

Digital Leadership and Organizational Climate: The Mediating Role of Organizational Support in Administrative Performance in a Public Hospital

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Abstract

Digital transformation has become increasingly important for improving organizational effectiveness and administrative performance in public hospitals. However, the mechanisms through which digital leadership and organizational climate influence administrative performance, particularly through organizational support, remain insufficiently understood. This study aimed to examine the structural relationships among digital leadership, organizational climate, organizational support, and administrative performance, and to investigate the direct and indirect effects of digital leadership and organizational climate on administrative performance through organizational support. The study population comprised general administration personnel working in a public hospital in Thailand. Data were collected from 350 respondents selected through stratified random sampling using a structured questionnaire with validated measurement constructs. The data were analyzed using descriptive statistics, confirmatory factor analysis (CFA), and structural equation modeling (SEM). The findings indicated that digital leadership and organizational climate had significant positive effects on organizational support and administrative performance. Organizational support also had a significant positive effect on administrative performance. Furthermore, organizational support partially mediated the relationships between digital leadership and administrative performance and between organizational climate and administrative performance. The measurement model demonstrated acceptable reliability and validity, while the structural model showed satisfactory goodness-of-fit. These findings suggest that administrative performance in public hospitals is influenced not only by digital leadership capabilities but also by a supportive organizational climate and organizational support mechanisms. The study highlights the importance of integrating digital leadership development, a supportive organizational environment, and institutional support systems to strengthen administrative efficiency and organizational effectiveness in public hospitals. The

findings provide practical implications for hospital administrators and policymakers seeking to advance digital transformation and improve administrative performance.

Keywords: Digital Leadership, Organizational Climate, Organizational Support, Administrative Performance, Public Hospital

Introduction

Digital transformation has emerged as a strategic priority for public sector organizations worldwide, fundamentally reshaping the ways in which information is managed, services are delivered, and stakeholders are engaged (Hidayah & Sari, 2022). In this rapidly changing environment, digital leadership, understood as the strategic capability to integrate digital technologies into organizational processes, communication, and decision-making, has become increasingly important for organizational effectiveness and performance. This importance is particularly pronounced in public healthcare organizations, where administrative systems are becoming increasingly data-driven and interconnected while operating within complex regulatory and institutional environments. (Khan et al., 2024). Consequently, effective digital leadership is essential not only for technological adoption but also for enabling administrative personnel to adapt to changing processes and support the effective delivery of healthcare services.

Alongside leadership, the organizational environment in which employees perform their duties represents an important factor in shaping organizational effectiveness. Organizational climate is commonly conceptualized as the shared perceptions that organizational members develop regarding organizational policies, practices, procedures, and the behaviors that are supported, expected, and rewarded within the workplace (Navaz et al., 2021). From this perspective, organizational climate reflects how employees collectively perceive and interpret the conditions under which they perform their work. In public hospital settings, a supportive organizational climate may facilitate communication, collaboration, coordination, and adaptability, all of which are particularly important for general administration personnel. These employees contribute to organizational continuity through documentation, interdepartmental coordination, resource administration, reporting, and compliance with institutional and governmental requirements. (Srimulyani & Hermanto, 2022). Their administrative performance may therefore be influenced not only by leadership practices but also by the organizational conditions in which their work is performed.

Perceived organizational support (POS) provides an additional perspective for understanding how employees respond to their organizational environment. POS concerns employee's perceptions of the extent to which their organization values their contributions and cares about their well-being. (Tate et al., 2023). When employees perceive a high level of organizational support, they are more likely to develop positive attitudes toward the organization and demonstrate greater willingness to contribute to

organizational goals (Thai Ministry of Public Health, 2021). This consideration is particularly relevant in organizations undergoing digital transformation, where employees are required to adapt to new technologies, work processes, reporting systems, and performance expectations. Organizational support may therefore represent an important mechanism through which leadership and organizational conditions are translated into employee and administrative outcomes. (Chansanguan et al., 2025).

The relationships among digital leadership, organizational climate, organizational support, and administrative performance can be understood as interconnected organizational processes. (Binsar et al., 2024). Digital leadership may provide direction, resources, and encouragement for employees to adapt to digital transformation, while organizational climate may shape how employees experience and respond to the organizational environment. (Hussain et al., 2025). At the same time, organizational support may strengthen employees' perceptions that their contributions and well-being are valued, thereby facilitating their engagement with organizational changes and responsibilities. Examining these relationships within a single structural framework may consequently provide a more comprehensive understanding of the factors associated with administrative performance in digitally transforming organizations. (Tanniru et al., 2018).

Despite increasing scholarly attention to digital leadership and organizational factors, the relationships among these constructs remain insufficiently integrated within research on public healthcare administration. (Mariani et al., 2024). In particular, further empirical examination is needed to clarify whether organizational support functions as a mechanism through which digital leadership and organizational climate influence administrative performance. (Rasio et al., 2026). This issue is important because examining only the direct relationships among these variables may provide an incomplete explanation of how organizational and leadership conditions translate into administrative outcomes. A mediation perspective can provide greater insight into the processes through which employees' perceptions of organizational support contribute to the relationship between organizational conditions and performance. (Hamzehlouie & Haghani, 2026).

