

therefore, aims to extend prior research by empirically examining these relationships within the unique context of the Central Bureau of Statistics (BPS) of West Sulawesi Province. The findings will contribute to the public sector management literature and provide practical, evidence-based recommendations for policymakers..

KAJIAN PUSTAKA

Employee Commitment (EC) is defined as an employee's psychological attachment to an organization, manifested through a willingness to exert considerable effort, a strong desire to maintain organizational membership, and an acceptance of the organization's values and goals (Meyer & Maltin, 2010). This study will demonstrate that EC not only enhances short-term organizational performance but also serves as a critical foundation for the organization's long-term sustainability.

Empirical studies indicate that employee commitment, particularly its affective dimension, directly contributes to enhanced organizational performance. The research by Loor-Zambrano et al. (2022) establishes that employee commitment is positively influenced by intrinsic motivation and trust in the organization, which subsequently leads to improved performance. Similarly, Triguero-Sánchez et al. (2022) found that a collectivist culture significantly strengthens affective, normative, and continuance commitment within public organizations, thereby positively impacting performance. Further extending this concept, Ahmad et al. (2023) demonstrated that Green Human Resource Management (HRM) Practices bolster Environmental Performance by fostering Employee Environmental Commitment. Collectively, these findings underscore that commitment to an organization's core values, such as sustainability, serves as a critical lever for achieving strategic performance outcomes.

Although a substantial body of literature affirms a positive correlation between employee commitment and organizational performance, empirical evidence and theoretical perspectives suggest that this relationship is not invariably linear, significant, or positive. In their critical review, Meyer & Maltin (2010) highlight that not all dimensions of commitment yield consistent positive effects. For instance, Continuance Commitment (CC)—rooted in economic necessity and a perceived lack of alternatives—often correlates negatively with employee well-being and positively with work-related strain. Employees with high CC, who feel "trapped" in the organization, tend to demonstrate lower innovativeness and exhibit minimal compliance with role requirements. Similarly, Normative Commitment (NC), which stems from a sense of obligation, demonstrates a weak and inconsistent relationship with positive organizational outcomes. Commitment driven primarily by guilt or duty does not necessarily translate into discretionary effort for the organization's benefit.

Quality Management (QM) is a comprehensive management philosophy centered on customer satisfaction, continuous improvement, and the participation of all employees. QM has evolved from its traditional roots into the era of Quality 4.0, which integrates digital technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and Big Data analytics (Sader et al., 2022). The literature identifies several key dimensions of QM, which include: top management leadership and commitment (Ababneh, 2020); a foundational focus on the customer (Gulati & Oldroyd, 2005); total employee involvement and empowerment (Roslin et al., 2019); process management and continuous improvement (Modarres & Pezeshk, 2017); data-driven decision making (Khalil & Muneenam, 2021); and supplier management and partnership development (Budayan & Okudan, 2022).

Quality Management (QM) exerts a significant positive influence on the enhancement of both operational and financial performance (Bahri et al., 2012). Its applicability extends

beyond the private sector, as evidenced in the public sector where QM principles contribute to greater accountability and transparency (Lapuente & Van de Walle, 2020). Furthermore, QM supports the achievement of sustainability objectives by promoting resource efficiency and driving continuous innovation (Abbas, 2020). The integration of QM with Corporate Social Responsibility (CSR) initiatives has been shown to amplify a firm's green performance (Abbas, 2020). Consequently, robust QM practices are widely recognized as a foundational element for the successful implementation of formal Environmental Management Systems (Wiengarten & Pagell, 2012). However, a nuanced perspective is offered by Bahri et al. (2012), whose research found no significant direct effect of QM on organizational performance. The study concluded that QM's influence is instead fully mediated by organizational culture, suggesting that its benefits are only realized when the practices are embedded within and supported by a conducive cultural environment.

Technology Propensity (TP) refers to an organization's holistic capacity to effectively adopt, adapt, and leverage technology in pursuit of its strategic objectives. This multidimensional construct encompasses several critical facets: technical capability, which pertains to the proficiency in utilizing specific technologies; digital competence, reflecting the organization-wide skills and literacy required for a digital environment; technology infrastructure, constituting the foundational hardware, software, and network systems; and system integration, which ensures these technological components interoperate seamlessly to create a unified and efficient operational framework.

