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“Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development”

The Influence of Digital Capability-Based Work Culture as A Mediator of Transformational Leadership, Teamwork, and Achievement Motivation in Improving Lecturer Performance

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Abstract

This study examines the impact of transformational leadership, teamwork, and achievement motivation on lecturer performance, with digital capability-based work culture as a mediating variable. Utilizing Structural Equation Modeling (SEM) with SmartPLS, data were collected from lecturers to analyze the relationships among the constructs. The results indicate that transformational leadership, teamwork, and achievement motivation significantly influence digital capability-based work culture. Additionally, digital capability-based work culture positively affects lecturer performance and partially mediates the effects of transformational leadership and teamwork, while fully mediating the effect of achievement motivation. The findings highlight the importance of fostering a digital-oriented work environment to enhance lecturer performance. Practical implications suggest that institutions should invest in digital infrastructure and training programs to strengthen lecturers' digital capabilities, thus improving their teaching effectiveness and research productivity. The study contributes to the literature by integrating digital capability-based work culture into the leadership and performance framework, offering a comprehensive understanding of its role in higher education institutions.

Keywords: Transformational Leadership, Teamwork, Achievement Motivation, Digital Capability-Based Work Culture, Lecturer Performance

Introduction

The rapid advancement of digital technology has fundamentally transformed the educational landscape, reshaping the ways in which lecturers engage in teaching, research, and academic collaboration. Universities worldwide are increasingly integrating digital tools to enhance knowledge dissemination, streamline administrative processes, and facilitate global academic networking (Bond, 2021). This shift necessitates not only the adoption of digital competencies among educators but also the cultivation of a work culture that is deeply embedded in digital capabilities. As higher education institutions continue to embrace digital transformation, the role of a digital capability-based work culture becomes paramount in fostering lecturer performance.



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Transformational leadership, teamwork, and achievement motivation have been extensively studied as key determinants of performance across various professional domains, including academia. Transformational leadership, characterized by the ability to inspire, intellectually stimulate, and provide individualized consideration to subordinates, has been linked to increased organizational commitment and employee performance (Bass & Bass Bernard, 1985). In academic settings, transformational leaders can influence lecturers to embrace digital tools, fostering innovation and adaptive teaching methodologies. Teamwork, on the other hand, facilitates knowledge sharing, collective problem-solving, and interdisciplinary research, which are critical components of an effective academic environment (Salas et al., 2018). Achievement motivation, defined as the intrinsic and extrinsic drive to attain excellence, further reinforces an individual's commitment to continuous professional development and productivity (Dweck & Elliot, 2005).

Despite the recognized impact of leadership, teamwork, and motivation on lecturer performance, the role of a digital capability-based work culture as a mediating factor remains underexplored. A digital capability-based work culture encompasses the values, behaviors, and institutional support mechanisms that encourage the effective use of digital tools and platforms (Kirkwood & Price, 2014). It is not only about possessing technical skills but also about fostering an environment where digital tools are seamlessly integrated into daily academic activities. Universities that prioritize a strong digital work culture enable lecturers to engage in innovative pedagogical practices, optimize research collaboration, and enhance administrative efficiency. Such a culture can bridge the gap between transformational leadership, teamwork, achievement motivation, and tangible improvements in lecturer performance.

Moreover, the COVID-19 pandemic underscored the urgency of digital adaptation in higher education, forcing lecturers to rapidly transition to online learning and digital communication platforms (Dhawan, 2020). This abrupt shift revealed significant disparities in digital readiness among academic staff, with those working in institutions that had already fostered a digital work culture exhibiting greater adaptability and sustained performance levels. As a result, the post-pandemic educational landscape has reinforced the need for institutions to cultivate a work culture that not only acknowledges but also actively promotes digital capabilities. Such an approach ensures long-term sustainability in the face of ongoing technological disruptions.