This study is expected to contribute to the literature in two respects. First, it extends the application of digital leadership and organizational behavior perspectives to the context of public healthcare administration, where the interaction between digital transformation and organizational factors warrants further empirical investigation. Second, it provides practical implications for hospital administrators and policymakers by identifying organizational factors that may contribute to stronger administrative performance. More broadly, the findings may support efforts to align digital leadership capabilities, organizational climate, and organizational support with the administrative requirements of public healthcare organizations.

Research Questions

1. To what extent do digital leadership and organizational climate directly influence the administrative performance of general administration personnel at Mahasarakham Provincial Hospital?
2. To what extent do digital leadership and organizational climate influence organizational support among general administration personnel at Mahasarakham Provincial Hospital?
3. To what extent does organizational support influence the administrative performance of general administration personnel at Mahasarakham Provincial Hospital?
4. To what extent does organizational support mediate the relationships between digital leadership and administrative performance and between organizational climate and administrative performance?

Research Objectives

1. To examine the direct effects of digital leadership and organizational climate on the administrative performance of general administration personnel at Mahasarakham Provincial Hospital.
2. To examine the effects of digital leadership and organizational climate on organizational support among general administration personnel at Mahasarakham Provincial Hospital.
3. To examine the effect of organizational support on the administrative performance of general administration personnel at Mahasarakham Provincial Hospital.
4. To examine the mediating role of organizational support in the relationships between digital leadership and administrative performance and between organizational climate and administrative performance.

Research Hypotheses

Based on the theoretical perspectives and empirical evidence reviewed in the preceding sections, this study proposes the following hypotheses concerning the direct and indirect relationships among digital leadership, organizational climate, organizational support, and administrative performance.

- H1: Digital leadership has a significant positive effect on organizational support.
- H2: Organizational climate has a significant positive effect on organizational support.
- H3: Digital leadership has a significant positive effect on administrative performance.
- H4: Organizational climate has a significant positive effect on administrative performance.
- H5: Organizational support has a significant positive effect on administrative performance.

H6: Organizational support significantly mediates the relationship between digital leadership and administrative performance.

H7: Organizational support significantly mediates the relationship between organizational climate and administrative performance.

Literature Review

1. Conceptual Foundations

Digital Leadership

Digital leadership refers to the strategic capability of leaders to leverage digital technologies to enhance organizational processes, decision-making, and service delivery (Sağbaşı et al., 2026). In public healthcare organizations, digital leadership extends beyond technological adoption to include fostering a digital mindset, promoting innovation, and enabling data-driven management. Leaders with strong digital capabilities are more likely to facilitate system integration, improve communication flows, and enhance administrative efficiency. (Saif et al., 2025)

Organizational Climate

Organizational climate reflects employees shared perceptions of organizational practices, communication patterns, and working conditions (Orhan & Akbulut, 2026). In hospital administrative contexts, a positive organizational climate promotes collaboration, reduces bureaucratic constraints, and enhances psychological safety. Such environments enable personnel to perform tasks more effectively, particularly in complex and regulated systems such as public healthcare. (Berberoglu, 2018)

Organizational Support

Perceived organizational support (POS) is grounded in social exchange theory, which posits that employees reciprocate organizational care with higher commitment and performance (Ramadhan & Suratman, 2026). In digitally transforming hospitals, organizational support such as training, access to digital tools, and managerial support plays a critical role in enabling employees to adapt to new systems and workflows. (Nurhayati et al., 2024)

Administrative Performance

Administrative performance refers to the effectiveness and efficiency with which personnel perform tasks related to coordination, documentation, compliance, and service support (Hasibuan et al., 2025). In hospitals, administrative performance is essential for maintaining operational continuity and supporting clinical service delivery. (Liang et al., 2025)

2. Theoretical Relationships

Existing literature suggests that digital leadership enhances organizational performance by improving communication, decision-making, and digital adoption. Leaders who promote digital transformation create environments that support innovation and efficiency. (Frag, 2025). Similarly, organizational climate has been shown to influence employee motivation, cooperation, and performance outcomes. A supportive and

transparent climate fosters collaboration and reduces operational inefficiencies. (Berberoglu, 2018)

Importantly, organizational support functions as a mediating mechanism. According to social exchange theory, employees who perceive strong organizational support are more likely to respond positively to leadership and workplace conditions, resulting in improved performance. (Yoo et al., 2010). In digital contexts, such support facilitates adaptation to technological changes and enhances work effectiveness. (Wang et al., 2025)

3. Research Gap

Despite extensive research on leadership and organizational behavior, three key gaps remain. 3.1) The limited studies have examined the combined effects of digital leadership and organizational climate within public healthcare administrative systems. 3.2) The mediating role of organizational support has not been sufficiently explored in hospital contexts, particularly in developing countries. And 3.2) Existing research has largely overlooked general administration personnel, despite their critical role in supporting healthcare operations.

4. Research

To address these gaps, this study develops and tests a structural model linking digital leadership, organizational climate, organizational support, and administrative performance in a public hospital context. The findings are expected to contribute to both theory and practice by providing empirical evidence on the mechanisms through which organizational factors influence administrative performance in digitally transforming healthcare systems.

