

Human Resources Performance Improvement Model Through Planning Skills and Transformational Leadership with Consolidation Capability as a Mediating Variable

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Abstract. *This study aims to develop a model for improving human resource performance in the public procurement sector through the roles of planning skills and transformational leadership, with consolidation capability as a mediating variable. A quantitative approach was employed using Partial Least Squares (PLS) analysis on 200 respondents who were procurement personnel in government institutions. The results indicate that planning skills significantly affects human resource performance both directly and indirectly through the mediation of consolidation capability. In contrast, the direct effect of transformational leadership on performance is not significant, but becomes significant when mediated by consolidation capability. These findings emphasize that improving human resource performance is not solely dependent on technical competencies or leadership style, but also on the organization's ability to consolidate processes, resources, and needs across functional units. In this regard, consolidation capability plays a strategic mediating role by translating managerial input into measurable performance outcomes. This study contributes theoretically to the development of public procurement literature and offers practical recommendations for policymakers and procurement managers.*

Keywords: *Capability; Consolidation; Planning; Transformational.*

1. Introduction

Procurement of goods and services in the public sector is a crucial element in effective, efficient, and accountable governance. In the public sector, procurement of goods and services is a strategic aspect in achieving organizational goals (Nurmansyah & Hariyati, 2021). According to Thai (2009), efficient and transparent public procurement can have a positive impact on the overall economy. Purchasing costs account for approximately 60% of the total budget (Gelderman & Van Weele, 2005). Therefore, procurement management is crucial because the better the procurement function is executed, the more positive the impact on human resource performance within the organization.

Good procurement encompasses not only proper budget management but also the quality of goods or services provided to meet public needs. In many countries, including Indonesia, the public procurement sector often faces significant challenges that hinder the achievement of national development goals, such as inefficiency, lack of transparency, potential corruption, and slow and bureaucratic processes (Bhatia & Bhatti, 2019). In this context, poor procurement management can lead to wasted state funds, a decline in the quality of public services, and a decline in public trust in government institutions (Fiala, 2016). Inefficient or non-transparent procurement can risk budget wastage, a decline in the quality of public services, or even open up opportunities for corruption (Kettunen, 2015).

The Corruption Eradication Commission (KPK) (2024) reported 339 cases of corruption related to the procurement of goods and services (PBJ) from 2004 to 2023. The most cases were recorded in the previous year, with 63 cases, resulting in PBJ corruption ranking second only to gratuities or bribery. Planning, procurement, contract drafting and signing, implementation, supervision, and reporting are examples of fraud or misappropriation within the PBJ scope. Given this phenomenon, it is necessary to implement a financial management strategy due to government spending to achieve value for money.

Transformational leadership is a key factor in driving successful procurement consolidation. Leaders with a transformational leadership style are able to provide a clear vision, inspire and motivate subordinates, and encourage innovation within the organization (Bass & Riggio, 2006). A study by Gallup (2020) found that managers or team leaders themselves account for 70% of the variation in team engagement. These findings emphasize the crucial role managers play in creating a supportive and motivating work environment for employees. In the context of public procurement, transformational leadership plays a role in building a collaborative work culture, increasing stakeholder engagement, and ensuring more effective and sustainable procurement strategy implementation (Yukl, 2013).

Consolidation capability enables organizations to manage resources more efficiently, reduce the risk of procurement failure, and improve coordination between work units (Thai, 2017). In the context of public procurement, the term consolidation in this study is specifically interpreted as cross-functional consolidation, namely the ability of individuals or procurement human resources to unite processes, needs, and resources from various work units in a coordinated and integrated manner. Cross-functional consolidation is important because the procurement process does not only involve one department, but requires coordination between planning, finance, goods users, and procurement implementers. Consolidation capability is positioned as a mediating variable that bridges the influence of planning skills and transformational leadership on human resource performance. This means that good planning and effective leadership are believed not to directly improve human resource performance, but rather through mechanisms to increase organizational capacity in managing procurement consolidation efficiently and integratedly. This mediation reflects the strategic role of consolidation capability in translating managerial input into measurable performance outcomes.

Furthermore, although research on transformational leadership has been extensively studied in the private sector, studies specifically examining its impact on HR performance in the public procurement sector are still limited. Furthermore, although consolidation capability is considered a factor that can improve procurement efficiency and effectiveness (Thai, 2017), research examining its role as a moderating variable in the relationship between planning and transformational leadership on HR performance is still scarce.