Recent research underscores the critical role of technology and innovation in advancing organizational quality and sustainability. Ahmad et al., (2023) established that IT governance makes a significant contribution to both environmental and social sustainability, aligning with broader sustainable development goals. This technological integration is central to Quality 4.0, which, as highlighted by Sader et al., (2022), leverages advanced technologies such as the Internet of Things (IoT), Big Data, Artificial Intelligence (AI), and Cloud Computing to modernize quality management frameworks. The pathway from quality management to sustainability is further clarified by Ali AlShehail et al., (2022), who identified service innovation as a key mediating variable that strengthens the relationship between QM and sustainability within the public service sector. Underpinning these technological initiatives is the strategic importance of their architecture; Chen et al., (2022) emphasize that effective digital platform design and governance are fundamental to creating and capturing value.

Hanaysha and Alzoubi, (2022) emphasize that Technology Propensity (TP), exemplified by the Internet of Things (IoT) in supply chains, enhances both operational and organizational performance by improving efficiency, visibility, and cost reduction. This constitutes a direct contribution to organizational sustainability, as it enables firms to better fulfill market demands and ensure operational fluidity through real-time, interconnected data. This dynamic aligns with Open Systems Theory (Katz & Kahn, 1978), which posits that organizations are systems that must continuously interact with and adapt to their external environment to survive and thrive. The application of such technologies within a supply chain strengthens integration with external partners, optimizes information flow, and augments the organization's capacity to respond to market dynamics. These technological benefits are indispensable for sustaining a competitive advantage and ensuring long-term business continuity.

Blichfeldt & Faullant (2021) present a critical nuance to the discourse on Technology Propensity (TP). Their research identifies that while organizations with a higher degree of TP—in terms of both the breadth and depth of technological adoption—demonstrate a tendency for more radical innovation, this relationship does not invariably translate into

improved organizational performance or long-term sustainability. Furthermore, they highlight a notable contingency: within high-technology industries, TP more frequently enhances operational efficiency than it drives significant innovation. This finding challenges the presumed direct and universally positive link between digital technology adoption and sustainable competitive advantage.

However, a critical perspective is offered by Lapuente & Van de Walle (2020), whose research into public organizations reveals significant shortcomings in the implementation of technology-driven reforms. They found that New Public Management (NPM) reforms, which are heavily reliant on technological solutions, do not yield uniform improvements in public service quality. Their analysis concludes that the success of such technological interventions is not guaranteed but is profoundly contingent upon the specific administrative and political context in which they are embedded.

Organizational performance, encompassing both operational and financial metrics, functions as a critical mediator in the relatihaonship between Employee Commitment (EC), Quality Management (QM), Technology Propensity (TP), and Organizational Sustainability (OS). The continuous improvement facilitated by QM practices directly enhances operational efficiency and reduces costs, thereby strengthening financial performance. Furthermore, the effective knowledge management inherent in these systems bolsters organizational performance by fostering innovation and elevating the quality of products and services. Consequently, organizational performance is not merely a reflection of the immediate outcomes of QM but also a pivotal indicator of its long-term impact on an organization's sustainability and competitive standing (Abbas, 2020).

Organizational performance refers to the outcomes achieved by an organization through the execution of its activities in pursuit of strategic objectives. It serves as a tangible reflection of the collective performance of its employees. Within the context of a national statistical office such as BPS, performance measurement extends beyond conventional financial metrics. It encompasses a multidimensional framework that includes operational efficiency, customer (data user) satisfaction, and long-term institutional sustainability.

Quality Management (QM) exerts a significant influence on enhancing organizational performance, both directly and indirectly through mediating variables such as innovation, organizational learning, and organizational culture (Bahri et al., 2012; Modarres & Pezeshk, 2017). Within the public sector context, QM principles further contribute to improved service quality and user satisfaction (Gulati & Oldroyd, 2005). Moreover, key human resource practices embedded in QM—including training, empowerment, and employee recognition—serve to enhance workforce motivation and commitment, which subsequently translate into positive performance outcomes (Ahmed & Idris, 2021).

Technology Propensity (TP) serves as a pivotal mediator in the relationship between Quality Management (QM) and Environmental Performance (EP), facilitating the translation of quality principles into tangible ecological outcomes (Ali AlShehail et al., 2022). Effective implementation of TP enhances operational efficiency and directly supports the broader objectives of Organizational Sustainability (OS) (Ahmad et al., 2023). This aligns with the contemporary understanding that sustainable organizational performance transcends mere economic metrics, encompassing integrated social and environmental dimensions (Abbas, 2020; Tasleem et al., 2019). Consequently, organizations that robustly implement QM are better positioned to achieve their holistic sustainability goals, as the systematic and improvement-oriented nature of QM provides a foundational framework for enduring success (Khalil & Muneenam, 2021).