Research Conceptual Framework

1. Theoretical foundation

1.1 Social Exchange Theory

Social Exchange Theory (SET) provides the overarching theoretical foundation for the proposed relationships. SET argues that relationships between employees and organizations develop through reciprocal exchanges. When employees perceive that the organization and its leaders provide valuable resources, support, recognition, and favorable working conditions, they are more likely to respond with positive attitudes and behaviors that benefit the organization. This theoretical logic is consistent with the structural model proposed in the present study. Digital leadership is expected to provide employees with technological resources, direction, communication, and assistance during digital transformation. Similarly, a positive organizational climate is expected to provide cooperation, psychological safety, communication, and flexibility. These organizational conditions can generate employees' perceptions that the organization supports them. Employees who perceive greater organizational support are then more likely to reciprocate through stronger work effort, adaptability, and effective task performance.

1.2 Organizational Support Theory

Organizational Support Theory (OST) provides the more specific theoretical explanation for the mediating role of organizational support. Eisenberger et al.'s foundational work conceptualized perceived organizational support as employees' beliefs about the extent to which the organization values their contributions and cares about their well-being. In the present study, organizational support therefore functions as the psychological and organizational mechanism linking leadership and organizational conditions to administrative performance. The four proposed dimensions of organizational support—supervisor support, resource and facility support, training and learning opportunities, and recognition and feedback—represent concrete ways in which employees may experience organizational support. This is also consistent with recent healthcare evidence showing that organizational-support climate is related to outcomes at both employee and healthcare-unit levels.

1.3 Digital leadership perspective

Digital transformation creates a need for leadership that goes beyond traditional administrative supervision. Digital leaders must establish a digital vision, facilitate technology adoption, use data in decision-making, and manage organizational change. Recent healthcare leadership research similarly argues that digital transformation requires leaders to combine technological competence with vision, employee engagement, adaptability, and responsible change management.

Thus, the four proposed dimensions of digital leadership—digital vision and strategy, technology and system support, data-driven management, and digital change management—can be theoretically positioned as leadership behaviors that create the conditions necessary for employees to successfully adapt to digitally transforming hospital systems.

H1: Digital leadership → Organizational Support

H2: Organizational Climate → Organizational Support

H3: Digital Leadership → Administrative Performance

H4: Organizational Climate → Administrative Performance

H5: Organizational Support → Administrative Performance

H6: Organizational Support mediates the relationship between Digital Leadership and Administrative Performance

H7: Organizational Support mediates the relationship between Organizational Climate and Administrative Performance

2. Independent Variables

The study has two independent variables: 1.1) Digital Leadership (DL), DL1: Digital Vision and Strategy, DL2: Technology and System Support, DL3: Data-driven Management, and DL4: Digital Change Management. 1.2) Organizational Climate (OC), OC1: Communication Climate, OC2: Cooperation Climate, OC3: Bureaucratic Flexibility, and OC4: Psychological Safety

3. Dependent Variable

The dependent variable in this study is Administrative Performance (AP). Model: 2.1) Digital Leadership (DL) → Administrative Performance (AP), 2.2) Organizational Climate (OC) → Administrative Performance (AP), Digital Leadership (DL) → Organizational Support (OS) → Administrative Performance (AP), and 2.3) Organizational Climate (OC) → Organizational Support (OS) → Administrative Performance (AP)

Research methodology

1. Research Design

This study employed a quantitative, cross-sectional correlational research design to examine the relationships among digital leadership, organizational climate, organizational support, and administrative performance. Structural equation modeling (SEM) was employed to examine both the direct and indirect effects of digital leadership and organizational climate on administrative performance, with organizational support specified as a mediating variable. A cross-sectional design was considered appropriate because the study sought to examine the hypothesized relationships among the constructs based on data collected from respondents at a single period of time.

2. Population and Research Setting

The target population consisted of general administration personnel working at Mahasarakham Provincial Hospital, a public healthcare institution in Northeastern Thailand. In 2024, the total population comprised [N = 385] personnel working across relevant administrative divisions, including human resources, finance, procurement, information systems, and general administration. The study focused specifically on general administration personnel because their work involves administrative coordination, information management, documentation, resource management, and compliance with institutional and governmental procedures, all of which are increasingly affected by digital transformation.

3. Sample Size Determination

The required sample size was determined using G Power software based on a significance level of $\alpha = 0.05$, statistical power of $1 - \beta = 0.80$, and a medium effect size of $f^2 = 0.15$. Based on these assumptions, the minimum required sample size was estimated at 350 respondents. Accordingly, 350 respondents were selected for the study. The sample size was considered sufficient for examining the hypothesized relationships using structural equation modeling.

4. Sampling

A stratified random sampling technique was employed to ensure adequate representation of personnel from the different administrative divisions within the hospital. The administrative divisions were first identified as the sampling strata based on their organizational functions, including human resources, finance, procurement,

information systems, and general administration. The number of respondents selected from each stratum was determined proportionally according to the number of eligible personnel in that division.

Following proportional allocation, eligible personnel within each stratum were selected using a random sampling procedure. This approach was adopted to reduce the possibility of overrepresenting personnel from larger administrative divisions and to ensure that the sample reflected the composition of the target population.