2. Research Methods

This research is explanatory research. According to Creswell (2014), explanatory research aims to explain the relationships between variables within a phenomenon. This research focuses more on the "why" and "how" of these relationships, thus providing an understanding of the phenomenon being studied. The research variables include planning skills, transformational leadership, consolidation capability, and human resources performance, with indicators.

3. Results and Discussion

3.1. Description of the Research Object

The study was conducted in the government sector, representing human resources in goods/services procurement or representatives of procurement actors with at least two years of experience and familiarity with procurement consolidation schemes. Data were collected from 200 respondents from a questionnaire distributed via Google Forms. Respondents included KPA (Procurement Commission), PPK (Procurement Officer), Procurement Officer, Selection Working Group, Head of UKPBJ (Procurement Unit), and Probity Advisor at Ministries/Institutions/Regional Governments.

As part of the preliminary analysis, a description of the respondents' characteristics is presented first to provide a more complete context for the data obtained. This information was collected through questionnaires completed by the respondents who were the focus of the study. These characteristics include gender, age range, length of service, education, and strategic position. Each of these aspects is further elaborated in the following sections to further enhance our understanding of the respondents' backgrounds.

Respondent Distribution Table by Gender

Genital Type	Frequency	Percentage (%)
Man	180	90
Woman	20	10
Total	200	100

Source: Human Resources for Procurement of Goods/Services (Data Processed 2025)

Based on the data in Table, the majority of respondents were male, at 180 (90%), while 20 (10%) were female. This gap indicates that men remain dominant in the procurement of goods and services, at least within this research context. This dominance may reflect the preponderance of men in strategic procurement positions. This is noteworthy.

It is important to read the results of the analysis, considering that gender perspectives can influence perspectives and experiences in carrying out procurement tasks.

Descriptive statistics from the questionnaire results are presented to provide an overview of how respondents responded to all questions. This presentation aims to make it easier for readers to understand the tendencies or patterns of respondents' responses to each variable studied. To determine the intensity or level of tendency for each variable, a calculation is performed by multiplying the highest score for each variable by the number of questions. The results are then divided into three categories: Low/Poor, Fair/Medium, and High/Good. These categories help interpret the results in a more structured and understandable manner.

Based on the data processing results, it was found that the planning skill variable consists of four main indicators. Overall, this variable received an average score of 4.275, which falls into the High category. This indicates that respondents' perceptions of planning in the public procurement process are very positive.

The indicator "able to clearly identify needs" achieved the highest average score of 4.385, with the majority of respondents (94%) rating it as Strongly Agree (SS). No respondents stated Disagree or Strongly Disagree. This indicates that the majority of respondents felt that being able to clearly identify needs is an important part of the planning process.

The average score for the indicator "creating structured and logical plans" was 4.225, also in the High category. A total of 88% of respondents stated Agree (S) and Strongly Agree (SS), indicating that the majority felt capable of developing plans with a logical structure and flow of thought.

The indicator "ability to prioritize appropriately" received an average score of 4.275, with the majority of respondents (82%) stating "Strongly Agree." This assessment reflects respondents' strong ability to effectively prioritize when developing procurement plans.

The indicator "ability to analyze and manage risk" achieved an average score of 4.215, also in the high category. Although there was some hesitation from a small number of respondents (around 12% voted "Somewhat Agree"), overall, respondents felt quite confident in addressing risks in the planning process.

The analysis shows that human resources performance in public procurement is high across all measured aspects. Respondents highly valued accountability and regulatory compliance, which were the most prominent aspects. This finding confirms that the success of public procurement is strongly supported by the quality and professionalism of human resources, particularly in accountable decision-making and the application of efficiency principles and

compliance with applicable regulations.

3.2. Hypothesis testing

Hypothesis testing in this study was conducted using a t-test to assess the significance of the relationship between variables. The t-test is a form of parametric statistical analysis used to identify the extent to which an independent variable influences or explains a dependent variable. According to Ghazali (2012) and Magdalena and Angela Krisanti (2019), the t-test is used to measure the strength of the influence of an independent variable on the dependent variable in a research model.