Organizational Sustainability (OS) refers to an organization's capacity to maintain long-term performance by integrating the three core pillars of the Triple Bottom Line: economic, social, and environmental. Within the context of public institutions such as BPS, sustainability further encompasses critical dimensions of governance and social legitimacy (Abbas, 2020; Tasleem et al., 2019). The implementation of Quality Management (QM) provides a systematic framework for embedding these sustainability principles into core business processes (Siva et al., 2016). In the public sector specifically, QM facilitates the creation of sustainable public value by ensuring that operational excellence aligns with broader societal and environmental objectives (Ali AlShehail et al., 2022).

The strategic deployment of information technology serves as a critical enabler for key sustainability initiatives, directly supporting energy efficiency, waste reduction, and operational transparency ((Ahmad et al., 2023). Furthermore, Technology Propensity (TP) enhances an organization's adaptive capacity to respond to evolving sustainability challenges (Ali AlShehail et al., 2022). This technological foundation also strengthens the overarching frameworks of sustainability accountability and governance, ensuring that environmental and social commitments are systematically tracked and reported (Chen et al., 2022)

Drawing upon the theoretical foundations and the proposed structural model, this study posits the following hypotheses concerning the direct and indirect relationships between the constructs. It is hypothesized that Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP) each exert a significant positive influence on Employee Performance (EP). Furthermore, Employee Performance (EP) is hypothesized to have a significant positive effect on Organizational Sustainability (OS). Concurrently, the model proposes direct effects, suggesting that EC, QM, and TP also have significant positive impacts on Organizational Sustainability (OS) independently.

Regarding the mediating mechanisms, this study hypothesizes that Employee Performance (EP) serves as a significant mediating variable in the relationships between the exogenous variables and Organizational Sustainability. Specifically, it is proposed that EP significantly mediates the influence of Employee Commitment (EC) on Organizational Sustainability (OS). Similarly, EP is hypothesized to be a significant mediator in the relationship between Quality Management (QM) and OS. Finally, it is also hypothesized that EP significantly mediates the effect of Technological Proficiency (TP) on Organizational Sustainability (OS).

The conceptual framework of this study, as illustrated in Figure 1, proposes a model in which three exogenous variables—Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP)—are theorized to exert a direct influence on Employee Performance (EP). The theoretical rationale underpinning these relationships posits that psychological attachment (EC) fosters greater discretionary effort, structured quality practices (QM) create an efficient and standardized work system, and the effective adoption of technology (TP) enhances operational accuracy and productivity, collectively contributing to elevated individual performance. Furthermore, the model delineates both direct and indirect pathways to Organizational Sustainability (OS). It is hypothesized that improved EP subsequently contributes to OS through enhanced service quality and operational efficiency. Concurrently, EC, QM, and TP are also postulated to have direct effects on OS. This is based on the premises that committed employees inherently support long-term organizational values, quality management systems inherently promote sustainable resource use and continuous improvement, and technology directly enables greater transparency, data-driven decision-making, and adaptive capacity.

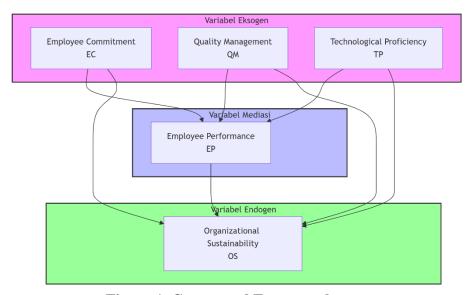


Figure 1. Conceptual Framework

Source: Data Were Processed by the Author (2025)

Crucially, Employee Performance (EP) is positioned as a pivotal mediating mechanism, hypothesized to transmit the effects of EC, QM, and TP to Organizational Sustainability (OS). This suggests that improvements in commitment, quality systems, and technology are expected to boost sustainability outcomes primarily by first elevating the performance levels of the employees. However, the empirical findings from BPS West Sulawesi later reveal a critical nuance: while the direct effects of EC, QM, and TP on EP are confirmed, the path from EP to OS is not significant, indicating that employee performance alone is an insufficient conduit for achieving organizational sustainability in this context. This underscores the paramount importance of the direct effects, particularly from Employee Commitment, in driving sustainable outcomes.

METODE PENELITIAN

This study employs a quantitative approach utilizing the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. This approach was selected due to its robustness in analyzing relationships between latent variables within complex models, even with a relatively small sample size (Hair et al., 2022). The population for this research comprises all 60 employees of the Statistics Indonesia (BPS) Office of West Sulawesi Province. A total sampling (census) technique was applied, wherein the entire population was invited to participate as respondents. The final sample consisted of 54 employees who completed the questionnaire in its entirety.

