

Adaptability, Digital Transformation, and Financial Performance: The Moderating Role of Transformational Leadership in Private Higher Education

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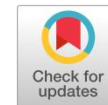
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Abstract

The study aims to examine the impact of adaptability and digital transformation on the financial performance of Private Higher Education Institutions (HEIs) in Indonesia, with transformational leadership as a moderator variable. Motivated by the escalating competition within the higher education sector, this research posits that private institutions must enhance their adaptive capacities and strategically leverage digital transformation to achieve sustainable financial performance. The study was conducted through a survey of 281 senior leaders with financial decision-making authority from Private HEIs across Indonesia. Data analysis uses the Partial Least Squares method of Structural Equation Modeling. The results demonstrate that both adaptability and digital transformation positively affect financial performance. While transformational leadership functions as a pure moderator, it significantly strengthens the positive relationship between digital transformation and financial performance, but weakens the effect of adaptability on financial performance. This study offers a theoretical contribution to the literature on strategic management in HEIs, particularly in Private HEIs, and provides practical implications for leaders of private institutions seeking to foster transformational leadership and optimize digital technology integration to enhance financial performance.



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Introduction

Higher Education Institutions (HEIs) hold a fundamental and strategic role in driving national development and societal welfare, a mandate enshrined in the constitutional framework. Globally, higher education institutions are currently navigating an increasingly complex and multidimensional landscape of pressures. These stem from heightened inter-institutional competition, more stringent demands for public accountability, and international ranking systems that simultaneously assess academic performance, institutional reputation, and, crucially, financial health (Tjahjadi et al., 2019; Utami & Pratolo, 2025). This dynamic environment compels HEIs to look beyond prioritizing academic excellence alone; they must also establish a foundation for sustainable, resilient financial performance. This financial stability serves as a vital prerequisite for long-term operational viability and the fulfillment of their institutional missions (Chebeñ et al., 2020).

Within the Indonesian context, the higher education ecosystem is characterized by a dualism between State HEIs and Private HEIs, which possess markedly different institutional characteristics and funding structures. State HEIs typically receive significant financial support from the government,

whereas Private HEIs are established and managed by private entities, relying predominantly and critically on student tuition fees as their primary revenue source (Wulandari & de Jager, 2018). Quantitatively, Private HEIs dominate the national system, enrolling 47.95% of all students, a proportion far exceeding that of State HEIs, which account for 36.88%, with the remaining percentage accounted for by Religious HEIs and institutions administered by other ministries or government agencies (Kemendikbudristek, 2024). However, this numerical dominance is not matched by commensurate financial performance. Extreme dependence on student-derived income renders Private HEIs highly vulnerable to fluctuations in enrolment, shifts in macroeconomic conditions, and the intensifying competition within the education sector (Handayani et al., 2022). This vulnerability is empirically reflected in data showing a national trend of declining Private HEIs numbers and persistently high student dropout rates, signaling a fragile financial structure and an incomplete, unstable post-pandemic recovery (Badan Pusat Statistik, 2025; Kemendikbudristek, 2024).

In response to these sustainability challenges, the concepts of organizational adaptability and digital transformation have been identified as key strategic factors for strengthening the financial foundations of HEIs. Adaptability represents an institution's capacity and agility to sense and respond effectively to changes in the external environment, such as policy shifts, technological advancements, and evolving educational market demands (Holliman et al., 2019; Liu et al., 2022). In parallel, digital transformation, realized through the adoption of learning management systems, big data analytics, cloud computing, and digital financial systems, has been empirically proven to drive significant operational efficiency, enhance governance transparency, and strengthen accountability in financial resource management (Alojail et al., 2023; Fernández et al., 2023; Filho et al., 2024). At their core, these capabilities embody the dynamic capacities necessary for organizational adaptation and transformation.

The successful internalization and implementation of adaptability and digital transformation are heavily contingent on institutional leadership. Theoretically, transformational leadership is posited to play a central catalytic role in reinforcing organizational change processes. This leadership style functions by creating and communicating an inspiring strategic vision, fostering a culture of innovation across all organizational levels, and empowering human resources to actively participate in building an adaptive work environment (Awan et al., 2023; Balwant et al., 2019). While some studies support the strengthening moderating role of transformational leadership in the relationship between digital initiatives and organizational performance (Ali et al., 2023; Alojail et al., 2023). The literature also notes inconsistent findings. In certain contexts, transformational leadership may paradoxically weaken innovative performance by reducing team autonomy (Ting et al., 2021). This inconsistency indicates a significant research gap that warrants deeper examination, particularly in the context of Indonesian Private HEIs.

