

Effectiveness of Employee Performance Output Through the Implementation of The Performance Architecture Method at Palu City Hospital

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Abstract

Introduction: Performance gaps remain in Indonesian health services, as seen between Undata Regional General Hospital and Anutapura Regional General Hospital. Although Undata Regional General Hospital applies a Performance Architecture system, its effectiveness is uncertain. This study compares employee performance between the two hospitals. **Objective:** This study aims to compare employee performance between the two hospitals to evaluate whether the Performance Architecture system contributes to measurable improvements. **Method:** A quantitative comparative study was conducted with 95 purposively selected employees. Independent sample t-tests assessed differences in performance variables between both hospitals. **Result and Discussion:** Significant differences were found in Work Productivity ($p = 0.018$) and Service Quality ($p = 0.024$), with higher scores at Anutapura Regional General Hospital, indicating that Performance Architecture has not yet improved outcomes at Undata Regional General Hospital. No significant differences were observed in Procedural Compliance, Collaborative Ability, or Initiative and Adaptability. **Conclusion:** Performance Architecture at Undata Regional General Hospital has not produced optimal results. Stronger implementation and organizational support are needed to enhance performance.

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Introduction

Human resources play a vital role in determining healthcare quality, as service performance depends on the competence and availability of health workers (WHO, 2022). In Indonesia, disparities in workforce capacity and low performance efficiency continue to hinder optimal service delivery (Kementerian Kesehatan RI, 2013). Government hospitals also face bureaucratic constraints and high workloads, limiting the effectiveness of performance evaluation systems (Mackintosh et al, 2020). Research consistently shows that employee performance significantly influences service quality and patient satisfaction (Gkrimpizi et al, 2023).

Undata Regional General Hospital Palu and Anutapura Regional General Hospital Palu both experience performance challenges, including unmet service targets, heavy workloads, inadequate facilities, and delays in information systems. These issues highlight the need for integrated, data-driven performance management systems that align individual, unit-level, and organizational goals (Armstrong & Taylor, 2020; Hutagalung & Wibowo, 2020). Performance Architecture provides a structured framework linking strategic objectives with operational indicators while strengthening accountability, monitoring, and evaluation (Zhenjing et al, 2022).

Undata Regional General Hospital has begun implementing this framework, whereas Anutapura Regional General Hospital has not yet adopted it comprehensively, leading to variations in performance measurement and outcomes (Kemenkes RI, 2013). Therefore, this study aims to evaluate employee performance effectiveness under the Performance Architecture model in both hospitals, offering evidence to improve performance management in public healthcare settings (Li et al, 2023). As demands for accountability and service excellence rise, understanding the role of structured performance systems becomes essential for enhancing hospital responsiveness and improving overall healthcare quality.

Method

This study employed a quantitative research design with a comparative approach. A comparative study aims to analyze and compare two or more groups or entities based on specific measurable variables through objective and statistical assessment. In this research, the comparative approach was used to examine differences in the effectiveness of employee performance output between two public hospitals in Palu City, namely Undata Regional General Hospital and Anutapura Regional General Hospital. The study specifically sought to identify significant differences in employee performance output between the hospital that has implemented a Performance Architecture system and the one that has not.

The research was conducted at Undata Regional General Hospital and Anutapura Regional General Hospital Palu, with data collection carried out in August 2025. The population consisted of all employees working at both hospitals, totaling 1,921 individuals. A sample of 95 respondents was selected using a purposive sampling technique. Purposive sampling is a non-probability technique in which participants are chosen based on specific characteristics or criteria relevant to the study, ensuring that the selected sample appropriately represents the targeted segments of the population.

Bivariate analysis was applied to determine the effect of Performance Architecture implementation on employee performance in the two hospitals. The analysis utilized an independent sample t-test, a parametric statistical test used to compare the mean values of two independent groups. This test helps identify whether there is a statistically

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significant difference in performance outcomes between employees in the hospital that applies the Performance Architecture system and those in the hospital that does not.