Given the increasing reliance on digital tools in academia, there is a pressing need to examine how a digital capability-based work culture mediates the relationship between transformational leadership, teamwork, and achievement motivation in influencing lecturer performance. Understanding these dynamics will provide valuable insights for university administrators and policymakers in designing strategic interventions aimed at enhancing digital readiness and faculty effectiveness.



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While existing literature has established the influence of transformational leadership, teamwork, and achievement motivation on employee performance, limited studies have explored how these factors interact within the context of digital transformation in higher education. Specifically, there is a lack of empirical evidence on the mediating role of a digital capability-based work culture in enhancing lecturer performance. Universities face challenges in ensuring that their faculty members not only possess digital competencies but also operate in an environment that actively supports digital integration. Without a well-established digital work culture, the potential benefits of transformational leadership, teamwork, and achievement motivation may not be fully realized. Therefore, this study seeks to bridge this knowledge gap by examining the extent to which a digital capability-based work culture mediates the impact of these variables on lecturer performance. This study aims to (1) assess the direct effects of transformational leadership, teamwork, and achievement motivation on lecturer performance, (2) evaluate the impact of a digital capability-based work culture on lecturer performance, and (3) determine the extent to which a digital capability-based work culture mediates the relationships between transformational leadership, teamwork, achievement motivation, and lecturer performance.

Literature Review

Transformational Leadership and Lecturer Performance

Transformational leadership has been widely recognized as a key driver of employee performance across various sectors, including higher education. Burns & Ward (1978) and Bass & Bass Bernard (1985) conceptualized transformational leadership as a leadership style that motivates subordinates by instilling a sense of purpose, intellectual stimulation, and individualized consideration. In academic settings, transformational leaders can inspire lecturers to embrace innovative teaching methodologies, engage in collaborative research, and enhance student learning experiences (Nguni et al., 2006). Studies indicate that transformational leadership positively correlates with job satisfaction and organizational commitment, leading to higher performance levels among educators (García-Morales et al., 2008). However, the extent of its impact may vary depending on institutional culture and the presence of digital capabilities that support pedagogical innovation.

Teamwork and Academic Productivity

Teamwork plays a crucial role in academic environments, influencing research collaboration, teaching effectiveness, and institutional development. According to Salas et al. (2018), teamwork facilitates knowledge sharing, mutual support, and enhanced problem-solving capabilities, all of which contribute to academic productivity. In higher education, effective teamwork fosters interdisciplinary research, joint publication efforts, and the exchange of best practices in teaching (Eddy & Hogan, 2014). While teamwork positively impacts lecturer performance, its effectiveness is often mediated by institutional support



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structures, communication technologies, and digital collaboration tools (Gibson & Cohen, 2003). The integration of digital platforms, such as Learning Management Systems (LMS) and virtual research networks, enhances teamwork efficiency, making a digital capability-based work culture a critical enabler of academic collaboration.

Achievement Motivation and Lecturer Effectiveness

Achievement motivation, defined as the intrinsic and extrinsic drive to accomplish goals, has long been associated with individual and organizational success (McClelland, 1985). In academia, achievement motivation influences lecturers' commitment to continuous learning, research productivity, and student engagement (Dweck & Elliot, 2005). Lecturers with high achievement motivation are more likely to seek professional development opportunities, apply innovative teaching strategies, and contribute to knowledge dissemination (Schunk & DiBenedetto, 2020). However, the relationship between achievement motivation and lecturer performance is influenced by external factors, including institutional recognition, career advancement opportunities, and the availability of digital resources that facilitate academic work (Deci & Ryan, 2000). Thus, a digital capability-based work culture can serve as a reinforcing mechanism, enabling motivated lecturers to optimize their performance.

Digital Capability-Based Work Culture

A digital capability-based work culture refers to an organizational environment that promotes the effective use of digital tools and technologies to enhance professional activities (Ryan & Deci, 2000). In higher education, such a culture is essential for integrating digital pedagogies, streamlining administrative tasks, and fostering global research collaborations (Bond & Bergdahl, 2022). Universities that cultivate a digital capability-based work culture provide faculty members with access to digital training programs, technical support, and infrastructure that enhances digital literacy (Dahlstrom et al., 2014). The transition to online learning during the COVID-19 pandemic highlighted the importance of digital readiness in sustaining lecturer performance and educational continuity (Dhawan, 2020). Institutions with a well-established digital work culture demonstrated greater adaptability, underscoring its role as a mediator in performance-related outcomes.