Prior research has predominantly focused on identifying the direct determinants of financial performance in HEIs. For instance, Chebeň et al. (2020) demonstrated that technology utilization and operational efficiency positively influence financial performance; however, their study did not incorporate leadership as a moderating variable. Similarly, Handayani et al. (2022) emphasized the role of leadership in enhancing financial sustainability in Private HEIs, yet they did not integrate adaptability and digital transformation within a unified analytical framework. Collectively, these studies indicate a fragmented body of knowledge in which dynamic organizational capabilities and leadership dynamics have not been systematically examined within a single, comprehensive model.

This study is explicitly grounded in the Dynamic Capabilities Theory, which emphasizes an organization's ability to continuously sense environmental changes, seize opportunities by mobilizing resources, and reconfigure its internal competencies and assets to achieve a sustainable competitive advantage (Cavusgil & Deligonul, 2024; Teece et al., 1997). Within this framework, adaptability and digital transformation are positioned as manifestations of these dynamic capabilities. The study aims to test the direct influence of these two dynamic capabilities on the financial performance of Private HEIs, while simultaneously exploring transformational leadership as a moderating variable in these relationships. Consequently, the expected contributions are twofold. Theoretically, this research can enrich the

application and development of Dynamic Capabilities Theory within the HEIs sector, particularly its private segment. Practically, the findings are anticipated to serve as an empirical reference for Private HEIs administrators and stakeholders in formulating more adaptive, technology-driven, and effective strategies to enhance financial performance.

Literature Review

Theoretical Background

The sustainability of organizational performance and competitive advantage in a dynamic environment is increasingly determined by an organization's ability to respond adaptively to external changes, seize strategic opportunities, and continuously reconfigure internal resources and capabilities. Rapid technological change, intense market competition, and environmental uncertainty demand that organizations not only rely on resource ownership but also develop managerial capabilities that facilitate continuous learning and strategic adaptation. In this context, Dynamic Capability Theory (Teece et al., 1997) provides a theoretical foundation, positing that sustainable organizational performance results from an organization's ability to execute the processes of sensing, seizing, and reconfiguring in response to environmental opportunities and threats. The sensing process relates to an organization's capacity to identify, interpret, and anticipate external shifts, which, in this study, is reflected in organizational adaptability. Adaptability enables continuous organizational learning and the responsive adjustment of strategies, structures, and behaviors, thereby enhancing environmental sensitivity and strengthening performance resilience amidst uncertainty (Heaton et al., 2022; Pulakos et al., 2000; Wang et al., 2017).

Once environmental opportunities and threats are identified, organizations must be able to effectively exploit them through the seizing process and subsequently reorganize resources and capabilities via reconfiguring. Digital transformation is positioned as the strategic manifestation of both processes, wherein organizations not only adopt digital technologies but also integrate them into strategy renewal, operational efficiency enhancement, and the creation of new economic value (Alzarooni et al., 2024; Teece et al., 1997). Digital transformation reflects fundamental changes in organizational structure, business processes, work culture, and decision-making mechanisms, representing a systemic reconfiguring of resources (De Jesus Wong-Galvez et al., 2022; Hilda Paola et al., 2024; Khurniawan et al., 2022). The effectiveness of the entire sensing, seizing, and reconfiguring cycle is strongly influenced by the quality of strategic leadership. Transformational leadership acts as a guiding mechanism that strengthens the integration of adaptability and digital transformation into the organization's strategic agenda. Through a clear vision, intellectual stimulation, and the empowerment of human resources, transformational leaders enhance the organization's capacity to translate adaptive responses and digital innovations into sustainable performance outcomes (Awan et al., 2023; Balwant et al., 2019; Handayani et al., 2022; Leih & Teece, 2016).

Adaptability and Financial Performance

Adaptability reflects an institution's capacity to proactively adjust strategies, structures, and resource configurations in response to environmental change and uncertainty (Green et al., 2020; Pulakos et al., 2000). Within the Dynamic Capability framework, adaptability represents the sensing processes through which organizations align internal resources with shifting external demands to sustain competitiveness (Cavusgil & Deligonul, 2024; Teece et al., 1997). In the context of Indonesian private HEIs, which rely predominantly on tuition-based revenue, adaptive capacity is closely linked to financial stability (Wulandari & de Jager, 2018). Institutions that can redesign academic programs in response to labor market trends, implement flexible tuition and payment schemes, optimize cost structures, and reallocate resources efficiently are better positioned to stabilize cash flow and strengthen revenue resilience amid enrollment volatility and regulatory pressure (Handayani et al., 2020). For instance, empirical research by Tien et al. (2020) demonstrates that higher education institutions that cultivate strategic adaptability can

optimize resource allocation and develop innovative revenue models, thereby enhancing their financial performance.