In practice, the t-test is conducted with a significance level of 0.05 or 5 percent. The decision regarding the hypothesis is determined based on the calculated t-value and its significance level. The hypothesis will be accepted if the calculated t-value exceeds 1.96 or the significance value is below 0.05. Conversely, the hypothesis will be rejected if the calculated t-value is less than 1.96 or the significance value is greater than 0.05. With this approach, the t-test provides a basis for evaluating whether the influence of the variables is significant indicated by the independent variables in the model are truly statistically significant.

Path Coefficients Table

Relationship between variables	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Note
<i>Planning Skill -> Human Resources Performance</i>	0.269	0.075	3,560	0.000	Accepted
<i>TransformationalLeadership -> Human Resources Performance</i>	0.098	0.058	1,697	0.090	Rejected
<i>Planning Skill -> Consolidation Capability</i>	0.680	0.048	14,132	0.000	Accepted
<i>TransformationalLeadership -> Consolidation Capability</i>	0.255	0.056	4,527	0.000	Accepted
<i>Consolidation Capability - > Human Resources Performance</i>	0.539	0.082	6,551	0.000	Accepted

Source: Processed Primary Data, 2025

Based on the results of hypothesis testing using the t-test through path coefficient analysis, it was found that not all relationships between variables in this research model were statistically significant. The test was conducted at a 5% significance level ($\alpha = 0.05$), and decisions were made based on the t-statistic and p-value, with the following test results:

1) The Relationship between Planning Skills and Human Resources Performance

The test results showed a t-value of 3.560 and a p-value of 0.000. Since $t > 1.96$ and $p < 0.05$, this indicates that planning skills have a positive effect on human resource performance.

2) The Relationship between Transformational Leadership and Human Resources Performance

The test results showed a t-value of 1.697 with a p-value of 0.090. The t-value < 1.96 and the p-value > 0.05 . The positive coefficient value (original sample) indicates that transformational leadership has a positive but insignificant relationship with human resource performance.

3) The relationship between Planning Skill and Consolidation Capability

The test results showed a t-statistic value of 14.132 and a p-value of 0.000. Since the t-value is > 1.96 and $p < 0.05$, these results indicate that planning skills have a positive effect on consolidation capability.

4) The Relationship between Transformational Leadership and Consolidation Capability The test results show a t-value of 4.527 and a p-value of 0.000. This is because the t-value is > 1.96 and $p < 0.05$. This indicates that transformational leadership has a positive effect on consolidation capability.

5) Connection between Consolidation Capability to Human Resource Performance

The test results obtained a t-value of 6.551 and a p-value of 0.000. With these values, it was concluded that the t-value > 1.96 and $p < 0.05$, which means that consolidation capability has a positive effect on human resources performance.

Overall, of the five hypotheses tested, four were accepted because they met the statistical significance criteria, while one hypothesis was rejected because it did not show a strong enough influence at the 5% significance level.

This research model includes a mediation relationship, so further testing is needed to confirm the role of the mediating variable in the model. This testing is conducted to determine whether the mediating variable plays a role in bridging the influence between the independent and dependent variables. One approach used to test the mediation relationship is through Moderated Regression Analysis (MRA), estimated using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method, as explained by Ghazali and Latan (2015).

This research model is designed to examine the relationship between planning skills and

transformational leadership on human resource performance, both directly and indirectly through consolidation capability as a mediating variable. This approach is based on the conceptual framework that human resource performance in public procurement is influenced not only by individual competencies but also by collaborative and integrated work systems. Therefore, leaders capable of inspiring change and planners capable of strategically directing the organization are needed. In this section, each hypothesis will be discussed in depth, accompanied by an analysis based on the questionnaire results and their relationship to theory and previous study findings.

H1: Planning Skills have a positive effect on Human Resources Performance The first hypothesis was accepted ($t = 3.560$; $p = 0.000$). This indicates that planning skills have a significant effect on HR performance. The questionnaire results showed that the majority of respondents agreed to strongly agreed with indicators such as "I am able to organize work plans logically," "I am able to determine work priorities correctly," "I am able to identify the needs required in my work," and "I am able to predict obstacles in my work." These findings indicate that HR with strong planning skills tend to have clear direction.

work, time efficiency, and accuracy in achieving targets.

This finding aligns with a study by Ivana and Marzuki (2023), which concluded that HR planning significantly influences employee performance in government. Similarly, research by Chowhan, Mann, and Budworth (2024) found that managerial activities, including planning, have a positive correlation with organizational performance.