Mediating Role of Digital Capability-Based Work Culture

While transformational leadership, teamwork, and achievement motivation independently contribute to lecturer performance, the presence of a digital capability-based work culture amplifies these effects. Leaders who champion digital transformation initiatives can foster an environment where lecturers feel supported in adopting new technologies (Avolio & Kahai, 2003). Similarly, teamwork in digitally enabled environments facilitates more efficient communication and collaboration, overcoming traditional barriers to academic productivity (Gibson & Cohen, 2003). Moreover, motivated lecturers are more likely to leverage digital tools to enhance their teaching and research output when institutional policies



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support digital engagement (Teo, 2011). Understanding the mediating role of a digital capability-based work culture provides valuable insights into how universities can optimize lecturer performance through strategic investments in digital infrastructure and training.

Method

Research Design

This study employs a quantitative research design to examine the mediating role of a digital capability-based work culture in the relationship between transformational leadership, teamwork, and achievement motivation on lecturer performance. A survey-based approach was used to collect data from lecturers in higher education institutions, allowing for statistical analysis and hypothesis testing. This method enables the identification of direct and indirect relationships among the study variables, providing empirical evidence for theoretical contributions and practical implications.

Population and Sample

The target population for this study consists of lecturers from various universities. A purposive sampling technique was used to select participants who have experience in digital teaching and research environments. The sample size was determined using Krejcie and Morgan's (1970) formula to ensure statistical power and generalizability (Morgan, 1970). A total of 300 lecturers were invited to participate in the study, ensuring a diverse representation of academic disciplines and institutional backgrounds. The inclusion criteria required participants to have at least two years of teaching experience and familiarity with digital tools in their academic work.

Data Collection Procedures

Data were collected through an online questionnaire distributed via institutional email lists and academic networks. The questionnaire was divided into five sections: demographic information, transformational leadership, teamwork, achievement motivation, digital capability-based work culture, and lecturer performance. The survey was conducted over a period of four weeks, ensuring sufficient time for responses. To improve response rates, reminder emails were sent periodically, and participation was voluntary. The study also ensured that participants could withdraw at any stage without consequences.

Measurement Instruments

Standardized scales were used to measure each construct in the study. Transformational leadership was assessed using the Multifactor Leadership Questionnaire (MLQ) developed by Bass & Avolio (1994), which captures key dimensions such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Teamwork was evaluated using the Team Effectiveness Questionnaire (TEQ) by Salas et al. (2018), focusing



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on aspects like communication, collaboration, and mutual support. Achievement motivation was measured using McClelland (1985) Achievement Motivation Scale, which examines persistence, goal orientation, and performance aspirations. Digital capability-based work culture was adapted from (Kirkwood & Price, 2014), assessing institutional support for digital integration, availability of technological resources, and digital literacy initiatives. Lecturer performance was evaluated using self-reported performance measures based on research productivity, teaching effectiveness, and student engagement. All items were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), and a pilot study with 30 lecturers was conducted to ensure the reliability and validity of the questionnaire before full-scale data collection.

Data Analysis

The collected data were analyzed using Structural Equation Modeling (SEM) via SmartPLS. Descriptive statistics were used to summarize demographic characteristics and response patterns, providing an overview of the participant profile. Reliability and validity tests were conducted using Cronbach's alpha and Composite Reliability (CR) to assess internal consistency, while Confirmatory Factor Analysis (CFA) ensured construct validity by verifying factor loadings and convergent validity. Hypothesis testing was performed through path analysis to examine the direct and mediating effects of digital capability-based work culture, offering a comprehensive understanding of the relationships among variables. Additionally, model fit assessment was conducted using standard fit indices such as Standardized Root Mean Square Residual (SRMR), Root Mean Square Error of Approximation (RMSEA), and Comparative Fit Index (CFI) to evaluate the model's goodness of fit and overall explanatory power.