H1. Adaptability positively influences financial performance.

Digital Transformation and Financial Performance

Digital transformation is the strategic integration of digital technologies into all organizational activities to enhance operational efficiency, foster innovation, and create value for stakeholders (Hilda Paola et al., 2024). In the context of higher education, this is manifested through the adoption of online learning platforms, data-driven academic management systems, and the automation of administrative processes and student services, all aimed at improving institutional management effectiveness (Khurniawan et al., 2022). Financial performance is a primary indicator of the efficient and sustainable management of financial resources (Bacidore et al., 1997). It has been shown to be significantly influenced by the adoption of digital technology. This influence operates through pathways such as cost reduction, enhanced transparency and accuracy in financial management, and the optimization of institutional revenue streams (Tien, Anh, Luong, et al., 2020). A body of research indicates that higher education institutions that implement digital transformation in a planned and consistent manner experience improvements in productivity, efficiency, sustainability, and overall financial performance (Aditya et al., 2022; Hilda Paola et al., 2024). From the perspective of Dynamic Capabilities Theory, digital transformation is viewed as an organization's strategic ability to integrate, build, and reconfigure internal resources in response to environmental dynamics. This adaptive capacity enables the optimal leveraging of digital technologies to drive operational efficiency and sustained innovation, thereby generating a positive impact on the financial performance of HEIs (Cavusgil & Deligonul, 2024).

H2. Transformation Digital positively influences financial performance.

Adaptability and Financial Performance: The Moderating Effect of Transformational Leadership

Adaptability reflects an institution's capacity to make ongoing strategic and operational adjustments in response to dynamic shifts in the external environment (Wang et al., 2017). In higher education, this capability serves as a crucial foundation for navigating uncertainty, fostering academic innovation, and maintaining financial stability through optimal resource utilization (Green et al., 2020). Financial performance, in turn, not only indicates the effectiveness of fund management but also signifies an institution's ability to sustain its legitimacy, stakeholder trust, and long-term operational viability (Rahi et al., 2024). The effectiveness of adaptability in enhancing financial performance is believed to be contingent on leadership, particularly transformational leadership. Through an inspirational vision, motivation, and the reinforcement of a collaborative culture, transformational leadership can align organizational behavior with strategic change initiatives (Farahnak, 2013). From a dynamic capabilities perspective, transformational leaders serve as key agents in driving the opportunity-sensing process, thereby enabling the effective implementation of adaptive capabilities to achieve superior financial performance (Bornay-Barrachina et al., 2025; Leih & Teece, 2016). However, empirical evidence suggests that the influence of transformational leadership is not invariably linear. In specific contexts, an excessively dominant leadership style may potentially weaken the relationship between organizational processes and performance by reducing team autonomy and flexibility in decision-making (Ting et al., 2021). These divergent findings indicate that the role of transformational leadership is context-dependent and may vary, necessitating an empirical examination of its function as a moderating variable in the relationship between adaptability and financial performance.

H3. Transformational leadership strengthens the relationship between adaptability and financial performance.

Digital Transformation and Financial Performance: The Moderating Effect of Transformational Leadership

Digital transformation, defined as the strategic integration of digital technology into an organization's structure, processes, and culture to create new value and enhance operational efficiency (Hilda Paola et al., 2024), is fundamentally understood through the lens of dynamic capabilities as the manifestation of an organization's ability to seize opportunities and reconfigure internal resources in response to environmental shifts, thereby driving sustained innovation (Cavusgil & Deligonul, 2024). However, the efficacy of such transformation in enhancing financial performance is contingent upon strategic leadership, with transformational leadership serving as a pivotal managerial capability that amplifies organizational dynamism by identifying digital opportunities, empowering human resources, and facilitating effective technological adoption (Heaton et al., 2023; Leih & Teece, 2016). Through inspiration, intrinsic motivation, and the infusion of work with meaning, transformational leadership aligns digital initiatives with strategic organizational objectives, thereby accelerating value creation and strengthening financial performance (Bornay-Barrachina et al., 2025). Consequently, within the dynamic capabilities framework, transformational leadership acts as an integrative catalyst orchestrating resources, redesigning work systems, and enhancing innovative capacity such that digital transformation, when underpinned by such leadership, not only boosts operational efficiency and innovation but also positively impacts long-term profitability and financial sustainability (Naeem et al., 2025).