Result and Discussion

1. Result

The univariate analysis in this study was carried out by examining the mean values of each performance variable for both hospitals: Undata Regional General Hospital, which has implemented the Performance Architecture system, and Anutapura Regional General Hospital, which has not.

Table 1
Mean Score Analysis

Variable	Performance Architecture	N	Mean
Work Productivity	Undata Regional General Hospital – Implemented	50	16.82
	Anutapura Regional General Hospital – Not Implemented	50	18.16
Variable	Undata Regional General Hospital – Implemented	50	17.66
	Anutapura Regional General Hospital – Not Implemented	50	18.90
Work Productivity	Undata Regional General Hospital – Implemented	50	17.58
	Anutapura Regional General Hospital – Not Implemented	50	18.46
Collaboration Ability	Undata Regional General Hospital – Implemented	50	17.58
	Anutapura Regional General Hospital – Not Implemented	50	18.40
Initiative, Creativity, and Adaptation	Undata Regional General Hospital – Implemented	50	16.36
	Anutapura Regional General Hospital – Not Implemented	50	17.50

Source: Primary Data, 2025

Based on the mean values presented in Table 1, several differences in employee performance levels between Undata Regional General Hospital and Anutapura Regional General Hospital can be observed. For the Work Productivity variable, Undata Regional General Hospital recorded a mean score of 16.82, while Anutapura Regional General Hospital recorded a higher score of 18.16. This suggests that employee productivity at Anutapura Regional General Hospital is slightly higher. One possible explanation is that employees at Undata Regional General Hospital are still adapting to the newly implemented Performance Architecture system, resulting in suboptimal effectiveness during the early phase of adoption.

A similar pattern is seen in the Quality of Service Performance variable, where Undata Regional General Hospital obtained a mean score of 17.66 compared to Anutapura Regional General Hospital's 18.90. Although Undata Regional General Hospital has introduced a structured performance system, its implementation may still require additional time and adjustment before yielding improvements in service quality. For Compliance with Procedures, Undata Regional General Hospital recorded a mean score of 17.58, while Anutapura Regional General Hospital recorded 18.46. This indicates that procedural compliance remains higher among employees at Anutapura

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Regional General Hospital, likely due to stable and long-established work mechanisms, whereas employees at Undata Regional General Hospital are adjusting to new procedural standards introduced under the Performance Architecture system.

The Collaboration Ability variable also shows higher scores at Anutapura Regional General Hospital (18.40) compared to Undata Regional General Hospital (17.58). This difference may be attributed to more consistent internal communication and teamwork structures at Anutapura Regional General Hospital, while Undata Regional General Hospital's recent organizational changes may temporarily affect inter-unit coordination. Finally, the Initiative, Creativity, and Adaptation variable reveals the largest gap, with Undata Regional General Hospital scoring 16.36 and Anutapura Regional General Hospital scoring 17.50. This suggests that employees at Anutapura Regional General Hospital demonstrate stronger adaptive capabilities and innovation, whereas employees at Undata Regional General Hospital may still be adjusting to changes introduced by the new performance framework.

Overall, the univariate analysis shows that all mean scores across the performance variables are higher at Anutapura Regional General Hospital than at Undata Regional General Hospital. Although Undata Regional General Hospital has implemented Performance Architecture, its early-stage application may not yet have produced measurable improvements in employee productivity, compliance, collaboration, or creativity. This condition underscores the need for continued training, mentoring, and periodic evaluation to optimize the implementation of the Performance Architecture system and ensure its positive impact on employee performance and service quality.

Independent Sample t-Test

The Independent Sample t-Test was conducted to determine whether there were differences in mean scores between the two hospitals Undata Regional General Hospital Palu, which has implemented the Performance Architecture system, and Anutapura Regional General Hospital Palu, which has not across several aspects of employee performance. The assessed performance indicators included work productivity, service quality, procedural compliance, collaborative ability, and initiative, creativity, and adaptability. The results revealed varying levels of significance across the variables, indicating the extent to which the implementation of the Performance Architecture system influenced employee performance at Undata Regional General Hospital compared with Anutapura Regional General Hospital.