H2: Transformational Leadership has a positive influence on HumanResource Performance

This hypothesis was rejected ($t = 1.697$; $p = 0.090$). This means that, although the correlation coefficient is positive, the influence of transformational leadership on HR performance is not statistically significant. The questionnaire results show that although respondents agreed that their leader "Encourages me to work

with enthusiasm and optimism", "Setting an example at work", and "Prioritizing the interests of the organization above personal interests", they show less direct connection between these experiences and their own performance results. This may indicate that transformational values are not yet sufficiently embedded to encourage real changes in work behavior.

This rejection contradicts the study by Roisyah & Viyani (2024), which stated that transformational leadership influences performance through empowerment. However, in the context of this study, this influence appears to be more indirect and will only be felt if supported by an integrative work system.

H3: Planning Skill has a positive effect on Consolidation Capability

This hypothesis was strongly accepted ($t = 14.132$; $p = 0.000$). The questionnaire results

showed that respondents agreed with indicators such as "I can make accurate needs estimates," "I am able to develop cross-work unit procurement implementation strategies," "I am able to manage risks in procurement implementation," and "I am able to develop a logical procurement implementation schedule." High scores on these indicators indicate that mature planning skills are the main foundation in strengthening consolidation capabilities.

This finding is in line with the study by Ghezzi et al. (2023) which links planning maturity with system interoperability in the public sector, as well as Deschamps & Potin (2025) who emphasize the importance of standardizing contract information in procurement consolidation.

H4: Transformational Leadership has a positive influence on Consolidation *Capability*

This hypothesis was accepted ($t = 4.527$; $p = 0.000$). The questionnaire results showed that respondents perceived transformational leadership through statements such as "My leader encourages cross-work unit cooperation," "My leader supports an integrated procurement system across work units," and "My leader encourages positive changes in procurement implementation." This proves that transformational leadership contributes to the creation of a more collaborative and coordinated work system.

This finding is reinforced by the study by Sutisna et al. (2024) which states that transformational leadership style supports synergy and collaboration, as well as promote an integrated work culture.

H5: Consolidation Capability has a positive effect on Human Resources *Performance*

The fifth hypothesis was accepted ($t = 6.551$; $p = 0.000$). Respondents gave high scores to indicators such as "Procurement implementation is more efficient," "Procurement processes are more coordinated," "Coordination between work units is improved," and "Tasks are clearer." This indicates that when an organization has good consolidation capabilities, the work environment becomes more structured, coordinated, and supports improved individual performance.

This finding is consistent with studies by Nkunda et al. (2023) and Stütz et al. (2023), which show that procurement consolidation impacts efficiency, collaboration, and decision-making, all indicators of HR performance. This suggests that the mediating role of consolidation capability is crucial because it reflects the extent to which procurement HR is able to bridge processes across work units.

H6: Consolidation Capability mediates the relationship between Planning Skill and *Human Resources Performance*

This hypothesis was accepted ($t = 6.356$; $p = 0.000$). Questionnaire data showed that respondents who scored high on the planning skills indicator also scored high on the HR consolidation and performance indicators. This suggests that the influence of planning skills

on HR performance will be more optimal if supported by the organization's ability to efficiently integrate procurement strategies and processes.

This model reflects a form of indirect mediation reinforced by Zhao et al.'s (2010) approach, and supports Prananda & Mulyana's (2022) argument that planning needs to be facilitated by an integrated work system to have maximum impact.

H7: Consolidation Capability mediates Transformational relationships *Leadership* on Human Resources Performance

This hypothesis was also accepted ($t = 3.374$; $p = 0.001$). Indicators in the questionnaire showed that respondents who agreed with transformational leadership values also showed positive experiences in aspects of consolidation, such as cross-unit coordination and work efficiency. This indicates that the transformation of work behavior expected of new leaders is effective if supported by an adequate consolidation system.

These findings reinforce the mediation theory by Hair et al. (2017) and Bass & Riggio (2006), which states that transformational leadership has a strong impact when implemented through supportive organizational structures and processes.

4. Conclusion

This study aims to analyze the influence of planning skills and transformational leadership on human resource performance, with consolidation capability as a mediating variable. Based on the results of data analysis on 200 respondents involved in the government procurement process, several important findings were obtained that form the basis for the following conclusion: consolidation capability has proven to be a middle door that bridges the roles of planning and leadership in driving human resource performance. Transformational leadership is the main trigger for the formation of this capability, while planning skills strengthen it. Therefore, organizations need to focus on developing human resources who are not only technically skilled, but also able to work across units in an integrated manner.