H4. Transformational leadership strengthens the effect of digital transformation on financial performance.

Based on the established theoretical framework and developed hypotheses, the proposed research model is visually summarized in Figure 1.

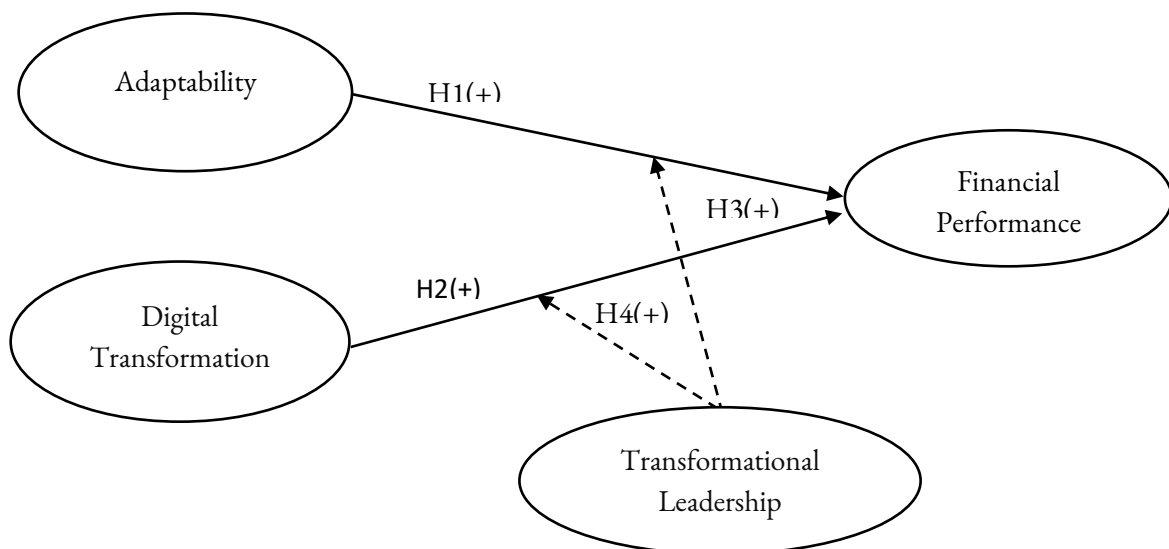


Figure 1. Research Model

Research Method

This study adopts a quantitative research approach with the primary objective of empirically examining the causal relationships between adaptability, digital transformation, and the financial performance of Private HEIs, incorporating transformational leadership as a moderating variable. The quantitative approach was selected due to its capacity to facilitate the objective and measurable testing of hypothesized relationships through structured statistical modelling.

The population of this study consists of all Private HEIs operating in Indonesia. The unit of analysis is the organization. The study focuses on Private HEIs accredited by the National Higher Education

Accreditation Board (*Badan Akreditasi Nasional Perguruan Tinggi*, BAN-PT) with a minimum accreditation rating of “Good” (C), including institutions rated “Very Good” (B) and “Excellent” (A). This criterion was applied based on the assumption that institutions with such accreditation levels possess relatively established governance and managerial systems, making them appropriate for analyzing financial performance. A purposive sampling technique was employed, selecting participants based on specific criteria aligned with the research objectives. The minimum required sample size was determined through a power analysis conducted using G*Power software version 3.1.9.7. Based on this analysis, a minimum sample of 92 Private HEIs in Indonesia was identified. Utilizing G*Power is considered methodologically appropriate as it accounts for the research model's structure and the characteristics of purposive sampling, thereby strengthening the statistical validity of the hypothesis testing (Sofyani, 2023). Data was disseminated between August and October 2025 through printed questionnaires and secure Google forms, which were distributed exclusively to the official email addresses of institutions and verified WhatsApp contacts of designated financial management officials. To ensure respondent validity, eligibility was verified through screening questions covering island, type of Private HEIs, and accreditation level. Table 1 provides an overview of the demographic characteristics of respondents.