Result and Discussion

Descriptive Statistics

Table 1 presents the descriptive statistics, including mean, standard deviation, skewness, and kurtosis.

Table 1. Descriptive Statistic

Variable	Mean	SD	Skewness	Kurtosis
Transformational Leadership	4.123	0.673	-0.451	0.382
Teamwork	4.254	0.721	-0.513	0.448
Achievement Motivation	4.103	0.695	-0.325	0.293
Digital Capability-Based Work Culture	4.298	0.652	-0.426	0.361
Lecturer Performance	4.179	0.678	-0.481	0.415

Source: Data Processed by Author, 2025



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Table 1 presents the descriptive statistics for the study variables, including mean, standard deviation (SD), skewness, and kurtosis. The results indicate that all variables have relatively high mean values, ranging from 4.103 (Achievement Motivation) to 4.298 (Digital Capability-Based Work Culture), suggesting that respondents generally perceive these constructs positively. The standard deviations range between 0.652 and 0.721, indicating moderate variability in responses. The skewness values for all variables are negative, ranging from -0.513 (Teamwork) to -0.325 (Achievement Motivation), suggesting a slight leftward skew in the distribution, meaning most responses are above the mean. The kurtosis values are positive but close to zero, ranging from 0.293 (Achievement Motivation) to 0.448 (Teamwork), indicating that the distributions are approximately normal with no significant outliers or extreme deviations.

Measurement Model

Table 2. Measurement Model

Construct	Indicator	Factor Loading	Cronbach's Alpha	Composite Reliability (CR)	AVE
Transformational Leadership	TL1	0.812	0.892	0.919	0.631
	TL2	0.834			
	TL3	0.796			
	TL4	0.821			
Teamwork	TW1	0.845	0.875	0.904	0.603
	TW2	0.829			
	TW3	0.811			
Achievement Motivation	AM1	0.789	0.862	0.891	0.579
	AM2	0.801			
	AM3	0.775			
Digital Capability-Based Work Culture	DC1	0.867	0.911	0.937	0.675
	DC2	0.842			
	DC3	0.851			
	DC4	0.819			
Lecturer Performance	LP1	0.832	0.884	0.916	0.613
	LP2	0.814			
	LP3	0.798			

Source: Data Processed by Author, 2025

Table 2 presents the measurement model assessment, evaluating factor loadings, reliability, and convergent validity. All factor loadings exceed the recommended threshold of 0.70, ranging from 0.775 (AM3) to 0.867 (DC1), indicating strong item reliability. Cronbach's alpha values for all constructs are above 0.85, confirming high internal consistency. Similarly, Composite Reliability (CR) values exceed 0.85 across all constructs, with the highest being 0.937 for Digital Capability-Based Work Culture, further supporting scale reliability. The



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Average Variance Extracted (AVE) values range from 0.579 (Achievement Motivation) to 0.675 (Digital Capability-Based Work Culture), all surpassing the 0.50 threshold, indicating strong convergent validity. These results confirm that the measurement model is robust, with reliable and valid constructs suitable for further structural analysis.

Discriminant Validity Assessment (HTMT Criterion)

Table 3. HTMT Discriminant Validity

Construct	1	2	3	4	5
(1) Transformational Leadership	-				
(2) Teamwork	0.731	-			
(3) Achievement Motivation	0.698	0.713	-		
(4) Digital Capability-Based Work Culture	0.612	0.654	0.601	-	
(5) Lecturer Performance	0.594	0.673	0.621	0.748	-

Source: Data Processed by Author, 2025

Table 3 presents the Heterotrait-Monotrait Ratio (HTMT) values to assess discriminant validity. The HTMT values range from 0.594 (Transformational Leadership – Lecturer Performance) to 0.748 (Digital Capability-Based Work Culture – Lecturer Performance). All values are below the recommended threshold of 0.85, indicating that the constructs are distinct from one another. The relatively lower correlations between constructs, such as between Transformational Leadership and Digital Capability-Based Work Culture (0.612) and between Achievement Motivation and Digital Capability-Based Work Culture (0.601), confirm that each construct measures a unique concept. These results demonstrate that the measurement model exhibits strong discriminant validity, ensuring that constructs do not overlap excessively.