5. References

- Abdillah, N., Nurmaulidya, A., & Hidayat, DR (2020). Planned Happenstance in Career Planning and Decision Making. *Undiksha Scientific Journal of Guidance and Counseling*, 11(1).
- Astuti, R. (2022). Effectiveness of Budget Planning and Realization in Procurement of Goods and Services. *Journal of Public Management*, 12(3), 45-60.
- Barnet, C., Barracket, J., & Luke, B. (2010). Procurement and social enterprise: Exploring the potential for sustainable public procurement. *Journal of Business Ethics*, 98(1), 67-81.
- Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. Free Press.

- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.). Psychology Press.
- Bhatia, S. K., & Bhatti, M. S. (2019). Public procurement and corruption: A review of the literature. *International Journal of Public Administration*, 42(7), 595-608.
- Bovens, M. (2007). Analyzing and assessing accountability: A conceptual framework. *European Law Journal*, 13(4), 447-468.
- Campbell, J. W. (2018). Efficiency, incentives, and transformational leadership: Understanding collaboration preferences in the public sector. *Public Performance & Management Review*, 41(2), 277–299. <https://doi.org/10.1080/15309576.2017.1403332>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
- Elliott, G., Day, M., & Lichtenstein, S. (2019). Strategic planning activity, middle manager divergent thinking, external stakeholder salience, and organizational performance: A study of English and Welsh police forces. *Public Management Review*. <https://doi.org/10.1080/14719037.2019.1635194>.
- Deschamps, A., & Potin, L. (2025). Processing and consolidation of open data on public procurement in France (2015–2023). *Data in Brief*, 58, 111277. <https://doi.org/10.1016/j.dib.2025.111277>
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital, and competitive advantage: Is the field going in circles? *Human Resource Management Journal*, 27(1), 1-21.
- Fauzi, M. (2023). Transformational leadership and organizational commitment: A review. *International Journal of Business and Management*, 18(2), 45-60.
- Fiala, P. (2016). Public procurement and its importance for good governance. *International Journal of Public Sector Management*, 29(3), 216-229.
- Gaspersz, E. J. (2024). Influence of Transformational Leadership and Teacher Collaboration on Teachers' Ability in Implementing Interdisciplinary Learning. *Academy of Education Journal*, 15(1), 718–733. <https://doi.org/10.1080/13603124.2016.1142119>
- Gallup. (2020). How to Improve Employee Engagement in the Workplace. Gallup, Inc. <https://www.gallup.com/workplace/285674/improve-employee-engagement-workplace.aspx>
- Gelderman, C. J., & van Weele, A. J. (2005). Strategic direction through public procurement:

- The role of contracting in fostering innovation. *Journal of Purchasing and Supply Management*, 11(3-4), 27-38.
- Ghezzi, R., Kolehmainen, T.S., Setälä, M., & Mikkonen, T. (2023). Enterprise architecture as an enabler for a government business ecosystem: Experiences from Finland. arXiv preprint. <https://arxiv.org/abs/2309.08266>
- Gould, M. (2017). Procurement Reform and Organizational Performance: A Systematic Review. *Journal of Public Administration*, 29(4), 67-85.
- Ghozali, I., & Latan, H. (2015). *Partial Least Squares: Concepts, Techniques, and Applications using SmartPLS 3.0*. Diponegoro University Publishing Agency.
- Habeeb, M., & Eyupoglu, S. Z. (2024). Transformational leadership and organizational performance: A systematic review and meta-analysis. *Journal of Business Research*, 148, 102-118.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications.
- Han, S.-H., Oh, E.G., & Kang, S.P. (2020). The link between transformational leadership and work-related performance: Moderating-mediating roles of meaningfulness and job characteristics. *Leadership & Organization Development Journal*, 41(4), 519–533. <https://doi.org/10.1108/LODJ-04-2019-0181>.
- Harini, S., Silaningsih, E., & Putri, ME (2022). The influence of market orientation, creativity, and product innovation on the marketing performance of MSMEs. *Journal of Business and Management Inspiration*, 6(1), 67–82.
- Hidayah, IN, & Sari, DK (2022). The Influence of Transformational Leadership Style, Organizational Culture.