# THE INFLUENCE OF ELECTRONIC MEDICAL RECORD IMPLEMENTATION ON MEDICAL STAFF PERFORMANCE AT NTB PROVINCIAL HOSPITAL: THE MODERATING ROLE OF LEADERSHIP AND ORGANIZATIONAL CULTURE

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## Abstract

This study examines the effect of Electronic Medical Records (EMR) implementation on the performance of medical personnel at the Regional General Hospital of West Nusa Tenggara Province, with leadership and organizational culture as moderating variables. The research employs a quantitative associative–causal design using proportional random sampling, involving 93 respondents comprising physicians, nurses, and medical record officers. Data were collected through structured questionnaires and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The findings reveal that EMR implementation has a positive and significant effect on employee performance ($\beta = 0.245$, $t = 2.318$, $p = 0.021$). Furthermore, leadership ($\beta = 0.151$, $t = 2.123$, $p = 0.034$) and organizational culture ($\beta = 0.158$, $t = 2.068$, $p = 0.039$) significantly moderate this relationship, thereby strengthening the influence of EMR implementation on employee performance. The research model demonstrates substantial explanatory power with an $R^2$ value of 0.878, indicating that 87.8% of the variability in employee performance is explained by EMR implementation, leadership, and organizational culture. These findings underscore that effective leadership enhances employee motivation and digital readiness, while an adaptive organizational culture fosters collaboration, accuracy, and innovation in clinical practice.

**Keywords:** Electronic Medical Records, Performance, Leadership, Organizational Culture, Digital Transformation

## INTRODUCTION

Human resources (HR) are a crucial element in organizational performance, particularly within hospitals where medical staff are directly involved in service delivery. HR is not only expected to demonstrate competence and readiness in carrying out tasks but also the ability to adapt to technological transformations. According to Noe et al. (2016), human resources serve as a strategic asset that generates competitive advantage through competence, commitment, and contribution to organizational goals. Inadequate human resources—whether in terms of quantity, quality, or adaptability to change—can hinder organizational sustainability and limit the ability to respond to future challenges (Dessler, 2020). Hospitals, as public service institutions, must therefore manage and develop HR capacity optimally, particularly in the context of digital transformation. Armstrong & Taylor (2023) emphasize that HR development must be aligned with environmental changes and technological demands to ensure organizational responsiveness and adaptability.

The adoption of Electronic Medical Records (EMR) represents a major shift in healthcare delivery, replacing manual recordkeeping with digital systems designed to improve efficiency, accuracy, and data security (Menachemi & Collum, 2011). Kruse et al. (2016) found that effective EMR utilization reduces administrative burden, accelerates access to patient information, and enhances diagnostic accuracy. Similarly, Patel et al. (2021) highlighted the role of EMR in minimizing medical errors and supporting evidence-based clinical decisions. In Indonesia, EMR adoption has become part of national health digital transformation policies, with hospitals mandated to fully transition by December 31, 2023. At RSUD Provinsi NTB, EMR implementation began with infrastructure readiness, training, and strong leadership directives. Starting January 1, 2024, the hospital officially adopted EMR, underscoring its commitment to improving healthcare service quality.

Despite these advances, EMR adoption often faces challenges related to human resource readiness. Staff require adequate knowledge, skills, and attitudes to ensure effective system use (Ngusie et al., 2022). Without sufficient training and mentoring, employees may struggle to adapt to digital workflows, thereby affecting productivity and quality of service. Natera & Sampedro-Hernánde, (2025) demonstrated that EMR implementation enhances work efficiency in medical record units, improves clinical service quality, and fosters collaboration among professionals. Likewise, Kim et al. (2015) found that EMR adoption significantly improved staff performance, particularly among graduates with medical records backgrounds. However, these benefits are not automatically realized without supportive organizational contexts, particularly in terms of leadership and culture.