Data were collected in July 2025 using an online questionnaire administered via Google Forms. The questionnaire was distributed through the internal employee communication group of BPS West Sulawesi. The research variables include three exogenous (independent) variables: Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP). The endogenous (dependent) variables are Employee Performance (EP) and Organizational Sustainability (OS).

Data analysis with PLS-SEM was conducted in two stages. The first stage involved the assessment of the measurement model (outer model). Reliability was measured using Cronbach's Alpha and Composite Reliability, with a minimum acceptable value of 0.7.

Convergent validity was assessed through the Loading Factor (> 0.7) and Average Variance Extracted (AVE > 0.5). Discriminant validity was tested using the Fornell-Larcker criterion, which requires the square root of the AVE of each construct to be greater than its correlation with any other construct.

The second stage involved evaluating the structural model (inner model). The Coefficient of Determination (R²) was used to assess the proportion of the variance in the dependent variables explained by the independent variables. The significance of the path coefficients was tested using a bootstrapping procedure with 500 resamples to generate t-values and p-values. A p-value of less than 0.05 was considered statistically significant.

Hypothesis testing was performed to examine both direct and indirect effects. Direct effects were tested to ascertain the relationships between the exogenous and endogenous variables. Indirect effects were tested to investigate the mediating role of Employee Performance (EP) on Organizational Sustainability (OS). The analysis was conducted using the SmartPLS software, employing the PLS-SEM algorithm and bootstrapping techniques to test the path significance.

A summary of the research procedure is illustrated in the following flowchart: Questionnaire Design \rightarrow Distribution to all BPS West Sulawesi Employees \rightarrow Data Collection (54 valid samples) \rightarrow PLS-SEM Data Analysis \rightarrow Reliability and Validity Test (Outer Model) \rightarrow Structural Relationship Test (Inner Model) \rightarrow Mediation and Significance Test with Bootstrapping \rightarrow Interpretation of Results and Conclusion.

HASIL DAN PEMBAHASAN

The conceptual framework of this study, as illustrated in Figure 2, comprises both exogenous and endogenous latent variables. The exogenous constructs include Employee Commitment (EC), Quality Management (QM), and Technology Propensity (TP). The endogenous constructs consist of Employee Performance (EP) and Organizational Sustainability (OS). Each latent variable is operationally defined through multiple indicators measured with reflective scales (e.g., EC is measured by indicators C1–C5, QM by A1–A5, etc.).

The structural model (inner model) specifies several hypothesized pathways. First, EP functions as a mediating variable in the relationships where EC, QM, and TP influence OS (EC \rightarrow EP \rightarrow OS; QM \rightarrow EP \rightarrow OS; TP \rightarrow EP \rightarrow OS). Second, the model also posits direct effects of EC, QM, and TP on OS. This comprehensive model allows for the examination of both the direct and indirect mechanisms through which the key exogenous variables ultimately impact organizational sustainability.

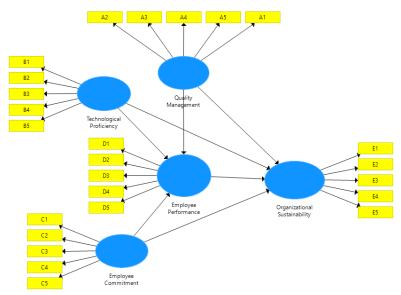


Figure 2. Structural Model (Inner Model)

Source: Processed Primary Data using SmartPLS 4.0 (2025)

The evaluation of the measurement model (outer model), as presented in Table 1, confirms the reliability and validity of the constructs. Reliability is substantiated by Cronbach's Alpha and Composite Reliability values, all of which exceed the recommended threshold of 0.7. For instance, the Employee Commitment (EC) construct demonstrates strong internal consistency (Cronbach's Alpha = 0.875, Composite Reliability = 0.909). Convergent validity is established through indicator loadings, with the majority surpassing the ideal value of 0.7. While certain indicators, such as A4 (0.512) and B1 (0.660), exhibited loadings below this ideal benchmark, they were retained as they exceeded the minimum acceptable level of 0.50, a common practice in social science research to maintain content validity and theoretical completeness of the constructs (Hair et al., 2019).