Table 1. Profile of Participating in Private HEIs

Category	Description	Frequency	Percentage (%)
Island	Sumatera	132	47
	Jawa	104	37
	Kalimantan	26	9.3
	Maluku	12	4.3
	Sulawesi, NTB, Papua	7	2.4
	Total	281	100
Type of Private HEIs	University	158	56.2
	Academy	15	5.3
	College	71	7.5
	Institute	21	5.7
	Polytechnic	16	25.3
	Total	281	100
Accreditation Level	Excellent/A	26	9.3
	Very Good/B	157	55.9
	Good/C	98	34.9
	Total	281	100

Source: Secondary data processed (2026)

The variables and their measurements were adopted from prior empirical studies and subsequently adapted to the higher education context without altering their conceptual meanings. Financial performance indicators were adapted from Yudianto et al. (2021), adaptability from Dubey and Gunasekaran (2016), digital transformation from De Jesus Wong-Galvez and Libaque-Saenz (2023), and transformational leadership from Bentaleb (2024). To ensure conceptual clarity and measurement consistency, the operational definitions and indicators of each construct are systematically presented in Table 2.

Primary data were collected using a structured questionnaire distributed through both offline and online channels. Printed questionnaires and electronic forms (Google Forms) were disseminated via email and WhatsApp to the targeted respondents. The questionnaire was developed based on an extensive review of relevant literature. Prior to full-scale data collection, a pilot test was conducted involving four accounting experts to evaluate the clarity of wording, the relevance of indicators, and to minimize potential measurement bias. The questionnaire employed a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), incorporating both positively and negatively worded statements

to enhance response accuracy and consistency.

Table 2. Operational Definition of Variables

Variable	Definition	Indicators
Financial Performance	Financial performance is the primary indicator of an institution's effectiveness in managing its financial resources to achieve its strategic and operational objectives.	<ol style="list-style-type: none"> 1. Our university has experienced a surplus in the last three years. 2. Our university has been effectively using performance-based budgeting. 3. At our university, the comparison of actual student revenue against the target in the last three years is: ... 4. At our university, the ratio of actual non-student revenue to the target over the past three years is: 5. The ratio of actual employee expenditure at our university to the target over the past three years is: (Yudianto et al., 2021)
Adaptability	Adaptability is the collective ability of an institution to proactively adjust to external and internal environmental changes and to reflect shared values, beliefs, and norms that encourage individuals to face dynamic challenges.	<ol style="list-style-type: none"> 1. Our university keeps up with financial technology developments that are relevant to the financial sustainability of the university. 2. Our university uses experience to design better financial strategies. 3. Our university establishes strategic partnerships with third parties to manage financial risk. 4. Our university provides a digital payment system that makes it easier for students. 5. Our leadership makes quick decisions to safeguard finances during crises. (Dubey & Gunasekaran, 2016)
Digital Transformation	Digital transformation is the process of implementing digital technology comprehensively in various aspects of an organization's operations to improve productivity and efficiency, support business strategies, and enhance the organization's ability to respond quickly and innovatively to changes in the environment.	<ol style="list-style-type: none"> 1. Our university utilizes digital technology to expand access to education. 2. Our university uses web-based applications in financial management. 3. Our university evaluates the impact of digitization on financial aspects. 4. Our university evaluates the impact of digitization on operational aspects. 5. Our university utilizes digitalization to provide more efficient and affordable services. (De Jesus Wong-Galvez & Libaque-Saenz, 2023)
Transformational Leadership	Transformational leadership is a leadership approach that emphasizes a leader's ability to inspire, motivate, and empower subordinates to achieve greater organizational goals.	<ol style="list-style-type: none"> 1. Our university leaders motivate us to continue improving effectiveness in line with our vision and mission. 2. Our university leaders motivate us to continue improving efficiency in line with our vision and mission. 3. Our university leadership demonstrates a commitment to using funds strategically and ethically. 4. Our university leadership does not take our needs and aspirations into account in financial management. 5. Our university leadership supports the development of expertise in university financial management. 6. Leadership encourages the use of databases and technology to find better financial solutions. (Bentaleb, 2024)

Source: Secondary data processed (2026)

Before hypothesis testing, descriptive statistics and analyses of respondent demographics were performed. Hypothesis testing was conducted using variance-based Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software version 4. PLS-SEM was selected due to its suitability for analyzing complex models involving latent variables, its robustness with relatively small sample sizes, and its minimal distributional assumptions. The analysis followed a two-stage procedure. First, the outer (measurement) model was evaluated to assess construct validity and reliability. Second, the inner (structural) model was assessed to test the hypothesized relationships, including the moderating effect of transformational leadership. PLS-SEM is considered more appropriate than covariance-based SEM (CB-SEM) in this study because the primary objective is prediction and theory development rather than model fit, and because the data may not satisfy multivariate normality assumptions (Hair et al., 2014).