Employee performance is a critical outcome for hospitals, as it directly reflects service quality and patient satisfaction. Wibowo (2016) defines performance as the work outcomes of an individual in relation to responsibilities, encompassing intellectual, emotional, spiritual, and technical capacities in utilizing organizational resources. Robbins & Judge (2019) argue that performance is influenced by multiple factors, including knowledge, motivation, organizational culture, job satisfaction, and leadership. In practice, variations in performance have been observed at RSUD Provinsi NTB, such as delays in patient service during peak hours, difficulties balancing administrative and clinical duties, and inconsistencies in adherence to standard operating procedures. These issues highlight the need to strengthen the determinants of performance within the hospital environment.

Organizational culture is one such determinant. Cameron & Quinn (2011) describe culture as shared values and assumptions shaping employee behavior and decision-making. Hatch (2018) emphasizes that culture not only forms organizational identity but also guides responses to change. Empirical studies confirm its importance: Haryadi & Wahyudi (2020) demonstrated that culture significantly influences performance, while Carolina (2012) found that culture reinforces staff commitment and productivity. In the context of EMR adoption, a supportive, adaptive, and innovative culture enables employees to embrace digital transformation, thereby enhancing performance outcomes (Alvesson & Sveningsson, 2024).

Leadership plays an equally crucial role in guiding organizations through technological transitions. Northouse (2025) defines leadership as the process of influencing individuals to achieve shared objectives, while Yukl (2013) stresses its role in inspiring motivation and establishing vision. In hospitals, leadership is essential for minimizing resistance to EMR, fostering collaboration, and ensuring staff motivation. Giltinane (2013) argues that effective leadership not only improves relationships among staff but also strengthens professional decision-making and enhances service delivery.

Although numerous studies have examined the influence of EMR, leadership, and organizational culture independently on employee performance, limited research has explored their interaction, particularly the moderating roles of leadership and organizational culture in strengthening the relationship between EMR implementation and staff performance. This research gap is particularly relevant in Indonesia, where hospitals are undergoing rapid digital transformation but face uneven readiness across staff and institutions.

The urgency of this research lies in its contributions to both theory and practice. It provides empirical evidence regarding how EMR implementation affects medical staff performance and how leadership and organizational culture function as moderating variables in this relationship. The findings are expected to support hospital management in designing policies and strategies that maximize the benefits of EMR adoption. Specifically, the study focuses on RSUD Provinsi NTB as a case of public hospital digital transformation, offering insights that may serve as a model for other healthcare institutions in Indonesia.

## REVIEW OF LITERATURE

### Electronic Medical Records (EMR)

Electronic Medical Records (EMR) are defined as digital systems that replace manual medical recordkeeping with the aim of improving efficiency, accuracy, and security of patient data (Menachemi & Collum, 2011). EMR systems enable healthcare professionals to access patient information in real time, reduce duplication of records, and minimize the likelihood of errors in clinical decision-making (Patel et al., 2021). Kruse et al. (2016) found that EMR implementation reduces administrative burden, accelerates information retrieval, and enhances diagnostic accuracy, which directly supports the productivity of medical staff. In Indonesia, the government has mandated hospitals to transition to EMR as part of national digital health transformation policies, with the target of full adoption by the end of 2023. For hospitals such as RSUD Provinsi NTB, EMR adoption not only represents compliance with regulations but also a strategic effort to improve healthcare service quality. Ariani (2023) demonstrated that EMR adoption improves efficiency in medical record units, enhances clinical services, and fosters professional collaboration, while Kim et al. (2015) showed its

significant positive impact on staff performance. However, successful implementation requires not only technological readiness but also organizational support and human resource adaptation (Faida & Ali, 2021).

**Employee Performance**

Employee performance reflects the extent to which individuals fulfill their job responsibilities and contribute to organizational objectives. Wibowo (2016) defines performance as work outcomes associated with responsibilities, encompassing intellectual, emotional, spiritual, and technical capacities in utilizing organizational resources. According to Fitriani et al. (2023), performance is the result of work achieved by employees in carrying out their duties and responsibilities, both in terms of quality and quantity, in accordance with organizational standards. Furthermore, Muniro et al. (2024) explains that employee performance is essentially understood as the work results of employees in performing their duties, which are influenced by rewards, punishments, organizational climate, and job satisfaction.