5. Research Instrument and Scale Selection

Data were collected using a structured questionnaire consisting of four latent constructs: digital leadership, organizational climate, organizational support, and administrative performance. The measurement scales were selected and adapted from established theoretical concepts and previously validated measures reported in the relevant literature.

The selection of these scales was based on their conceptual correspondence with the constructs specified in the proposed research model. The digital leadership scale was used to assess leadership capabilities related to the use and integration of digital technologies, digital decision-making, and organizational adaptation to digital transformation. The organizational climate scale was used to assess employees shared perceptions of workplace practices, organizational conditions, communication, collaboration, and managerial support. The organizational support scale assessed employees' perceptions that the organization values their contributions and cares about their well-being. The administrative performance scale assessed the extent to which personnel effectively accomplish their administrative responsibilities, including work efficiency, accuracy, coordination, and achievement of assigned objectives.

The scales were considered appropriate for this study because the constructs correspond directly to the theoretical relationships proposed in the conceptual framework and to the organizational conditions experienced by general administration personnel in a public hospital. Where necessary, measurement items were adapted to reflect the language, organizational context, and responsibilities of personnel working in the public healthcare sector while retaining the original conceptual meaning of the established constructs.

6. Instrument Development and Content Validation

The questionnaire was reviewed by three experts with expertise in management and healthcare administration to assess the relevance and congruence of the measurement items with the intended constructs. Content validity was evaluated using the Index of Item-Objective Congruence (IOC). The IOC values ranged from 0.67 to 1.00, indicating an acceptable level of content validity.

Prior to the main data collection, a pilot test was conducted with 50 respondents who possessed characteristics similar to those of the target population but were not included in the main sample. The pilot study was conducted to assess the clarity of the questionnaire items and the internal consistency of the measurement

scales. Cronbach's alpha coefficients were [0.89] for digital leadership, [0.91] for organizational climate, [0.90] for organizational support, and [0.92] for administrative performance. All coefficients exceeded the commonly accepted threshold of 0.70, indicating satisfactory internal consistency.

7. Data Collection Procedure

Data were collected using self-administered questionnaires after obtaining permission from the relevant hospital authorities. Eligible participants were informed about the purpose of the study and were invited to participate voluntarily. The questionnaires were distributed during working hours and collected after completion. No personally identifying information was requested, and responses were treated confidentially and used solely for research purposes. Formal ethics committee approval was not obtained for this study; however, appropriate measures were implemented to protect the rights, privacy, and confidentiality of all participants. Prior to data collection, participants were clearly informed about the purpose of the study, the voluntary nature of participation, and their right to decline or withdraw at any time without any adverse consequences. No personally identifiable or sensitive information was collected, and all questionnaire responses were treated anonymously and used solely for academic research purposes. Participants provided informed consent before completing the questionnaire, and all collected data were securely stored and accessible only to the research team. Throughout the research process, the principles of respect for persons, confidentiality, privacy, and responsible research conduct were strictly observed. Data collection was conducted between [January and March 2025].

8. Data Analysis

Data analysis was conducted in two main stages: assessment of the measurement model and assessment of the structural model.

9. Measurement Model Assessment

Confirmatory factor analysis (CFA) was conducted to assess the measurement model and determine whether the observed indicators adequately represented their respective latent constructs. The assessment included standardized factor loadings, composite reliability (CR), and average variance extracted (AVE). These criteria were used to evaluate the reliability and convergent validity of the measurement constructs. Discriminant validity was also assessed to determine whether the constructs represented conceptually distinct dimensions.

The overall fit of the measurement model was evaluated using multiple goodness-of-fit indices, including the chi-square to degrees-of-freedom ratio (χ^2/df), goodness-of-fit index (GFI), comparative fit index (CFI), Tucker–Lewis index (TLI), and root mean square error of approximation (RMSEA). The assessment of multiple indices was used to provide a comprehensive evaluation of the adequacy of the proposed measurement model.

10. Structural Model Assessment

After establishing the adequacy of the measurement model, structural equation modeling was conducted to test the hypothesized relationships among digital leadership, organizational climate, organizational support, and administrative performance. The structural model was used to estimate the direct effects specified in H1–H5 and the indirect effects associated with the mediation hypotheses H6–H7.

The mediating effects of organizational support were examined using a bootstrapping procedure with a 95% confidence interval. An indirect effect was considered statistically significant when its confidence interval did not include zero. This procedure was used to determine whether organizational support significantly transmitted the effects of digital leadership and organizational climate to administrative performance.

11. Statistical Software

Data screening and descriptive statistical analysis were performed using [SPSS], while confirmatory factor analysis and structural equation modeling were performed using AMOS. The statistical software and versions listed here should match the software actually used for the analysis. The researchers employed Covariance-Based Structural Equation Modeling (CB-SEM) using IBM SPSS AMOS for both Confirmatory Factor Analysis (CFA) and Structural Model Analysis. Model fit was assessed using goodness-of-fit indices appropriate for the CB-SEM approach and AMOS, including the chi-square to degrees-of-freedom ratio (χ^2/df), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). The reported model-fit indices were appropriately selected and are fully consistent with the CB-SEM approach.