Table 1. Construct Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Commitment	0,875	0,880	0,909	0,665
Employee Performance	0,807	0,816	0,861	0,555
Organizational Sustainability	0,886	0,894	0,917	0,688
Quality Management	0,763	0,794	0,846	0,534
Technological Proficiency	0,730	0,745	0,822	0,501

Source: Processed Primary Data using SmartPLS 4.0 (2025)

Discriminant validity is confirmed when the square root of the Average Variance Extracted (AVE) for each construct is greater than its correlation with any other construct (Hair et al., 2019). As presented in Table 2, the discriminant validity for all constructs in the

research model has been satisfactorily established. This is evidenced by the square root of the AVE for each construct (displayed diagonally in bold) exceeding the inter-construct correlations in the corresponding rows and columns. For instance, the square root of the AVE for Employee Commitment is 0.816, which is greater than all its correlations with other constructs (0.612, 0.572, 0.563, and 0.684). This pattern is consistently observed across all constructs: Employee Performance (0.745 > 0.612, 0.455, 0.466, 0.563), Organizational Sustainability (0.830 > 0.572, 0.455, 0.667, 0.649), Quality Management (0.731 > 0.563, 0.466, 0.667, 0.691), and Technology Propensity (0.694 > 0.684, 0.563, 0.649, 0.691). Therefore, it can be concluded that each construct in this model is unique and captures the variance of its indicators more effectively than the variance shared with other constructs, thereby fulfilling the criterion for discriminant validity (Hair et al., 2019).

Table 2. Discriminant Validity

Variable	Employee Commitment	Employee Performance	Organizational Sustainability	Quality Management	Technological Proficiency
Employee Commitment	0,816			S	
Employee Performance	0,612	0,745			
Organizational Sustainability	0,572	0,455	0,830		
Quality Management	0,563	0,466	0,667	0,731	
Technological Proficiency	0,684	0,563	0,649	0,691	0,694

Source: Processed Primary Data using SmartPLS 4.0 (2025)

Table 3 presents the coefficient of determination (R²) for Employee Performance (EP) as 0.417. This indicates that 41.7% of the variance in Employee Performance is explained by the combined influence of the independent variables—namely, Employee Commitment, Quality Management, and Technology Propensity. The remaining 58.3% of the variance is attributed to other factors not included in the current model (Hair et al., 2019). Following the interpretive guidelines for R² in social science research, this value falls within the moderate range (0.25–0.50), suggesting a substantive explanatory power for the proposed model (Hair et al., 2019).

Table 3. Coefficient of Determination

	R Square	R Square Adjusted
Employee Performance	0,417	0,383
Organizational Sustainability	0,529	0,491

Source: Processed Primary Data using SmartPLS 4.0 (2025)

The coefficient of determination (R²) for Organizational Sustainability (OS) is 0.529. This indicates that 52.9% of the variance in Organizational Sustainability is explained by the combined effect of the independent variables in the model—namely, Employee Performance and Employee Commitment. The remaining 47.1% of the variance is accounted for by external factors or variables not included in this study. According to the interpretive guidelines established by Sarstedt et al. (2023), an R² value exceeding 0.50 is considered

substantial in behavioral and social science research, confirming the model's strong explanatory power for the organizational sustainability construct.

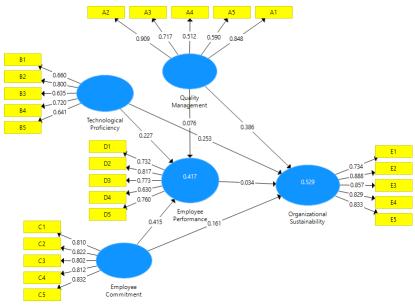


Figure 3. Structural Model (Inner Model)

Source: Processed Primary Data using SmartPLS 4.0 (2025)

Figure 3 illustrates the structural model (inner model), which delineates the causal relationships among the latent variables in this study. The model demonstrates that Quality Management (QM), Technology Propensity (TP), and Employee Commitment (EC) serve as exogenous variables that exert a significant influence on the endogenous variable, Employee Performance (EP).

Figure 4 presents the results of the analysis using SEM-PLS with 500 bootstrap samples. Bootstrapping is a non-parametric statistical technique employed to assess the significance of the path coefficients within the model. This method operates by generating a large number of random subsamples (in this case, 500) from the original dataset through resampling with replacement. For each subsample, the path coefficients are re-estimated. These results are then used to construct an empirical sampling distribution, which serves as the basis for calculating T Statistics (IO values) and corresponding P Values to determine statistical significance.

The numerical values on the paths represent the path coefficients, indicating the magnitude of the direct influence of one variable on another. The statistical significance of these relationships is determined by the T Statistics (and/or P Values). The analysis results reveal that the path from Employee Commitment (EC) to Employee Performance (EP) possesses the highest path coefficient, supported by a T Statistic of 3.191. This indicates that, among the exogenous variables in the model, EC exerts the strongest and most statistically significant direct influence on EP.