In the hospital setting, performance is particularly critical, as it directly impacts service quality, patient safety, and user satisfaction. Robbins & Judge (2019) argue that performance is influenced by factors such as ability, knowledge, motivation, job design, organizational culture, and leadership. For medical staff, performance is often measured through productivity, timeliness, adherence to standard operating procedures, and service quality. Gilbert et al. (2012) emphasized that digital technology adoption, including EMR, can enhance productivity when supported by adequate training and organizational capacity. However, without sufficient adaptation and commitment, technological innovation may fail to translate into improved staff outcomes. Thus, performance in hospitals must be understood not only as an individual attribute but also as an organizational achievement shaped by systemic factors.

**Leadership**

Leadership plays a fundamental role in influencing employee attitudes and behaviors, particularly during periods of organizational change. Northouse (2025) defines leadership as a process of influencing individuals to achieve shared goals, while Yukl (2013) emphasizes its role in motivating staff, creating vision, and establishing supportive working environments. In the hospital context, effective leadership is crucial for ensuring acceptance of EMR systems, minimizing resistance to change, and encouraging collaboration across departments. Giltinane (2013) notes that strong leadership in healthcare organizations enhances communication, fosters professional decision-making, and improves overall service quality. Leaders who are able to balance authority with empathy and provide clear guidance during technological transitions are more likely to achieve sustainable improvements in staff performance. Leadership, therefore, is not merely about directing tasks but also about building trust, cultivating resilience, and aligning employees with the organization's vision for digital transformation.

**Organizational Culture**

Organizational culture encompasses shared values, beliefs, and assumptions that shape employee behavior and decision-making within an organization. Cameron & Quinn (2011) highlight culture as a key determinant of organizational effectiveness, while Hatch (2018) stresses its role in shaping identity and guiding responses to change. A strong, adaptive, and innovative culture creates an environment in which employees are more willing

to embrace technological advancements, such as EMR implementation, thereby improving performance outcomes (Alvesson & Sveningsson, 2024). Haryadi & Wahyudi (2020) found that organizational culture significantly influences employee productivity and commitment, while Carolina (2012) concluded that culture plays a reinforcing role in staff performance. In hospitals, cultural values such as collaboration, discipline, and patient-centered care determine how effectively staff adapt to new systems and maintain service quality. Conversely, a rigid or resistant culture can hinder innovation, increase employee reluctance, and reduce the overall effectiveness of technological change.

Taken together, the literature highlights that EMR implementation has the potential to significantly enhance employee performance by streamlining administrative tasks, improving accuracy, and supporting clinical decision-making (Kruse et al., 2016; Patel et al., 2021). However, the effectiveness of EMR adoption is not determined solely by technological factors. Leadership and organizational culture emerge as critical moderating elements that shape how employees perceive, accept, and utilize new systems (Cameron & Quinn, 2011; Northouse, 2025). Effective leadership fosters motivation, reduces resistance, and provides strategic direction, while a supportive culture encourages openness to innovation and strengthens commitment to organizational goals. Despite the substantial body of research on EMR and organizational performance, there remains a need to further explore how these moderating factors jointly influence the relationship between EMR implementation and employee performance, particularly within public hospitals in Indonesia such as RSUD Provinsi NTB. Addressing this gap is essential to understanding the complex dynamics of digital transformation in healthcare and to providing actionable insights for enhancing service quality through human resource empowerment.