Results and Discussion

Bias Test

Survey-based research is susceptible to method bias; therefore, to mitigate this issue, Harman’s single-factor test was conducted prior to data analysis. Following the criterion proposed by Podsakoff et al. (2003), common method variance becomes a concern when a single latent factor explains more than 50% of the total variance. The results of the CMV test, conducted using SPSS, indicate that the first factor accounts for only 45.24% of the explained variance, which is below the recommended threshold. Thus, it can be concluded that common method variance does not pose a serious threat to the validity of this research model.

Descriptive Statistics

Descriptive statistical analysis was performed using SPSS software to provide an overview of the mean, maximum, minimum, and standard deviation values for each variable. The results, presented in Table 3, show that the actual mean scores for all variables exceed their respective theoretical midpoints. This indicates a generally high level of respondent perception across the measured construct. It is noteworthy, however, that while the perceived scores for all variables are high, the actual mean score for Financial Performance is the lowest among the variables.

Table 3. Descriptive Statistics of Research Variables

Variable	Theoretical Range			Actual Range			Std. Deviation
	Min	Max	Mean	Min	Max	Mean	
Financial Performance	5	25	15	5	25	16.62	3.807
Adaptability	5	25	15	8	25	19.57	3.468
Digital Transformation	5	25	15	6	25	19.08	3.979
Transformational Leadership	6	30	18	7	30	23.87	3.696

Source: Secondary data processed (2026)

Assessing the measurement model

Convergent validity was assessed by examining the outer loadings of indicators and the Average Variance Extracted (AVE) for each construct. As per the criteria established by Hair et al. (2014) convergent validity is supported when outer loadings >0.70 and the AVE for each construct is >0.50. The results, presented in Table 4, indicate that all retained indicators met the loading threshold, and all constructs demonstrated adequate AVE values. Consequently, the measurement model exhibits convergent validity. Indicators AD4, TD1, TL4, FP3, FP4, and FP5 were removed prior to analysis due to loadings <0.70.

Table 4. Outer Loading dan AVE

Variable	Outer Loading	AVE
Financial Performance 1	0.826	0.766
Financial Performance 2	0.922	
Adaptability 1	0.806	0.636
Adaptability 2	0.818	
Adaptability 3	0.759	
Adaptability 5	0.806	
Digital Transformation 2	0.878	0.785
Digital Transformation 3	0.912	
Digital Transformation 4	0.892	
Digital Transformation 5	0.862	
Transformational Leadership 1	0.853	0.720
Transformational Leadership 2	0.834	
Transformational Leadership 3	0.858	
Transformational Leadership 5	0.863	
Transformational Leadership 6	0.834	

Source: Secondary data processed (2026)

Discriminant validity was evaluated using the Fornell-Larcker criterion and cross-loadings. The Fornell-Larcker criterion requires the square root of the AVE (shown on the diagonal in Table 5) for each construct to be greater than its highest correlation with any other construct (off-diagonal values) (Hair et al., 2014). The results confirm discriminant validity, as this condition was met for all constructs.

Table 5. Discriminant Validity: Fornell-Larcker Criterion

	Adaptability	Financial Performance	Digital Transformation	Transformational Leadership
Adaptability	0.797			
Financial Performance	0.658	0.875		
Digital Transformation	0.785	0.680	0.886	
Transformational Leadership	0.762	0.566	0.682	0.848

Source: Secondary data processed (2026)

Internal consistency reliability was evaluated using Cronbach's alpha and composite reliability. As recommended by Hair et al. (2014) values exceeding 0.60 indicate acceptable reliability. The results, detailed in Table 6, show that all constructs exceeded this threshold for both Cronbach's alpha and composite reliability (rho_c), confirming the measurement model's reliability.