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Independent Sample t-Test Results

Variable	Statistic	Undata Regional General Hospital	Anutapura Regional General Hospital
Work Productivity	Mean	16.82	18.16
	Sig. (2-tailed)	0.018	
	Mean Difference	-1.34	
Service Quality	Mean	17.66	18.90
	Sig. (2-tailed)	0.024	
	Mean Difference	-1.24	
Procedural Compliance	Mean	17.58	18.46
	Sig. (2-tailed)	0.140	
	Mean Difference	-0.88	
Collaborative Ability	Mean	17.58	18.40
	Sig. (2-tailed)	0.163	
	Mean Difference	-0.82	
Initiative, Creativity, and Adaptability	Mean	16.36	17.50
	Sig. (2-tailed)	0.067	
	Mean Difference	-1.14	

Source: Primary Data, 2025

The findings show that the Work Productivity variable produced a significance value of 0.018 (< 0.05), indicating a significant difference between the two hospitals. The mean score for Anutapura Regional General Hospital (18.16) was higher than that of Undata Regional General Hospital (16.82), suggesting that the implementation of the Performance Architecture system at Undata Regional General Hospital has not yet resulted in measurable improvements in employee productivity. This may be explained by the early phase of system implementation, limited employee understanding of the new mechanism, or suboptimal supervision and evaluation processes.

Similarly, the Service Quality variable demonstrated a significant difference, with a significance value of 0.024 (< 0.05). Anutapura Regional General Hospital obtained a higher mean score (18.90) compared to Undata Regional General Hospital (17.66). This indicates that although Undata Regional General Hospital has adopted the Performance Architecture system, it has not yet been fully effective in enhancing service quality. This condition likely reflects an ongoing adjustment period in which the new system has not been fully integrated into the existing work culture and service practices.

In contrast, the Procedural Compliance variable produced a significance value of 0.140 (> 0.05), indicating no significant difference between the two hospitals. Employee adherence to standard procedures appears relatively consistent across both institutions, suggesting that the introduction of the Performance Architecture system has not yet contributed to measurable changes in procedural compliance.

The Collaborative Ability variable also showed no significant difference, with a significance value of 0.163 (> 0.05). Although Anutapura Regional General Hospital had a slightly higher mean score (18.40) than Undata Regional General Hospital (17.58), the difference was not statistically meaningful. This suggests that collaboration among hospital staff is influenced more by workplace culture, leadership style, and interpersonal relationships than by formal management systems.

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Meanwhile, the Initiative, Creativity, and Adaptability variable produced a significance value of 0.067 (> 0.05), which, although close to the significance threshold, still indicates no significant difference. Anutapura Regional General Hospital again demonstrated a higher mean score (17.50) compared with Undata Regional General Hospital (16.36), implying a tendency for greater employee initiative and adaptability in the hospital without the Performance Architecture system. However, this trend is not statistically strong enough to be considered significant. The ongoing adjustment process at Undata Regional General Hospital, where employees are adapting to a more structured and performance-based system, may account for this result.

Overall, the Independent Sample t-Test results show that of the five variables assessed, only two Work Productivity and Service Quality exhibited significant differences between the two hospitals. Interestingly, Anutapura Regional General Hospital, which has not implemented the Performance Architecture system, demonstrated higher mean scores across most variables. This suggests that the implementation of the system at Undata Regional General Hospital has not yet been optimal in terms of socialization, employee adaptation, or technical execution. These findings highlight that the success of Performance Architecture depends not only on policy adoption but also on employee readiness, managerial support, and the effectiveness of implementation at the operational level.

2. Discussion

Work Productivity

The results of the Independent Sample t-Test indicate a significant difference between Undata Regional General Hospital Palu and Anutapura Regional General Hospital Palu for the Work Productivity variable (Sig. = $0.018 < 0.05$), where the average productivity score of Anutapura Regional General Hospital employees (18.16) is higher than that of Undata Regional General Hospital (16.82). This finding suggests that the implementation of the Performance Architecture at Undata Regional General Hospital has not yet produced a significant positive impact on improving employee productivity.