## RESEARCH METHOD

This study employed a quantitative associative-causal design to examine the effect of Electronic Medical Records (EMR) implementation on employee performance, moderated by leadership and organizational culture (Creswell, 2014; Sugiyono, 2016). The research was conducted at RSUD Provinsi Nusa Tenggara Barat, a type-B referral and teaching hospital that plays a central role in the implementation of EMR in Indonesia (Rusmulia et al., 2024). The study population consisted of 1,360 civil servant medical personnel. The sample size was determined using Slovin's formula with a 10% margin of error, resulting in 93 respondents (Sugiyono, 2016). Proportional random sampling was applied to ensure representation across professional groups, including doctors, nurses, and medical record staff, while simple random sampling within units provided equal opportunity for inclusion. Data were collected through a structured questionnaire distributed via Google Forms, allowing efficient and accessible participation.

The independent variable was EMR implementation (X), measured by the frequency and duration of system use in daily tasks (Kruse et al., 2016; Patel et al., 2021). The dependent variable was employee performance (Y), operationalized through indicators of quality, quantity, timeliness, effectiveness, and independence (Robbins & Judge, 2019; Wibowo, 2016). Leadership (Z1) was measured through decision-making, motivation, communication, supervision, responsibility, and emotional control (Northouse, 2025; Yukl, 2013), while organizational culture (Z2) was assessed through innovation, attention to detail, outcome orientation, people orientation, team orientation, aggressiveness, and stability (Cameron &

Quinn, 2011; Hatch, 2018). All variables were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) (Sugiyono, 2016).

Quantitative data analysis was performed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4, which is considered appropriate for complex models and relatively small sample sizes (Chin, 1998; Hair et al., 2021). The measurement model was evaluated using outer loadings, composite reliability, and average variance extracted (AVE) to establish convergent validity, while discriminant validity was assessed through Fornell–Larcker criteria, cross-loadings, and the HTMT ratio (Henseler et al., 2015). The structural model was then tested through bootstrapping at a 5% significance level, supported by $R^2$, $Q^2$, and effect size ($f^2$) statistics to evaluate explanatory and predictive power (Alsyouf et al., 2022; Hair et al., 2021).

This systematic design ensured the constructs were measured with reliability and validity, while allowing rigorous testing of the hypothesized relationships between EMR implementation, leadership, organizational culture, and employee performance.

**Table 1. Recapitulation of Questionnaire Results**

| Variables | Indicators | Mean | Category |
|---|---|---|---|
| Employee Performance | Y1 | 3.71 | High |
| | Y2 | 3.871 | High |
| | Y3 | 4.011 | High |
| | Y4 | 4.204 | High |
| | Y5 | 3.935 | High |
| | Y6 | 3.935 | High |
| | Y7 | 4.054 | High |
| | Y8 | 4.161 | High |
| | Y9 | 4.269 | Very High |
| | Y10 | 4.151 | High |
| | Y11 | 3.989 | High |
| | Y12 | 4.215 | Very High |
| | Y13 | 4.204 | High |
| | Y14 | 4.151 | High |
| | Y15 | 4.14 | High |
| RME Implementation | X1 | 4.28 | Very Ready |
| | X2 | 4.247 | Very Ready |
| | X3 | 4.183 | Ready |
| | X4 | 4.14 | Ready |
| | X5 | 4.129 | Ready |
| | X6 | 4.043 | Ready |
| Leadership | Z1.2 | 3.699 | Effective |
| | Z1.3 | 3.419 | Effective |
| | Z1.4 | 3.656 | Effective |
| | Z1.5 | 4 | Effective |
| | Z1.6 | 4.011 | Effective |
| | Z1.7 | 3.591 | Effective |
| | Z1.8 | 3.774 | Effective |
| | Z1.9 | 3.828 | Effective |