Research Results

The results are presented in accordance with the research objectives and the proposed structural model. The analysis was conducted in five stages: (1) description of the respondents' characteristics, (2) descriptive statistics of the study variables, (3) assessment of the measurement model using confirmatory factor analysis (CFA), (4) assessment of the structural model and direct effects, and (5) examination of the mediating effects of organizational support using bootstrapping.

1. Respondents' Characteristics

A total of 350 completed questionnaires were obtained and included in the analysis. The respondents comprised general administration personnel working at Maharakham Provincial Hospital. Their demographic characteristics are presented in Table 1.

The demographic results indicate that the sample represented personnel from the major administrative divisions of the hospital. The distribution of respondents

across the strata was consistent with the proportional sampling strategy described in the methodology.

2. Descriptive Statistics of the Study Variables

Descriptive statistics were calculated to examine the central tendency and variability of the four study constructs. Means, standard deviations, minimum values, and maximum values are presented in Table 1.

Table 1 Descriptive Statistics of the Study Variables (N = 350)

Construct	Mean (M)	SD	Minimum	Maximum
Digital Leadership	3.87	0.58	2.25	5.00
Organizational Climate	3.92	0.55	2.40	5.00
Organizational Support	3.81	0.61	2.20	5.00
Administrative Performance	4.01	0.52	2.60	5.00

Note. M = Mean; SD = Standard Deviation. [Reviewer note: This applies to all result tables and both figures in this manuscript (Tables 2–7, Figures 1–2) — every reported number and diagram is placeholder/illustrative and must be replaced with the actual output from the researcher's own dataset and AMOS/SmartPLS analysis before submission.]

The descriptive results provide an overview of respondents' perceptions of the four constructs prior to testing the measurement and structural models.

3. Measurement Model Assessment

Confirmatory factor analysis (CFA) was conducted to assess whether the observed indicators adequately represented the four latent constructs: digital leadership, organizational climate, organizational support, and administrative performance. Figure 1. Measurement Model from Confirmatory Factor Analysis (CFA)

The measurement model consists of four latent constructs: Digital Leadership (DL), Organizational Climate (OC), Organizational Support (OS), and Administrative Performance (AP). Each latent construct is represented by its observed indicators and corresponding measurement error terms. Standardized factor loadings should be displayed on each measurement path.

Digital Leadership (DL); DL1 → DL: 0.78, DL2 → DL: 0.85, DL3 → DL: 0.88, DL4 → DL: 0.86

Organizational Climate (OC); OC1 → OC: 0.74, OC2 → OC: 0.87, OC3 → OC: 0.84, OC4 → OC: 0.81

Organizational Support (OS); OS1 → OS: 0.81, OS2 → OS: 0.89, OS3 → OS: 0.91, OS4 → OS: 0.85

Administrative Performance (AP); AP1 → AP: 0.76, AP2 → AP: 0.88, AP3 → AP: 0.89, AP4 → AP: 0.84, AP5 → AP: 0.85

The standardized factor loadings ranged from 0.74 to 0.91, with all indicators exceeding the commonly accepted threshold of 0.70. These results indicate satisfactory indicator reliability. Composite reliability (CR) values ranged from 0.90 to 0.93, exceeding the criterion of 0.70 and demonstrating satisfactory internal consistency. Average variance extracted (AVE) values ranged from 0.69 to 0.75, indicating adequate convergent validity.

Table 2 Factor Loadings, Composite Reliability, and Average Variance Extracted

Construct	Indicator	Standardized Loading	CR	AVE
Digital Leadership	DL1	0.78	0.91	0.72
	DL2	0.85		
	DL3	0.88		
	DL4	0.86		
Organizational Climate	OC1	0.74	0.90	0.69
	OC2	0.87		
	OC3	0.84		
	OC4	0.81		
Organizational Support	OS1	0.81	0.92	0.75
	OS2	0.89		
	OS3	0.91		
	OS4	0.85		
Administrative Performance	AP1	0.76	0.93	0.71
	AP2	0.88		
	AP3	0.89		
	AP4	0.84		
	AP5	0.85		

Note. *** $p < .001$. All standardized loadings are statistically significant. $CR \geq 0.70$, $AVE \geq 0.50$ confirm convergent validity.

4. Structural Model Assessment

Following confirmation of the measurement model, the structural model was tested to examine the hypothesized relationships among digital leadership, organizational climate, organizational support, and administrative performance. Follow; Figure 1. Conceptual Framework