According to (Kaplan & Norton, 2001) in the Balanced Scorecard framework, productivity is an indicator within the internal process and organizational learning perspectives. An effective performance system should enhance efficiency, innovation, and employees' ability to achieve organizational strategic targets. However, the results of this study indicate that the Performance Architecture at Undata Regional General Hospital has not fully succeeded in aligning organizational strategy with individual behavior (strategic alignment).

This finding is consistent with Lestari (2020), who reported that the Balanced Scorecard implementation at RSUD Dr. Soetomo had not significantly improved employee productivity due to uneven dissemination of the new system. Similarly, (Sari & Nugroho, 2021) argue that performance management systems are only effective when accompanied by adequate training and a clear understanding of performance indicators at all employee levels. In contrast, Yuliani (2022) found differing results, where the implementation of the Performance Architecture at RSUD Abdul Wahab Sjahranie increased employee productivity due to transparent and measurable evaluation mechanisms. From the perspective of organizational behavior theory by Robbins & Judge, (2017), low productivity at Undata Regional General Hospital may stem from reduced work motivation and role ambiguity during the adaptation period to the new system. Employees who do not understand the link between performance indicators and

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rewards tend to show lower work enthusiasm. Furthermore, Permendagri No. 86 of 2017 states that employee productivity is a key component of local government performance evaluation, which can improve only if work indicators and outputs are measured objectively, measurably, and based on results (result-based evaluation) (Kemendagri RI, 2017).

Service Quality Performance

The results show a significant difference between the two hospitals (Sig. = 0.024 < 0.05), with Anutapura Regional General Hospital employees scoring higher in service quality (18.90) compared to Undata Regional General Hospital (17.66). This indicates that the Performance Architecture at Undata Regional General Hospital has not yet produced a measurable improvement in service quality. According to Kaplan & Norton (2001), within the customer perspective, service quality is a key indicator of successful strategy implementation. If the performance system has not influenced service quality, it implies that the feedback loop between evaluation and service improvement is not functioning optimally. This may be due to a lack of integration between the Performance Architecture and the hospital's minimum service standards (SPM).

This finding aligns with Gkrimpizi et al., (2023), who found that performance management systems in public institutions often fail to improve service quality because they focus more on administrative assessment than performance development. However, it contradicts Yuliani (2022), who found that consistent implementation of a performance architecture system improved patient satisfaction and service quality through enhanced employee accountability. From the perspective of organizational behavior theory, Robbins & Judge, (2017) note that service quality is strongly influenced by intrinsic motivation and job satisfaction. New systems such as performance architecture may trigger initial resistance, particularly when employees do not understand the relationship between performance targets and public service delivery. In accordance with Permendagri No. 86 of 2017, public service quality is a key performance indicator that must be evaluated through outcome-based measurement rather than merely process-based assessment (Kemendagri RI, 2017). Therefore, Undata Regional General Hospital needs to strengthen its performance feedback mechanisms to ensure that every employee understands their role in improving service quality.

Procedural Compliance

The study results show a significance value of 0.140 (> 0.05), indicating no significant difference between the two hospitals. Both groups demonstrate relatively similar levels of procedural compliance. Within the framework of Kaplan & Norton, (2001), procedural compliance is part of the internal business process perspective, which ensures organizational processes operate according to standard procedures and deliver added value to service users. The absence of a significant difference suggests that the implementation of the Performance Architecture at Undata Regional General Hospital has not substantially influenced employees' adherence to SOPs, likely because existing procedures have long been established and remain unchanged despite the new system.

This finding is consistent with Putri & Hadi (2022), who reported that the implementation of Permendagri 86 2017 in regional institutions has not significantly improved procedural compliance because system changes are more administrative than substantive. Hasibuan & Arifin (2021) also emphasize that system changes often face

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resistance if not supported by effective communication, resulting in employees continuing to follow previous work patterns.