| | | | |
|---|---|---|---|
| | Z1.10 | 4.194 | Effective |
| | Z1.11 | 4.312 | Very Effective |
| | Z1.12 | 3.677 | Effective |
| | Z1.14 | 4.108 | Effective |
| | Z1.15 | 3.613 | Effective |
| | Z1.16 | 3.581 | Effective |
| | Z1.18 | 3.849 | Effective |
| Organizational Culture | Z2.1 | 4.172 | Strong |
| | Z2.2 | 4.172 | Strong |
| | Z2.3 | 4.161 | Strong |
| | Z2.4 | 4.226 | Very Strong |
| | Z2.6 | 4.237 | Very Strong |
| | Z2.7 | 4.183 | Strong |
| | Z2.8 | 4.151 | Strong |
| | Z2.9 | 3.925 | Strong |
| | Z2.10 | 4.022 | Strong |
| | Z2.11 | 3.957 | Strong |
| | Z2.12 | 3.882 | Strong |
| | Z2.13 | 4.032 | Strong |
| | Z2.14 | 4.204 | Strong |
| | Z2.15 | 4.312 | Very Strong |
| | Z2.17 | 4.344 | Very Strong |
| | Z2.18 | 4.355 | Very Strong |
| | Z2.20 | 4.452 | Very Strong |
| | Z2.21 | 4.387 | Very Strong |
| | Z2.1 | 4.172 | Strong |
| | Z2.2 | 4.172 | Strong |
| | Z2.3 | 4.161 | Strong |

Source: Researcher's own data processing (2025)

**Research Hypothesis**

This study aims to analyze the effect of Electronic Medical Records (EMR) implementation on employee performance, with leadership and organizational culture serving as moderating variables at RSUD Provinsi NTB. Drawing upon the theoretical framework and insights from prior research, the hypotheses proposed in this study are as follows:

- H1 The implementation of Electronic Medical Records (EMR) has a positive and significant effect on employee performance.
- H2: Leadership positively moderates the relationship between EMR implementation and employee performance.
- H3: Organizational culture positively moderates the relationship between EMR implementation and employee performance.

Vol. 9. No. 1 (2026)
Page: 2860-2874

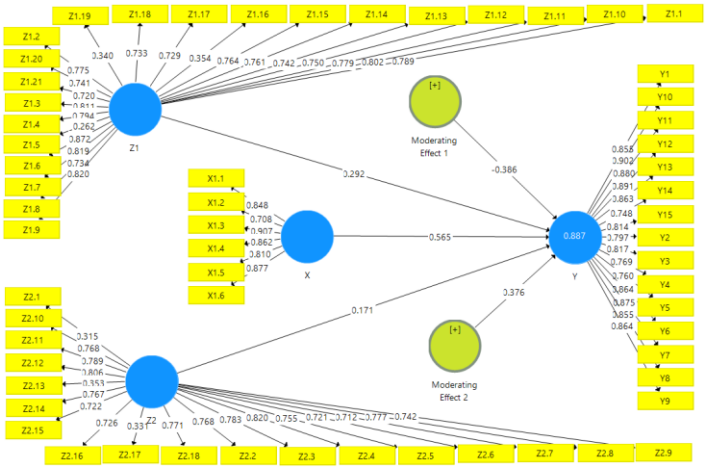
## RESULTS AND DISCUSSION

After the data collection stage, the measurement model was evaluated using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The analysis consisted of two stages: the outer model evaluation (measurement model) and the inner model evaluation (structural model).

### Measurement Model (Outer Model)

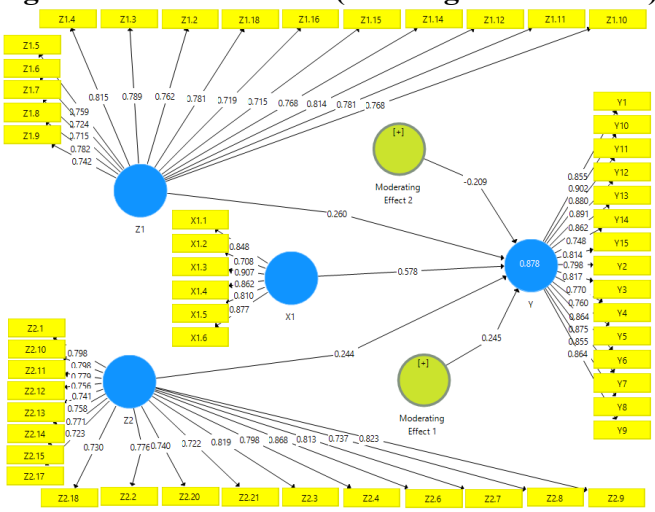
Convergent validity was assessed through outer loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). All indicators exceeded the threshold of 0.70, except the first indicator of Leadership, which was removed due to poor validity (Hair et al., 2021). AVE values were above 0.50, confirming convergent validity, and CR values ranged from 0.812 to 0.934, above the minimum requirement of 0.70, indicating reliability.