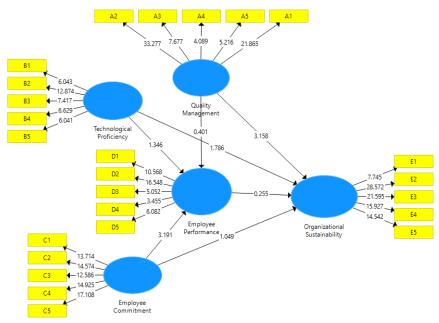


Figure 4. SEM-PLS Bootstrapping 500 Times

Source: Processed Primary Data using SmartPLS 4.0 (2025)

Table 4 presents the results of the direct effects analysis between the latent variables. The analysis reveals that Employee Commitment (EC) exerts a statistically significant direct effect on both Employee Performance (EP) (p=0.005) and Organizational Sustainability (OS) (p=0.024). Conversely, the direct effect of EP on OS was found to be statistically non-significant (p=0.795). Furthermore, Quality Management (QM) demonstrates a significant influence on both EP (p=0.026) and OS (p=0.002). Similarly, Technology Propensity (TP) also exhibits significant direct effects on EP (p=0.022) and OS (p=0.045). The results indicate that Quality Management (QM) and Technological Proficiency (TP) have a significant positive impact on both Employee Performance (EP) and Organizational Sustainability (OS). These findings demonstrate that the implementation of quality systems and technological mastery has been effective within BPS West Sulawesi Province.

Table 4. Direct Effects

Tuble W Birect Effects					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Employee Commitment -> Employee Performance	0.415	0.404	0.148	2.804	0.005
Employee Commitment -> Organizational Sustainability	0.175	0.166	0.137	1.273	0.024
Employee Performance -> Organizational Sustainability	0.034	0.029	0.131	0.260	0.795
Quality Management -> Employee Performance	0.176	0.072	0.195	0.389	0.026
Quality Management -> Organizational Sustainability	0.389	0.415	0.123	3.162	0.002
Technological Proficiency -> Employee Performance	0.227	0.263	0.194	1.171	0.022
Technological Proficiency -> Organizational Sustainability	0.260	0.263	0.130	2.011	0.045

Source: Processed Primary Data using SmartPLS 4.0 (2025)

The key findings of this study indicate that Employee Commitment (EC), Quality Management (QM), and Technological Proficiency (TP) significantly enhance Employee Performance (EP) at BPS West Sulawesi Province. Furthermore, EC, QM, and TP were also found to exert a significant direct influence on Organizational Sustainability (OS). However, the analysis revealed that EP does not have a significant effect on OS. This suggests that, in the context of BPS West Sulawesi Province, improvements in employee performance do not automatically translate into or guarantee enhanced organizational sustainability.

As presented in Table 5, all tested indirect effects are statistically non-significant. The p-values for the paths EC \rightarrow EP \rightarrow OS (p = 0.802), QM \rightarrow EP \rightarrow OS (p = 0.929), and TP \rightarrow EP \rightarrow OS (p = 0.863) all exceed the conventional significance threshold. Therefore, it can be concluded that Employee Performance (EP) does not function as a statistically significant mediator in transmitting the effects of Employee Commitment (EC), Quality Management (QM), and Technology Propensity (TP) to Organizational Sustainability (OS)

Table 5. Hunteet Effects							
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values		
Employee Commitment -> Employee Performance -> Organizational Sustainability	0,014	0,011	0,056	0,251	0,802		
Quality Management -> Employee Performance -> Organizational Sustainability	0,003	0,003	0,029	0,090	0,929		
Technological Proficiency - > Employee Performance -> Organizational Sustainability	0,008	0,008	0,045	0,172	0,863		

Table 5. Indirect Effects

Source: Processed Primary Data using SmartPLS 4.0 (2025)

The implications of these findings suggest that while Employee Commitment (EC), Quality Management (QM), and Technology Propensity (TP) enhance Employee Performance (EP), their ultimate impact on Organizational Sustainability (OS) is primarily driven by the direct effect of EC. This underscores the critical need for organizational policies aimed at strengthening employee commitment, such as through targeted leadership development and comprehensive employee engagement programs. Furthermore, the non-significant mediating role of EP necessitates further investigation into additional variables that may more effectively bridge the gap between employee performance and long-term organizational sustainability.

The insignificance of Employee Performance (EP) as a mediator necessitates further investigation into additional variables that could bridge the relationship between EP and Organizational Sustainability (OS). This finding also suggests that employee performance at BPS West Sulawesi Province is likely still oriented towards short-term operational outputs and has not yet encompassed the strategic aspects that underpin long-term sustainability, such as innovation, adaptation, and the creation of sustained public value. Consequently, these strategic aspects should be considered as potential variables for future research concerning BPS West Sulawesi Province.