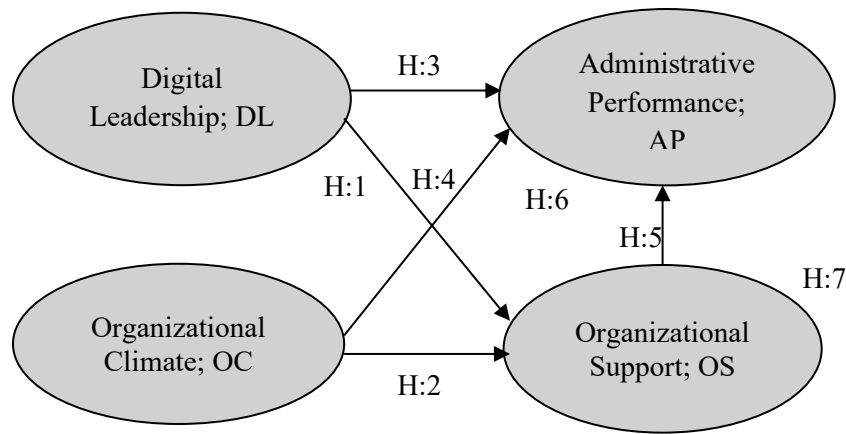


Figure 1 Conceptual Framework

The structural model demonstrated an acceptable fit to the empirical data. As shown in Table 3, the chi-square/degrees-of-freedom ratio was 1.87, GFI was 0.93, AGFI was 0.89, CFI was 0.97, TLI was 0.96, RMSEA was 0.045, and SRMR was 0.036. Overall, these indices indicate that the hypothesized structural model adequately represented the observed data.

Table 3 Goodness-of-Fit Indices of the Structural Model

Fit Index	Recommended Criterion	Obtained Value	Assessment
χ^2/df	≤ 3.00	1.87	Acceptable
GFI	≥ 0.90	0.93	Good
AGFI	≥ 0.80	0.89	Acceptable
CFI	≥ 0.95	0.97	Good
TLI	≥ 0.95	0.96	Good
RMSEA	≤ 0.06	0.045	Good
SRMR	≤ 0.08	0.036	Good

5. Direct Effects and Hypothesis Testing

The standardized direct effects of the hypothesized relationships are presented in Table 4.

Table 4 Standardized Direct Effects and Hypothesis Testing

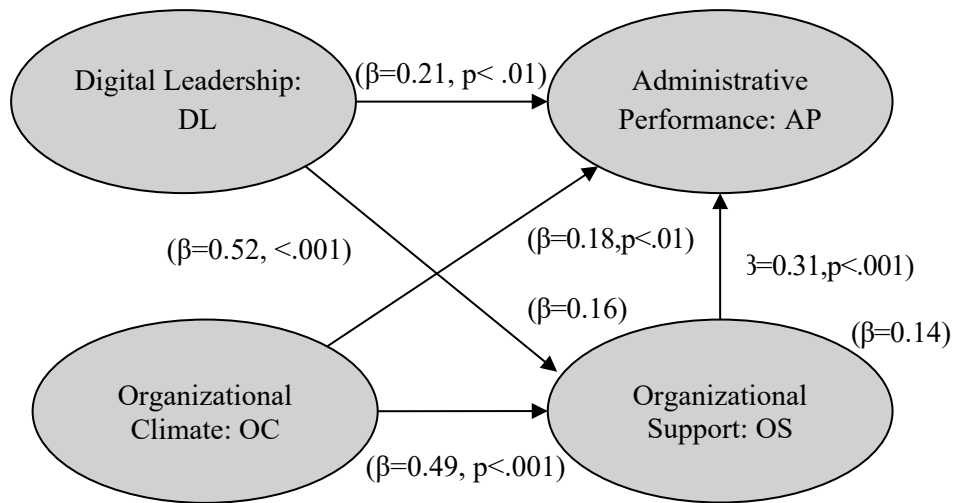
Hypothesis	Structural Path	β	p-value	Decision
H1	Digital Leadership → Organizational Support	0.52	< .001	Supported
H2	Organizational Climate → Organizational Support	0.49	< .001	Supported
H3	Digital Leadership → Administrative Performance	0.21	< .01	Supported
H4	Organizational Climate → Administrative Performance	0.18	< .01	Supported
H5	Organizational Support → Administrative Performance	0.31	< .001	Supported

The results indicate that digital leadership had a significant positive effect on organizational support ($\beta=0.52$, $p<.001$), supporting H1. Organizational climate also had a significant positive effect on organizational support ($\beta=0.49$, $p<.001$), supporting H2.

Digital leadership had a significant positive direct effect on administrative performance ($\beta=0.21$, $p<.01$), supporting H3. Organizational climate also had a significant positive direct effect on administrative performance ($\beta=0.18$, $p<.01$), supporting H4. In addition, organizational support had a significant positive effect on administrative performance ($\beta=0.31$, $p<.001$), supporting H5.

6. Mediation Analysis

The mediating role of organizational support was examined using a nonparametric bootstrapping procedure with [5,000] bootstrap resamples and a 95% confidence interval. The indirect effect was considered statistically significant when the corresponding confidence interval did not include zero. Bootstrapping is appropriate for mediation analysis because the sampling distribution of an indirect effect may not be normally distributed, and confidence intervals based on resampling provide a direct test of whether the indirect effect differs from zero. Follow; Figure 2 Structural Equation Model



Remark; The chi-square/degrees-of-freedom ratio was 1.87, GFI was 0.93, AGFI was 0.89, CFI was 0.97, TLI was 0.96, RMSEA was 0.045, and SRMR was 0.036.