**Figure 1. Outer Model 1 (PLS Algorithm Result)**




Source: Researcher's own data processing (2025)

**Figure 2. Outer Model 2 (PLS Algorithm Result)**




Source: Researcher's own data processing (2025)

The initial SmartPLS 3.0 analysis indicated that several indicators did not meet the validity threshold: Z1.5, Z1.16, and Z1.19 (Organizational Culture) and Z2.1, Z2.13, and

Z2.17 (Leadership) were removed to improve construct reliability and validity. The re-estimated outer model confirmed that all remaining items satisfied the validity criteria, with satisfactory factor loadings across constructs, ensuring a reliable and valid measurement model for subsequent structural analysis.

**Table 2. Construct Reliability and Validity**

| Construct | Cronbach's Alpha | Rho_A | Composite Reliability | AVE | Cut-off Value | Evaluation |
|---|---|---|---|---|---|---|
| EMR Implementation (X) | 0.914 | 0.916 | 0.934 | 0.702 | ≥ 0.70 (CR), ≥ 0.50 (AVE) | Reliable & Valid |
| Employee Performance (Y) | 0.969 | 0.97 | 0.972 | 0.703 | ≥ 0.70 (CR), ≥ 0.50 (AVE) | Reliable & Valid |
| Leadership (Z1) | 0.949 | 0.954 | 0.954 | 0.582 | ≥ 0.70 (CR), ≥ 0.50 (AVE) | Reliable & Valid |
| Organizational Culture (Z2) | 0.961 | 0.964 | 0.965 | 0.602 | ≥ 0.70 (CR), ≥ 0.50 (AVE) | Reliable & Valid |

Source: Researcher's own data processing (2025)

Table 2 shows that all constructs meet the reliability and validity criteria, with Cronbach's Alpha and Composite Reliability values above 0.70 and AVE values above 0.50, confirming strong internal consistency and convergent validity (Fornell & Larcker, 1981; Hair et al., 2021). Building on this, discriminant validity was assessed using the Fornell–Larcker criterion and the HTMT ratio. As presented in Table 3, the square root of AVE values exceeded inter-construct correlations, and all HTMT values were below 0.90, indicating that the constructs are empirically distinct (Henseler et al., 2015).

**Table 3. Discriminant Validity Results**

| Construct | EMR Implementation (X) | Employee Performance (Y) | Leadership (Z1) | Organizational Culture (Z2) |
|---|---|---|---|---|
| EMR Implementation (X) | **0.838** | | | |
| Employee Performance (Y) | 0.715 | **0.839** | | |
| Leadership (Z1) | 0.642 | 0.701 | **0.763** | |

| | | | | |
|---|---|---|---|---|
| Organizational Culture (Z2) | 0.668 | 0.729 | 0.693 | **0.776** |

Source: Researcher's own data processing (2025)

**Structural Model (Inner Model)**

The inner model was evaluated to examine the relationships among constructs using the coefficient of determination ($R^2$), adjusted $R^2$, effect size ($f^2$), and predictive relevance ($Q^2$). The $R^2$ values indicate the explanatory power of the exogenous constructs on the endogenous variable. As shown in Table 4, the $R^2$ for employee performance (Y) was 0.878, with an adjusted $R^2$ of 0.853. This means that 87.8% of the variance in employee performance is explained by EMR implementation (X), leadership (Z1), and organizational culture (Z2). According to Chin (1998), this value can be considered substantial.