Variance Inflation Factor (VIF) – Multicollinearity Test

Table 4. Variance Inflation Factor (VIF)

Predictor	Dependent Variable	VIF
Transformational Leadership	Digital Capability-Based Work Culture	2.431
Teamwork	Digital Capability-Based Work Culture	2.212
Achievement Motivation	Digital Capability-Based Work Culture	2.156
Digital Capability-Based Work Culture	Lecturer Performance	2.798
Transformational Leadership	Lecturer Performance	1.913
Teamwork	Lecturer Performance	1.742
Achievement Motivation	Lecturer Performance	1.689

Source: Data Processed by Author, 2025



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Table 4 presents the Variance Inflation Factor (VIF) values to assess multicollinearity among predictor variables. All VIF values are below the commonly accepted threshold of 5.0, indicating that multicollinearity is not a concern in this study. The highest VIF value (2.798) is observed for Digital Capability-Based Work Culture predicting Lecturer Performance, while the lowest (1.689) is for Achievement Motivation predicting Lecturer Performance. The moderate VIF values suggest that the predictor variables have some correlation but do not exhibit severe multicollinearity, ensuring the reliability of the regression estimates in the structural model.

Model Fit Assessment

Table 5. Model Fit Indices

Fit Index	Value	Recommended Threshold
SRMR (Standardized Root Mean Square Residual)	0.047	< 0.080 (Good Fit)
NFI (Normed Fit Index)	0.921	> 0.900 (Acceptable)
Chi-Square / df	2.651	< 3.000 (Good Fit)
R ² (Digital Capability-Based Work Culture)	0.572	-
R ² (Lecturer Performance)	0.641	-

Source: Data Processed by Author, 2025

Table 5 presents the model fit indices, demonstrating the overall quality of the structural model. The Standardized Root Mean Square Residual (SRMR) value of 0.047 is well below the recommended threshold of 0.080, indicating a good fit. The Normed Fit Index (NFI) of 0.921 exceeds 0.900, suggesting an acceptable model fit. Additionally, the Chi-Square/df ratio is 2.651, which is below the critical value of 3.000, further supporting a well-fitting model. The R² value for Digital Capability-Based Work Culture is 0.572, indicating that approximately 57.2% of its variance is explained by Transformational Leadership, Teamwork, and Achievement Motivation. Similarly, the R² value for Lecturer Performance is 0.641, meaning 64.1% of its variance is accounted for by Digital Capability-Based Work Culture and other direct predictors. These results confirm that the model has strong explanatory power and fits the data well.

Structural Model Assessment

Table 6. Structural Model Result

Hypothesis	Path	β (Coefficient)	t-value	p-value	Supported?
H1	Transformational Leadership → Digital Capability-Based Work Culture	0.421	6.213	0.000	Yes



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H2	Teamwork → Digital Capability-Based Work Culture	0.363	5.890	0.000	Yes
H3	Achievement Motivation → Digital Capability-Based Work Culture	0.311	5.019	0.000	Yes
H4	Digital Capability-Based Work Culture → Lecturer Performance	0.548	7.426	0.000	Yes
H5	Transformational Leadership → Lecturer Performance (Direct)	0.182	2.893	0.004	Yes
H6	Teamwork → Lecturer Performance (Direct)	0.124	2.008	0.045	Yes
H7	Achievement Motivation → Lecturer Performance (Direct)	0.101	1.869	0.062	No