Table 6. Reliability Test Results

	Cronbach's alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Adaptability	0.809	0.809	0.875
Financial Performance	0.704	0.772	0.867
Digital Transformation	0.909	0.910	0.936
Transformational Leadership	0.903	0.911	0.928

Source: Secondary data processed (2026)

Assessing the Structural Model

The explanatory power of the structural model was assessed using the R² adjusted. As presented in Table 7, the model explains 50.7% of the variance in Financial Performance, indicating a moderate explanatory power. The effect size (f²) of each predictor was calculated to assess its substantive impact on the

endogenous variable, following the guidelines of Hair et al. (2019). The f^2 values, shown in Table 7, indicate low effect sizes ($f^2 < 0.15$) for all direct and moderating relationships within the model. The model's goodness-of-fit was evaluated using the Standardized Root Mean Square Residual (SRMR). A value below 0.08 is considered a good fit (Hair et al., 2014). The obtained SRMR value of 0.077 (Table 7) indicates a good fit between the proposed model and the observed data.

Table 7. R-Square Adjusted, F-Square, Model Fit

R-Square Adjusted	0.507
F-Square	
Adaptability → Financial Performance	0.030
Digital Transformation → Financial Performance	0.146
Transformational Leadership → Financial Performance	0.005
Transformational Leadership x Adaptability → Financial Performance	0.020
Transformational Leadership x Digital Transformation → Financial Performance	0.022
SRMR	0.077

Source: Secondary data processed (2026)

The research hypotheses were tested by examining the path coefficients, t-statistics, and p-values. The t-statistic value is satisfied if it > t-table value of 1.66, and the p-value < alpha 0.05. Then, for one-tailed research, it can be accepted if the original sample shows the direction of the hypothesis (positive or negative). The results of the hypothesis testing are summarized in Table 8.

Table 8. Hypothesis Testing Results

		Original Sample (O)	t-Statistics	p-value	Conclusion
Direct Effect					
AD → FP	H1+	0.232	2.534	0.006	Supported
TD → FP	H2+	0.455	6.458	0.000	Supported
TL → FP	NH	0.081	0.865	0.193	Unsupported
Indirect Effect					
TL x AD → FP	H3+	-0.145	1.890	0.029	Unsupported
TL x TD → FP	H4+	0.155	2.110	0.017	Supported (<i>Pure Moderation</i>)

Note: FP (Financial Performance); AD (Adaptability); TD (Digital Transformation); TL (Transformational Leadership); NH (Not Hypothesis)

Source: Secondary data processed (2026)

The Effect of Adaptability on Financial Performance

The test of H1 reveals that adaptability has a significant positive effect on the financial performance of Private HEIs. This finding aligns with the research of Green et al. (2020), Rahi et al. (2024), and Tien, Anh, Luong, et al. (2020), which demonstrates that organizations with a high degree of adaptability can better optimize resources and navigate environmental changes, thereby positively impacting financial outcomes. Descriptive statistical analysis indicates that both adaptability and financial performance were perceived positively by the financial leaders of Private HEIs. This suggests that Private HEIs that adapt effectively to external environmental shifts, such as government policy changes and evolving student needs, possess a greater potential to maintain stability and enhance institutional financial performance. This finding supports the Dynamic Capabilities Theory, where adaptability represents the sensing capability of detecting external opportunities and threats (Tien, Anh, Luong, et al., 2020). Within the Indonesian Private HEI context, this sensing capability manifests through sensitivity to educational digitalization trends, regulatory changes, and stakeholder demands, enabling institutions to appropriately adjust their financial and operational strategies (Green et al., 2020; Rahi et al., 2024).

The Effect of Digital Transformation on Financial Performance

The test of H2 indicates that digital transformation has a significant positive influence on the financial performance of Private HEIs. This result corroborates the findings of Hilda Paola et al. (2024), Khurniawan et al. (2022), and Aditya et al. (2022), who affirm that adopting digital technologies can enhance productivity, financial management efficiency, and institutional sustainability. Both digital transformation and financial performance were perceived as high, indicating that Indonesian Private HEIs have begun integrating digital technology into academic management systems, financial administration, and operational processes to improve efficiency and institutional competitiveness. This finding reinforces Dynamic Capabilities Theory, where digital transformation embodies the seizing and reconfiguring capabilities of an organization's ability to leverage digital opportunities and restructure its systems, structures, and resources to remain competitive in the digital era (Khurniawan et al., 2022). For Indonesian Private HEIs, digital transformation is achieved by implementing data-driven academic and financial information systems, adopting online learning platforms, and automating administrative services. These initiatives drive changes in work culture, enable technology-based decision making, and increase transparency and accountability in resource management (Hilda Paola et al., 2024). Private HEIs capable of implementing comprehensive digital transformation have proven to boost productivity, reduce operational costs, and expand revenue opportunities, ultimately having a direct impact on the improvement and sustainability of institutional financial performance (Aditya et al., 2022).