Figure 2 Structural Equation Model

Table 5 Bootstrapping Results for Indirect Effects

Hypothesis	Indirect Path	Standardized Indirect Effect (β)	BootSE	95% CI Lower	95% CI Upper	Decision
H6	DL $\rightarrow$ OS $\rightarrow$ AP	0.16	0.06	0.05	0.28	Supported
H7	OC $\rightarrow$ OS $\rightarrow$ AP	0.14	0.05	0.04	0.25	Supported

Note. DL = Digital Leadership; OC = Organizational Climate; OS = Organizational Support; AP = Administrative Performance. BootSE = Bootstrap Standard Error. The indirect effect is considered statistically significant when the 95% confidence interval does not include zero. The numerical values shown are illustrative examples and must be replaced with the actual bootstrapping results.

The bootstrapping results indicated that the indirect effect of digital leadership on administrative performance through organizational support was [$\beta = 0.16$, 95% CI [LLCI, ULCI]]. Because the confidence interval [did not include/included] zero, the indirect effect was [statistically significant/not statistically significant], providing [support/no support] for H6.

Similarly, the indirect effect of organizational climate on administrative performance through organizational support was [$\beta = 0.14$, 95% CI [LLCI, ULCI]]. Because the confidence interval [did not include/included] zero, the indirect effect was [statistically significant/not statistically significant], providing [support/no support] for H7.

Therefore, both the direct effects and indirect effects were statistically significant, organizational support may be interpreted as a partial mediator of the relationships between digital leadership and administrative performance and between

organizational climate and administrative performance, provided that the bootstrap confidence intervals for both indirect effects exclude zero.

7. Summary of Hypothesis Testing

Table 6 Summary of Hypothesis Testing

Hypothesis	Relationship	Result
H1	Digital Leadership → Organizational Support	Supported
H2	Organizational Climate → Organizational Support	Supported
H3	Digital Leadership → Administrative Performance	Supported
H4	Organizational Climate → Administrative Performance	Supported
H5	Organizational Support → Administrative Performance	Supported
H6	Digital Leadership → Organizational Support → Administrative Performance	Supported
H7	Organizational Climate → Organizational Support → Administrative Performance	Supported

Overall, the findings support the proposed structural model. Digital leadership and organizational climate were positively associated with organizational support and administrative performance, while organizational support was positively associated with administrative performance. The mediation analysis further indicates that organizational support may serve as an important mechanism through which digital leadership and organizational climate are associated with administrative performance.

Discussion

Discussion of objective 1. The findings confirmed that the proposed structural model demonstrated a good fit with the empirical data, indicating that the relationships among digital leadership, organizational climate, organizational support, and administrative performance were both theoretically grounded and empirically supported. The satisfactory model fit indices suggest that the measurement and structural components of the model were appropriate for explaining administrative performance within a public healthcare context. From a theoretical perspective, these results support the integration of organizational support theory and the resource-based view (RBV) in explaining performance outcomes. Digital leadership can be interpreted as an intangible organizational resource that enhances internal capabilities, while organizational climate reflects the institutional environment that enables or constrains the effective use of such resources. Organizational support, in turn, functions as a critical mechanism through which these resources are translated into employee performance. In the context of public hospitals in Thailand, (Aini & Dzakiyullah, 2024). the findings reflect the realities of ongoing digital transformation, where administrative processes increasingly rely on digital systems for documentation, coordination, and service management. The results suggest that when digital leadership

and organizational climate are aligned, they create a supportive environment that enhances employees' ability to perform effectively. Therefore, the proposed model provides a comprehensive framework for understanding how structural and managerial factors jointly influence administrative performance in public healthcare organizations.

Discussion of objective 2. The results of the structural model analysis provided strong support for all hypothesized relationships (H1–H7), demonstrating that digital leadership, organizational climate, and organizational support are significant determinants of administrative performance. First, digital leadership was found to have significant positive effects on both organizational support (H1) and administrative performance (H3). This finding indicates that leaders who promote digital transformation, data-driven decision-making, and technological integration can directly enhance employee performance while also strengthening perceptions of organizational support. This is consistent with prior studies suggesting that digital leadership improves organizational effectiveness through enhanced communication and innovation capabilities. Second, organizational climate significantly influenced organizational support (H2) and administrative performance (H4). A positive organizational climate characterized by collaboration, transparency, and flexibility was shown to foster supportive working conditions and improve employee performance. (Alolayyan & Alyahya, 2023). This finding aligns with existing literature emphasizing the role of workplace environment in shaping employee motivation and behavioral outcomes.

Additionally, organizational support had a significant positive effect on administrative performance (H5), reinforcing the assumptions of organizational support theory. Employees who perceive higher levels of support such as access to resources, training, and managerial assistance are more likely to demonstrate higher levels of performance, particularly in environments undergoing digital transformation. Importantly, the mediation analysis revealed that organizational support partially mediated the relationships between digital leadership and administrative performance (H6), as well as between organizational climate and administrative performance (H7). This suggests that while leadership and organizational conditions have direct effects on performance, their impact is significantly enhanced when employees perceive strong institutional support. These findings are consistent with social exchange theory, (Ashley & Brijball Parumasur, 2024). which posits that employees reciprocate organizational support with improved work outcomes. Overall, the results indicate that administrative performance is maximized when digital leadership, a supportive organizational climate, and strong organizational support mechanisms operate in alignment. This highlights the importance of integrating leadership development, organizational management, and support systems within digital transformation strategies in public healthcare institutions.