Predictive relevance was assessed using the Stone–Geisser $Q^2$ statistic, which was 0.219 for employee performance. Since the value is greater than zero, the model demonstrates satisfactory predictive relevance (Hair et al., 2021).

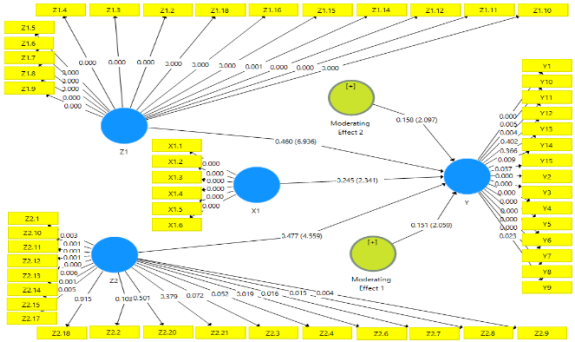
**Table 4. R-Square and Q-Square Results**

| Endogenous Variable | $R^2$ | Adjusted $R^2$ | $Q^2$ | Evaluation |
|---|---|---|---|---|
| Employee Performance (Y) | 0.878 | 0.853 | 0.219 | Substantial, Predictive |

Source: Researcher's own data processing (2025)

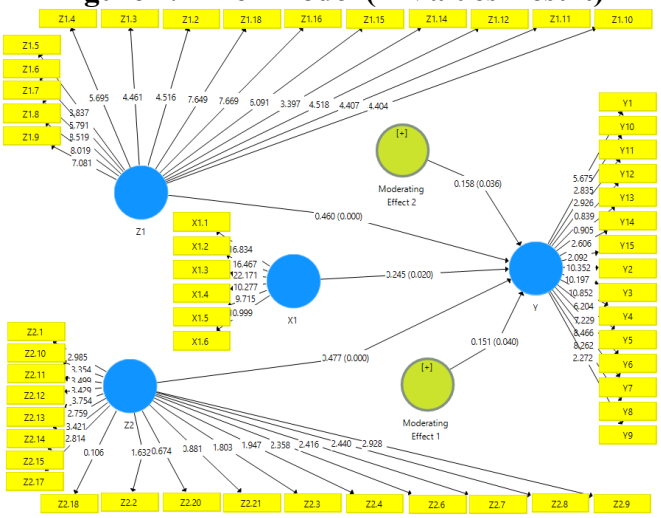
To further assess the hypothesized relationships, a bootstrapping procedure with 5,000 resamples was performed. The results are presented in Figure 2 and Figure 3, which display the original sample estimates, T-statistics, and p-values for each pathway.

**Figure 3. Inner Model (T-Statistics Result)**




Source: Researcher's own data processing (2025)

**Figure 4. Inner Model (P-Values Result)**




Source: Researcher's own data processing (2025)

Path coefficients, t-values, and p-values are summarized in Table 5. The results indicate that all hypothesized pathways are statistically significant ($p < 0.05$), with t-values exceeding the critical threshold of 1.96.

**Table 5. Path Coefficients and Hypothesis Testing**

| Hypothesis | Pathway | β (Original Sample) | t-value | p-value | Conclusion |
|---|---|---|---|---|---|
| H1 | EMR Implementation → Employee Performance | 0.245 | 2.318 | 0.021 | Supported |
| H2 | Leadership (Z1) × EMR Implementation → Employee Performance | 0.151 | 2.123 | 0.034 | Supported |
| H3 | Organizational Culture (Z2) × EMR Implementation → Employee Performance | 0.158 | 2.068 | 0.039 | Supported |

Source: Researcher's own data processing (2025)

All hypotheses were supported, showing that RME implementation positively affects employee performance, and both Organizational Culture and Leadership significantly strengthen this relationship.