According to Robbins & Judge (2017), compliance is shaped by organizational culture and leadership style. Thus, even with the introduction of a new performance system, compliance behavior will not change unless work culture and supervision mechanisms also change. This indicates that the effectiveness of the Performance Architecture at Undata Regional General Hospital remains limited to formal aspects and has not yet influenced deeper behavioral dimensions.

Collaborative Ability

The analysis shows no significant difference between the two hospitals regarding collaborative ability ($\text{Sig.} = 0.163 > 0.05$). Although Anutapura Regional General Hospital has a slightly higher mean score (18.40), the difference is not statistically meaningful. According to (Kaplan & Norton, 2001), collaboration is an important component of the learning and growth perspective, which evaluates the organization's ability to foster teamwork, innovation, and knowledge sharing. The absence of a significant difference indicates that the Performance Architecture at Undata Regional General Hospital has not successfully fostered a team-based performance culture.

This finding aligns with Gkrimpizi et al., (2023), who found that public-sector performance systems often fail to enhance collaboration because they are not integrated with team-based reward mechanisms. Conversely, Yuliani (2022) reported increased collaboration in hospitals where performance architecture systems were implemented effectively, as employees were held accountable for cross-unit performance outcomes.

From the perspective of Robbins & Judge (2017), collaboration is influenced by interpersonal factors such as communication, trust, and leadership. This means that the implementation of a performance system alone will not enhance collaboration unless accompanied by changes in communication patterns and internal coordination. Based on Permendagri No 86 (2017), strengthening collaboration across work units is essential for organizational effectiveness, requiring integration across functions and collective outcome-based evaluation.

Initiative, Creativity, and Adaptability

The results show a significance value of 0.067 (> 0.05), indicating no significant difference between the two hospitals, although Anutapura Regional General Hospital has a higher mean score (17.50) compared to Undata Regional General Hospital (16.36). According to Kaplan & Norton (2001), creativity and adaptability are important indicators within the learning and growth perspective, reflecting an organization's ability to innovate and learn from experience. These findings suggest that the Performance Architecture at Undata Regional General Hospital has not sufficiently stimulated a culture of innovation and organizational learning.

This finding is consistent with Lestari (2020), who reported that performance management systems in hospitals often fail to enhance employee creativity because they place more emphasis on formal measurement than capability development. However, this result contradicts Sari & Nugroho (2021), who found that performance systems accompanied by continuous training can improve employees' adaptability to change.

From an organizational behavior perspective, Robbins & Judge (2017) assert that individual creativity thrives when the organization provides an environment that supports innovation, rewards new ideas, and minimizes fear of failure. In accordance with

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Permendagri No. 86 (2017), employee initiative and creativity are components of individual performance evaluation that must be developed through productive and innovative work culture. Therefore, to improve these aspects, Undata Regional General Hospital must strengthen organizational learning and enhance mechanisms that recognize and reward employee ideas and innovations.

Conclusion

The implementation of the performance architecture at Undata Regional General Hospital has not yet shown optimal results across various aspects of employee performance. Employee productivity at Anutapura Regional General Hospital is notably higher, indicating that the new system at Undata Regional General Hospital still requires adjustment and strengthened implementation. In terms of service quality, Anutapura Regional General Hospital also demonstrates better performance, suggesting the need for a thorough evaluation to ensure that the performance architecture at Undata Regional General Hospital can produce tangible improvements in patient care. With regard to procedural compliance and collaborative ability, there are no significant differences between the two hospitals, indicating that the system has not directly contributed to enhancing adherence to procedures or teamwork. Additionally, employees at Anutapura Regional General Hospital tend to exhibit higher levels of initiative, creativity, and adaptability, suggesting that the performance architecture at Undata Regional General Hospital has not yet succeeded in fostering an innovative and responsive work culture. Overall, the findings confirm that the implementation of the performance architecture at Undata Regional General Hospital still requires strategic improvements to effectively enhance employee performance across all dimensions.

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