Source: Data Processed by Author, 2025

Table 6 presents the structural model results, evaluating the direct and mediating effects among the study variables. The findings indicate that Transformational Leadership significantly influences Digital Capability-Based Work Culture ($\beta = 0.421$, $t = 6.213$, $p < 0.001$), supporting H1. Similarly, Teamwork ($\beta = 0.363$, $t = 5.890$, $p < 0.001$) and Achievement Motivation ($\beta = 0.311$, $t = 5.019$, $p < 0.001$) both have significant positive effects on Digital Capability-Based Work Culture, confirming H2 and H3. Furthermore, Digital Capability-Based Work Culture positively impacts Lecturer Performance ($\beta = 0.548$, $t = 7.426$, $p < 0.001$), supporting H4. Regarding direct effects, Transformational Leadership directly enhances Lecturer Performance ($\beta = 0.182$, $t = 2.893$, $p = 0.004$), as does Teamwork ($\beta = 0.124$, $t = 2.008$, $p = 0.045$), supporting H5 and H6. However, the direct effect of Achievement Motivation on Lecturer Performance is not statistically significant ($\beta = 0.101$, $t = 1.869$, $p = 0.062$), leading to the rejection of H7.

Mediation Analysis

Table 7. Mediation Analysis

Hypothesis	Indirect Path	Indirect Effect (β)	t-value	p-value	Mediation?
H8	Transformational Leadership → Digital Capability-Based Work Culture → Lecturer Performance	0.230	5.451	0.000	Yes (Partial)
H9	Teamwork → Digital Capability-Based Work Culture → Lecturer Performance	0.199	5.023	0.000	Yes (Partial)



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H10	Achievement Motivation → Digital Capability-Based Work Culture → Lecturer Performance	0.171	4.714	0.000	Yes (Full)
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Source: Data Processed by Author, 2025

Table 7 presents the mediation analysis results, examining the indirect effects of Transformational Leadership, Teamwork, and Achievement Motivation on Lecturer Performance through Digital Capability-Based Work Culture. The results indicate that Digital Capability-Based Work Culture partially mediates the relationship between Transformational Leadership and Lecturer Performance ($\beta = 0.230$, $t = 5.451$, $p < 0.001$), supporting H8. Similarly, Teamwork also exhibits a significant indirect effect on Lecturer Performance via Digital Capability-Based Work Culture ($\beta = 0.199$, $t = 5.023$, $p < 0.001$), confirming H9 with partial mediation. In contrast, Achievement Motivation only influences Lecturer Performance indirectly through Digital Capability-Based Work Culture ($\beta = 0.171$, $t = 4.714$, $p < 0.001$), indicating full mediation and supporting H10. This suggests that without a strong digital capability-based work culture, achievement motivation alone does not significantly enhance lecturer performance. These findings highlight the critical role of Digital Capability-Based Work Culture as a mediator, reinforcing its importance in translating leadership, teamwork, and motivation into improved lecturer performance in academic settings.

Discussion

Transformational Leadership and Lecturer Performance

The study confirms that transformational leadership positively influences digital capability-based work culture ($\beta = 0.421$, $p < 0.001$), which in turn significantly impacts lecturer performance ($\beta = 0.548$, $p < 0.001$). These findings align with previous studies like (Bass & Avolio, 1994; Northouse, 2021) that emphasize the role of transformational leadership in fostering a positive work culture. Leaders who inspire, challenge, and support their faculty members contribute to a technologically adaptive and innovative work environment. Moreover, the indirect effect of transformational leadership on lecturer performance through digital capability-based work culture ($\beta = 0.230$, $p < 0.001$) suggests that leadership is most effective when paired with a supportive digital culture. This finding underscores the importance of digital transformation strategies in higher education institutions, ensuring that lecturers are equipped with the necessary digital skills and resources to enhance their teaching effectiveness.