**The Effect of EMR Implementation on Employee Performance (H1)**

The findings demonstrate that the implementation of Electronic Medical Records (EMR) has a significant positive effect on employee performance ($\beta = 0.245$, $t = 2.318$, $p = 0.021$). This indicates that higher readiness and consistency in using EMR systems lead to better task execution among medical staff. Such readiness encompasses frequency of use, duration, and comprehension of the system in supporting healthcare services. These results are consistent with the Technology Acceptance Model (TAM) proposed by Davis et al. (1989), which emphasizes that technology adoption is driven by perceived usefulness and ease of use. In the context of RSUD NTB, frequent and routine use of EMR reflects functional acceptance of the system, which directly supports timeliness, efficiency, and independence at work.

This finding also aligns with Mathis & Jackson (2006), who argued that well-managed technology improves productivity through efficiency and measurability, and with Zamlynskyi et al. (2022), who emphasized the role of information systems in accelerating communication and decision-making. Furthermore, similar evidence has been reported by Aldosari et al. (2018) and Kruse et al. (2016), who found that EMR readiness enhances staff efficiency, satisfaction, and productivity.

**Leadership as a Moderator of the EMR–Performance Relationship (H2)**

The results further reveal that leadership significantly moderates the relationship between EMR implementation and employee performance ($\beta = 0.151$, $t = 2.123$, $p = 0.034$). Effective leadership strengthens staff motivation and confidence in using digital systems by providing guidance, discipline, and support. This echoes Bass & Avolio (1994) leadership theory, which emphasizes inspiration, motivation, and individual consideration as drivers of organizational change, and Hersey & Blanchard's (1982) situational leadership theory, which highlights the need to adapt leadership styles to employees' readiness.

In the case of RSUD NTB, leaders who communicate effectively and respond to staff needs have fostered an enabling environment for digital transition. This is consistent with Yukl & Mahsud (2010), who stressed the importance of interpersonal relations, task structuring, and decision-making in leadership behavior, and with Robbins & Judge (2019), who underlined leadership's role in shaping organizational culture and enhancing performance. Emotional intelligence in leadership, as suggested by Goleman (2017), also plays a role in creating stability during digital transformation.

**Organizational Culture as a Moderator of the EMR–Performance Relationship (H3)**

Organizational culture also significantly moderates the effect of EMR implementation on employee performance ($\beta = 0.158$, $t = 2.068$, $p = 0.039$). A culture that emphasizes collaboration, attention to detail, adaptability, and innovation strengthens the effectiveness of EMR adoption. This finding supports Schein (2010), who conceptualized organizational culture as shared assumptions that shape behavior, and Robbins & Coulter (2016), who described culture as a social glue uniting members through shared values and goals.

Moreover, Denison's (1990) framework, which highlights involvement, consistency, adaptability, and mission, is reflected in RSUD NTB, where medical staff demonstrate consistent EMR use supported by organizational stability. The results are also consistent with Cameron & Quinn's (2011) Competing Values Framework, which shows that innovative and collaborative cultures accelerate digital transformation. Previous studies, such as Denison

(1990) and Robbins & Judge (2017), similarly emphasized that adaptive organizational cultures are crucial for the success of information systems implementation.

## CONCLUSION

This study demonstrates that the implementation of Electronic Medical Records (EMR) has a positive and significant effect on the performance of medical personnel. Leadership plays a significant moderating role in strengthening the influence of EMR implementation on employee performance. Likewise, organizational culture significantly moderates the relationship, enhancing the positive effect of EMR implementation on employee performance.

From a theoretical perspective, these findings extend the Technology Acceptance Model (Davis et al., 1989), transformational leadership theory (Bass & Avolio, 1994), and organizational culture theory (Schein, 2010), by highlighting their combined explanatory power in the context of digital transformation within healthcare organizations.

From a practical standpoint, hospital management should ensure the continuous improvement of EMR systems, invest in leadership development, and reinforce organizational values that support digital adoption. Such strategies are crucial to maintaining employee productivity and ensuring high-quality patient care.

Nevertheless, this study has several limitations. The data were collected from a single institution, which limits generalizability, and relied on self-reported questionnaires that may introduce bias. Future research could expand the sample to multiple hospitals, incorporate longitudinal data, or triangulate findings with objective performance indicators.

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