Transformational Leadership as a Moderator between Adaptability and Financial Performance

The test of H3 reveals that transformational leadership negatively moderates the relationship between adaptability and the financial performance of Indonesian Private HEIs. This means that increasing the intensity of transformational leadership weakens the contribution of adaptability to financial performance. This finding contrasts with prior research highlighting the reinforcing role of transformational leadership on organizational performance (Balwant et al., 2019; Bellibaş et al., 2021; Memon et al., 2019), although those studies did not indicate a direct negative impact of such leadership. Current results suggest that the effectiveness of transformational leadership depends on context. Given that the sample consisted mostly of Private HEIs with intermediate accreditation (B and C) and operating under significant financial pressure due to their high dependence on tuition revenue, transformational leadership may be applied in a more centralized, risk-averse manner to maintain institutional stability. In this context, a strong vision may inadvertently limit operational autonomy, thereby reducing the flexibility of financial and administrative units to respond quickly and adaptively. This situation has implications for the sensing processes within the dynamic capability framework, weakening the contribution of adaptability to financial performance as the intensity of transformational leadership increases. These results are in line with Ting et al. (2021) who show that under certain conditions, transformational leadership can reduce the effectiveness of internal capabilities when its practice is not balanced with structural empowerment.

Transformational Leadership as a Moderator between Digital Transformation and Financial Performance

The test of H4 indicates that transformational leadership strengthens the relationship between digital transformation and the financial performance of Indonesian Private HEIs. This suggests that higher levels of transformational leadership among Private HEI leaders amplify the positive impact of digital transformation on financial performance. This finding aligns with Alojail et al. (2023), Hidayat-ur-rehman and Alsolamy (2023), and Omar et al. (2025), who affirm the role of transformational leaders as primary catalysts for successful digital transformation through shaping a strategic vision, empowering human resources, and fostering an innovation culture. Furthermore, the results demonstrate that transformational leadership functions as a pure moderator (Sharma et al., 1981), as its influence emerges

solely through interaction with digital transformation, without exerting a direct effect on financial performance. This supports Dynamic Capabilities Theory, wherein digital transformation involves the seizing and reconfiguring of capabilities to leverage technological opportunities and to restructure resources. Transformational leadership, in turn, reinforces these capabilities by building collective commitment and organizational readiness for change (Omar et al., 2025). In the Indonesian Private HEIs context, visionary transformational leadership plays a crucial role in integrating technology into learning systems, administration, and financial management. This accelerates the digital transformation process, enhances efficiency and transparency, and ultimately strengthens institutional competitiveness and the sustainability of financial performance (Alojail et al., 2023; Hidayat-ur-rehman & Alsolamy, 2023).

Conclusion

The study aims to examine the influence of adaptability and digital transformation on the financial performance of Private HEIs in Indonesia, with transformational leadership as a moderating variable. The empirical analysis of 281 Private HEIs leaders confirmed that both independent variables have a significant positive effect on financial performance, aligning with the dynamic capability framework underpinning the research. This finding demonstrates that Private HEIs' ability to sense, seize, and reconfigure resources, as manifested in adaptive responses to change and the adoption of digital technology, can effectively enhance efficiency, innovation, and financial stability. However, the role of transformational leadership yielded more complex dynamics: this variable strengthened the influence of digital transformation on financial performance, but weakened the effect of adaptability. This indicates that the implementation of transformational leadership must be applied proportionally, balancing strategic guidance with operational autonomy to ensure adaptive flexibility is not hindered.

This study provides theoretical contributions by extending the validity and application of dynamic capability theory within the context of higher education in a developing country, particularly in the financially vulnerable private sector. In practice, these findings serve as a reference for Private HEIs leaders in designing financial performance enhancement strategies that integrate strengthening adaptive capacity, accelerating digital transformation, and the contextual application of leadership styles. Several limitations of this study, such as the sample scope not covering all regions of Indonesia and the cross-sectional quantitative approach, open avenues for further development. Future research should expand geographical and sectoral coverage to evaluate the external validity of the findings and to assess whether the observed moderating dynamics of transformational leadership persist across diverse funding structures and governance arrangements. The incorporation of qualitative or mixed-method approaches would enable a more granular examination of the organizational processes underlying sensing, seizing, and reconfiguring activities, particularly in relation to leadership enactment. Additionally, integrating exogenous factors such as regulatory shifts and digital infrastructure readiness would facilitate a more precise specification of the boundary conditions under which dynamic capabilities influence financial performance.

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