SIMPULAN

The analysis confirms that Employee Performance (EP) is significantly influenced by Employee Commitment (EC), Quality Management (QM), and Technology Propensity (TP). However, EP does not serve as a significant mediator in transmitting these effects to Organizational Sustainability (OS). Instead, Organizational Sustainability is predominantly and directly influenced by Employee Commitment, more so than by the other variables in the model. Consequently, it is recommended that future research investigate the underlying reasons for the non-significant relationship between EP and OS. This could involve exploring additional mediating variables or proposing a modified theoretical model to better capture the complex mechanisms leading to sustainability.

DAFTAR PUSTAKA

- Ababneh, O. M. A. (2020). The impact of organizational culture archetypes on quality performance and total quality management: the role of employee engagement and individual values. *International Journal of Quality and Reliability Management*, 38(6), 1387–1408. https://doi.org/10.1108/IJQRM-05-2020-0178
- Abbas, J., Zhang, Q., Hussain, I., Akram, S., Afaq, A., & Shad, M. A. (2020). Sustainable innovation in small medium enterprises: The impact of knowledge management on organizational innovation through a mediation analysis by using SEM approach. *Sustainability (Switzerland)*, 12(6). https://doi.org/10.3390/su12062407
- Ahmad, F., Hossain, M. B., Mustafa, K., Ejaz, F., Khawaja, K. F., & Dunay, A. (2023). Green HRM Practices and Knowledge Sharing Improve Environmental Performance by Raising Employee Commitment to the Environment. *Sustainability (Switzerland)*, 15(6). https://doi.org/10.3390/su15065040
- Ahmed, A. O., & Idris, A. A. (2021). Examining the relationship between soft total quality management (TQM) aspects and employees' job satisfaction in "ISO 9001" Sudanese oil companies. *TQM Journal*, 33(1), 95–124. https://doi.org/10.1108/TQM-05-2019-0147
- Ali AlShehail, O., Khan, M., & Ajmal, M. (2022). Total quality management and sustainability in the public service sector: the mediating effect of service innovation. *Benchmarking*, 29(2), 382–410. https://doi.org/10.1108/BIJ-08-2020-0449
- Bahri, S., Hamzah, D., & Yusuf, R. M. (n.d.). Implementation of Total Quality Management and Its Effect on Organizational Performance of Manufacturing Industries Through Organizational Culture in South Sulawesi, Indonesia. In *IOSR Journal of Business and Management (IOSR-JBM* (Vol. 5, Issue 1). www.iosrjournals.org
- Blichfeldt, H., & Faullant, R. (2021). Performance effects of digital technology adoption and product & service innovation A process-industry perspective. *Technovation*, 105. https://doi.org/10.1016/j.technovation.2021.102275
- Budayan, C., & Okudan, O. (2022). Roadmap for the implementation of total quality management (TQM) in ISO 9001-certified construction companies: Evidence from Turkey. *Ain Shams Engineering Journal*, *13*(6). https://doi.org/10.1016/j.asej.2022.101788

- Chen, L., Tong, T. W., Tang, S., & Han, N. (2022). Governance and Design of Digital Platforms: A Review and Future Research Directions on a Meta-Organization. In *Journal of Management* (Vol. 48, Issue 1, pp. 147–184). SAGE Publications Inc. https://doi.org/10.1177/01492063211045023
- Gulati, R., & Oldroyd, J. B. (2005). The quest for customer focus. *Harvard Business Review*, 83(4), 92-101.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). *Sage*. DOI/Link: https://doi.org/10.1007/978-3-030-80519-7
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hanaysha, J. R., & Alzoubi, H. M. (2022). Investigating the impact of benefits and challenges of IOT adoption on supply chain performance and organizational performance: An empirical study in Malaysia. *Uncertain Supply Chain Management*, 10(2), 537-550.
- Isensee, C., Teuteberg, F., Griese, K.-M., & Topi, C. (2020). The relationship between organizational culture, sustainability, and digitalization in SMEs: A systematic review. *Journal of Cleaner Production*, *122944*. https://doi.org/10.1016/j.jclepro.2020.122944
- Katz, D., & Kahn, R. L. (1978). The social psychology of organizations (Vol. 2, p. 528). *New York: wiley*.
- Khalil, M. K., & Muneenam, U. (2021). Total quality management practices and corporate green performance: does organizational culture matter? *Sustainability (Switzerland)*, 13(19). https://doi.org/10.3390/su131911021
- Lapuente, V., & Van de Walle, S. (2020). The effects of new public management on the quality of public services. *Governance*, 33(3), 461-475.
- Lee, K. L., Romzi, P. N., Hanaysha, J. R., Alzoubi, H. M., & Alshurideh, M. (2022). Investigating the impact of benefits and challenges of IOT adoption on supply chain performance and organizational performance: An empirical study in Malaysia. *Uncertain Supply Chain Management*, 10(2), 537–550. https://doi.org/10.5267/j.uscm.2021.11.009
- Loor-Zambrano, H. Y., Santos-Roldán, L., & Palacios-Florencio, B. (2022). Relationship CSR and employee commitment: Mediating effects of internal motivation and trust. *European Research on Management and Business Economics*, 28(2). https://doi.org/10.1016/j.iedeen.2021.100185
- Meyer, J. P., & Maltin, E. R. (2010). Employee commitment and well-being: A critical review, theoretical framework and research agenda. *In Journal of Vocational Behavior* (Vol. 77, Issue 2, pp. 323–337). https://doi.org/10.1016/j.jvb.2010.04.007