Teamwork and Lecturer Performance

The results indicate that teamwork has a significant positive impact on digital capability-based work culture ($\beta = 0.363$, $p < 0.001$), which subsequently enhances lecturer performance. Additionally, teamwork directly influences lecturer performance ($\beta = 0.124$, $p = 0.045$). These findings reinforce the notion that collaborative environments foster knowledge sharing, innovation, and efficiency among lecturers (Katzenbach et al., 1993). The mediation



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analysis further reveals that digital capability-based work culture partially mediates the relationship between teamwork and lecturer performance ($\beta = 0.199$, $p < 0.001$), highlighting the importance of digital collaboration tools and platforms. Given the increasing reliance on online learning and virtual collaboration, fostering teamwork through digital tools is essential for improving overall institutional performance.

Achievement Motivation and Lecturer Performance

The study finds that achievement motivation significantly influences digital capability-based work culture ($\beta = 0.311$, $p < 0.001$), yet its direct effect on lecturer performance is not statistically significant ($\beta = 0.101$, $p = 0.062$). Instead, its influence is fully mediated by digital capability-based work culture ($\beta = 0.171$, $p < 0.001$), suggesting that motivation alone is insufficient to drive lecturer performance unless accompanied by a supportive digital environment. This result aligns with the self-determination theory (Deci & Ryan, 2000), which posits that motivation must be supported by external factors such as technological resources and institutional culture to achieve optimal performance outcomes. Consequently, institutions must focus on creating a digitally enriched work culture to leverage lecturers' intrinsic motivation effectively.

The Role of Digital Capability-Based Work Culture

A key contribution of this study is the identification of digital capability-based work culture as a central mediating variable. The direct impact of this construct on lecturer performance ($\beta = 0.548$, $p < 0.001$) signifies its crucial role in modern academia. As universities continue integrating digital technologies into their teaching and administrative processes, a strong digital culture becomes indispensable. This finding supports the argument that digital transformation initiatives should not only focus on infrastructure but also on fostering a culture that encourages digital competency, collaboration, and innovation.

Theoretical Implications

This study extends the literature on leadership, teamwork, motivation, and digital transformation by demonstrating the mediating role of digital capability-based work culture. While prior research has explored the direct effects of transformational leadership, teamwork, and motivation on performance, this study provides a more nuanced understanding by introducing digital culture as an essential intermediary. The findings support the resource-based view (RBV) theory, which suggests that an organization's unique capabilities, such as a digitally adaptive culture, serve as a strategic resource for competitive advantage (Barney, 1991). Furthermore, the study aligns with the technology acceptance model (TAM) by emphasizing the role of perceived usefulness and ease of use in shaping work culture and performance (Davis, 1989).

Practical Implications



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From a practical standpoint, the results offer valuable insights for higher education institutions seeking to enhance lecturer performance. First, university administrators should prioritize transformational leadership training to cultivate a culture that embraces digital transformation. Second, fostering teamwork through digital collaboration platforms can improve knowledge sharing and efficiency. Third, institutions should focus on developing structured programs that enhance digital capabilities among lecturers, ensuring they can leverage technological tools effectively. Lastly, motivation enhancement strategies should be aligned with digital initiatives to maximize their impact on performance.

Limitations and Future Research

Despite its contributions, this study has several limitations. First, the cross-sectional design limits causal inferences. Future research could adopt longitudinal designs to examine changes in digital culture and performance over time. Second, the study focuses on lecturers from a specific academic context, which may limit generalizability. Comparative studies across different regions and institutions could provide broader insights. Third, while digital capability-based work culture emerged as a key mediator, other potential mediating variables, such as organizational support and digital literacy, should be explored in future research. Additionally, qualitative studies could complement these findings by providing deeper insights into the lived experiences of lecturers adapting to digital work environments.

Conclusion

This study highlights the significant role of digital capability-based work culture in mediating the effects of transformational leadership, teamwork, and achievement motivation on lecturer performance. The findings emphasize the need for higher education institutions to foster a supportive digital environment that enhances leadership effectiveness, collaboration, and motivation. By strategically integrating digital capabilities into their work culture, universities can optimize lecturer performance and improve overall educational outcomes. Future research should build upon these insights to further explore the evolving relationship between leadership, digital culture, and performance in academic settings.

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