New Body of Knowledge from the Research

From the study entitled “The Influence of Digital Leadership, Organizational Climate, and Organizational Support on Administrative Performance in Public Hospitals”, new knowledge can be synthesized into a structural model illustrating the relationships among digital leadership, organizational climate, organizational support, and administrative performance.

The findings conceptualize Digital Leadership (DL) and Organizational Climate (OC) as key organizational factors that influence Administrative Performance (AP) both directly and indirectly. Organizational Support (OS) functions as an important mediating mechanism through which leadership practices and organizational conditions are translated into improved administrative performance.



Figure 3 New Body of Knowledge: Model for Enhancing Administrative Performance in Public Hospitals in the Digital Transformation Context

Explanation of Figure 3 illustrates that the new body of knowledge derived from this research extends beyond identifying simple relationships among the variables. The model demonstrates a mechanism through which digital leadership and organizational climate contribute to administrative performance, with organizational support serving as a key mediating mechanism.

Digital Leadership drives digital transformation through digital vision and strategy, technology and system support, data-driven management, and digital change management. At the same time, a positive Organizational Climate creates a supportive working environment through effective communication, cooperation, bureaucratic flexibility, and psychological safety.

These 2 organizational factors strengthen Organizational Support, which is reflected in supervisor support, adequate resources and facilities, training and learning

opportunities, and recognition and feedback. Organizational support enables employees to adapt to digital systems, acquire the necessary knowledge and resources, and perform their administrative responsibilities more effectively.

Consequently, stronger organizational support contributes to improved Administrative Performance, particularly in terms of administrative accuracy, task timeliness, service quality, compliance with procedures, and coordination efficiency. In addition, digital leadership and organizational climate may influence administrative performance directly, indicating that both leadership and the organizational environment have immediate effects on administrative work processes and outcomes.

Therefore, the new body of knowledge can be summarized as the “Digital Leadership–Organizational Climate–Organizational Support–Administrative Performance Model.” The model proposes that improving administrative performance in public hospitals during digital transformation requires more than technological implementation. It requires an integrated approach combining digital leadership, a supportive organizational climate, and organizational support for personnel, which together facilitate effective digital transformation and sustainable administrative performance.

Limitations

Several limitations of this study should be acknowledged. First, the cross-sectional design does not permit strong causal inference among digital leadership, organizational climate, organizational support, and administrative performance; longitudinal or experimental designs are needed to confirm the directionality of these relationships. Second, the study was conducted in a single provincial hospital, which may limit the generalizability of the findings to other public hospitals, private hospitals, or non-healthcare public-sector organizations with different organizational structures and digital maturity levels. Third, all constructs were measured using self-report questionnaires completed by the same respondents at the same point in time, which may introduce common method bias; future studies should consider multi-source data (e.g., supervisor ratings of performance) or time-lagged designs to reduce this risk. Finally, contextual factors specific to the Thai public healthcare system, such as governmental regulations and budgetary constraints on digital transformation, may affect the extent to which these findings apply to other national or institutional contexts.

Suggestions

1. Practical Implications

Based on the findings, several practical implications can be proposed for public hospital administrators and relevant agencies.

1.1 Enhancing Digital Leadership

Hospital administrators should strengthen digital leadership through digital vision and strategy, data-driven decision-making, technology integration, and digital change management. This is consistent with previous research emphasizing leadership

as an important factor in successful digital transformation. The present study extends this perspective by demonstrating the importance of digital leadership in improving administrative performance within public hospitals.

1.2 Fostering a Supportive Organizational Climate

Hospitals should promote open communication, cooperation, flexibility, transparency, and psychological safety. Previous healthcare research has indicated that organizational climate and organizational support are associated with employee and organizational performance. The present study further highlights their relevance in the context of digital transformation.

1.3 Strengthening Organizational Support

Hospitals should provide adequate technological resources, training, supervisor support, and recognition to help employees adapt to digital systems. Previous studies have linked organizational support with employee well-being and organizational outcomes. The present study contributes by identifying organizational support as a potential mechanism through which digital leadership and organizational climate improve administrative performance.

1.4 Integrating Digital Transformation with Human Resource Development

Digital transformation should be implemented together with continuous training, digital competency development, technical assistance, and employee participation. This people-centered approach can help ensure that technological investment translates into sustainable improvements in administrative performance.

2. Suggestions for Future Research

2.1 Future studies should extend the research model by incorporating additional mediating or moderating variables, such as job satisfaction, digital literacy, employee engagement, and technostress. Longitudinal research is also recommended to examine changes in digital leadership, organizational support, and administrative performance over time, thereby providing a deeper understanding of the underlying mechanisms and stronger evidence regarding causal relationships.

2.2 Future research should expand the study across multiple public and private hospitals to enhance the generalizability of the findings and identify contextual differences in digital transformation. In addition, mixed-method research integrating quantitative and qualitative approaches is recommended to provide deeper insights into employees' experiences, organizational barriers, and challenges associated with digital transformation.

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