- Modarres, M., & Pezeshk, J. (2017). Impact of total quality management on organisational performance: exploring the mediating effects of organisational learning and innovation. *International Journal of Business Environment*, 9(4), 356-389.
- Narayanamurthy, G., & Tortorella, G. (2021). Impact of COVID-19 outbreak on employee performance Moderating role of industry 4.0 base technologies. *International Journal of Production Economics*, 234, 108075. https://doi.org/10.1016/j.ijpe.2021.108075
- OECD. (2021). The future of work in government: Building resilient public sector workforces. *OECD Publishing*. https://doi.org/10.1787/1db08c8c-en
- Ordieres-Meré, J., Prieto Remón, T., & Rubio, J. (2020). Digitalization: An opportunity for contributing to sustainability from knowledge creation. *Sustainability*, 12(4), 1460. https://doi.org/10.3390/su12041460
- Roslin, E. N., Ahmed, S., Ahamat, M. A., Bahrom, M. Z., & Ibrahim, N. (2019). The impact of employee involvement and empowerment in Lean Manufacturing System implementation towards organizational performances. *International Journal on Advanced Science, Engineering and Information Technology*, 9(1), 188-193.
- Sarstedt, M., Ringle, C. M., & Cheah, J. H. (2023). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *Journal of Business Research*, 165, 112–125. https://doi.org/10.1016/j.jbusres.2023.03.067
- Sader, S., Husti, I., & Daroczi, M. (2022). A review of quality 4.0: definitions, features, technologies, applications, and challenges. In Total Quality Management and Business Excellence (Vol. 33, Issues 9–10, pp. 1164–1182). *Routledge*. https://doi.org/10.1080/14783363.2021.1944082
- Selfiani, S. (2024). The effect of human capital on financial performance with corporate sustainable growth as a moderating variable. *Jurnal Akuntansi, Keuangan, Pajak Dan Informasi (JAKPI)*, 4(1), 56–70. https://doi.org/10.32509/jakpi.v4i1.4086
- Selfiani, S., & Usmar, U. (2023). The Effect of Intellectual Capital on the Quality of Sustainability Report Disclosures with Financial Performance as a Moderating Variable. *Jurnal Akuntansi*, 15(1), 177–188. https://doi.org/10.28932/jam.v15i1.6364
- Siva, V., Gremyr, I., Bergquist, B., Garvare, R., Zobel, T., & Isaksson, R. (2016). The support of Quality Management to sustainable development: A literature review. *Journal of cleaner production*, 138, 148-157.
- Tamrin, L., Usmar, U., & Selfiani, S. (2023). The Influence Of Green Image, Green Communication On Sustainability Report With Financial Performance Variables As Moderation. *International Journal of Accounting, Management, Economics and Social Sciences (IJAMESC)*, 1(5), 546–557
- Tasleem, M., Khan, N., & Nisar, A. (2019). Impact of technology management on corporate sustainability performance: The mediating role of TQM. *International Journal of Quality & Reliability Management*, 36(9), 1574-1599.

- Triguero-Sánchez, R., Peña-Vinces, J., & Ferreira, J. J. M. (2022). The effect of collectivism-based organisational culture on employee commitment in public organisations. *Socio-Economic Planning Sciences*, 83. https://doi.org/10.1016/j.seps.2022.101335
- Wiengarten, F., & Pagell, M. (2012). The importance of quality management for the success of environmental management initiatives. *International Journal of Production Economics*, 140(1), 407-415.
- World Bank. (2020). Enhancing government effectiveness: Lessons from global experiences. *World Bank Group*. https://openknowledge.worldbank.org/handle/10986/34394