

The Effects of Transformational Leadership, Motivation, Competence, and Commitment on Innovation Capability and Their Implications for the Performance of Civil Servants (A Study of the West Java Provincial Department of Industry and Trade)

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Keywords:	Abstract
transformational leadership; work motivation; competence; commitment; innovation capability.	This study examined the effects of transformational leadership, work motivation, competence, and commitment on innovation capability and their implications for the performance of civil servants (Aparatur Sipil Negara [ASN]) at the Department of Industry and Trade (Dinas Perindustrian dan Perdagangan [Disperindag]) of West Java Province. The study was conducted based on preliminary findings indicating that employee performance, innovation capability, transformational leadership, motivation, competence, and commitment were categorized as relatively good but had not yet reached optimal levels. A quantitative approach using descriptive and verificative methods was applied. The study employed a saturated sampling technique involving all 350 ASN employees at Disperindag West Java. Data were collected through a Likert-scale questionnaire and analyzed using Structural Equation Modeling (SEM) with LISREL 8.80. The results indicated that transformational leadership, work motivation, competence, and commitment simultaneously and partially had significant positive effects on innovation capability, accounting for 77.63% of its variance. Furthermore, innovation capability had a significant positive effect on employee performance, explaining 83.41% of the variance. Among the examined factors, transformational leadership had the strongest influence on innovation capability (22.90%), followed by competence (19.78%), motivation (18.37%), and commitment (16.58%). Innovation capability functioned as a key mediating variable connecting the four antecedent factors with employee performance. The structural model demonstrated good fit criteria, confirming its theoretical adequacy. These findings highlighted the importance of an integrated human resource strategy to strengthen leadership, motivation, competence, and commitment in improving innovation capability and ASN performance.

INTRODUCTION

National economic development is fundamentally directed toward building a strong, self-reliant, and competitive economic structure capable of creating sustainable public welfare (Naidu, 2026; Soegiharto et al., 2026; Van Thanh & Tri, 2025; Widyastuti et al., 2026). Within this context, the industry and trade sectors occupy strategic positions as drivers of economic growth, creators of added value, facilitators of market expansion, catalysts for investment, and sources of employment. Law No. 3 of 2014 on Industry positions the industrial sector as a driver of the national economy through strengthening industrial structures, developing industrial resources, and increasing the added value of natural resources. Meanwhile, Law No.

7 of 2014 on Trade positions the trade sector as an instrument for facilitating the distribution of goods and services, strengthening domestic markets, and increasing export capacity. As part of regional autonomy under Law No. 23 of 2014 on Regional Government, the West Java Provincial Government, through the Department of Industry and Trade (Dinas Perindustrian dan Perdagangan/Disperindag), is responsible for managing these two strategic sectors to support the province's 2025–2030 Regional Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Daerah [RPJMD]), which emphasizes strengthening policy coordination and improving policy quality to achieve superior development outcomes in West Java (Herawati & Sunjaya, 2022; Hidayat, 2024; Kumape et al., 2025; Suaedi et al., 2026).

The human resources responsible for implementing this mandate are the State Civil Apparatus (Aparatur Sipil Negara [ASN]) of Disperindag West Java. Their management is guided by national policies on ASN performance management, including Regulation of the Minister of PANRB No. 6 of 2022, as well as regional policies concerning ASN recruitment and merit-based bureaucratic reform, including Governor Regulation No. 52 of 2020 and the West Java Bureaucratic Reform Road Map 2020–2025. Employee performance at Disperindag West Java is measured through the annual Employee Performance Standard (Standar Kinerja Pegawai [SKP]), with a minimum performance threshold of 80. Data from January to December 2021 indicated an overall average SKP score of 87.48, categorized as “good,” with organizational commitment receiving the lowest score among the assessed components (82.81). However, more recent internal performance appraisal data from 2024 (Table 1) showed that the overall average score across three main appraisal clusters—work achievement, working relationships, and personal qualities—was 77, corresponding to a “fairly good” (cukup) category rather than a “good” category. This finding indicated that employee performance had not yet reached an optimal level.

Table 1. Employee Performance Appraisal of Disperindag West Java Province, 2024

Appraisal Cluster	Average Score
I. Work Achievement (job understanding, diligence, knowledge, quality and quantity of output)	77
II. Working Relationships (attitude toward superiors, peers, subordinates and the public)	77
III. Personal Qualities (integrity, diligence, dedication, initiative, capacity for growth)	78
Overall Average	77

Source: Disperindag West Java Province, 2024 (translated by the authors).

These findings were supported by a preliminary survey conducted by the researchers involving 30 employees, which examined employee performance, innovation capability, transformational leadership, work motivation, competence, and organizational commitment. The results, summarized in Table 2, showed that all six constructs were consistently categorized as “fairly good” (55–66%), remaining below the “good” category threshold and indicating that improvements were still needed across the overall research model.

Table 2. Preliminary Survey Results (n = 30 employees)

Variable	Weakest Dimension	Strongest Dimension	Overall Score (%)
Employee Performance	Quality of work output (54.00%)	Integrity (70.00%)	59.62
Innovation Capability	Relative advantage (56.67%)	Trialability (69.33%)	63.11
Transformational Leadership	Intellectual stimulation (56.00%)	Individualized consideration (64.67%)	59.07
Work Motivation	Need for achievement (58.67%)	Need for power (64.67%)	60.44
Competence	Technical competence (55.33%)	Managerial competence (60.67%)	57.56
Commitment	Continuance / normative commitment (62.0–62.7%)	Affective commitment (72.00%)	65.56

Source: Preliminary survey, 2025 (translated and summarized by the authors).

Employee performance is theoretically understood as the quality and quantity of work achieved by individuals in carrying out assigned responsibilities, which is influenced by individual abilities, motivation, organizational conditions, and psychological factors (Wibowo, 2021; Dessler, 2021; Armstrong, 2022). Innovation capability, defined as the ability to generate and implement new ideas, practices, or solutions that create added value, has increasingly been recognized as a critical factor in improving public-sector performance, as public organizations that fail to innovate may experience limitations in service delivery effectiveness (Rogers, 2020; Cohen & Eimicke, 2021; Putra, 2020). Leadership also plays an important role in organizational success, as ineffective leadership direction may weaken the alignment between individual objectives and organizational goals (Robbins, 2020). Field observations at Disperindag West Java indicated that leadership practices had not yet been fully effective, as leaders tended to involve subordinates primarily in procedural matters rather than substantive decision-making processes, potentially resulting in decisions that were less aligned with organizational needs. Similarly, work motivation, competence, and organizational commitment are important factors influencing performance (Amin, 2022; Hajiali et al., 2022; Isbat et al., 2024; Rachman, 2022; Widarko & Anwarodin, 2022). Employees with low motivation tend to demonstrate lower discretionary effort (Mangkunegara, 2020), while competence, consisting of skills, personal characteristics, and knowledge reflected through job-related behavior, serves as a foundation for effective task execution (Wibowo, 2020). Furthermore, organizational commitment represents employees' psychological attachment and loyalty that encourage them to prioritize organizational interests over personal interests (Sopiah et al., 2020; Putri & Sunarsi, 2020).

Given the strategic role of Disperindag West Java in regional economic development and the evidence of suboptimal performance, identifying key factors that enhance civil servant innovation and performance has become an important research priority. This study addressed this issue by providing empirical evidence regarding the role of transformational leadership, work motivation, competence, and organizational commitment in strengthening innovation

capability and improving employee performance. The novelty of this study lies in its comprehensive integrative model, which positions innovation capability as a mediating variable that connects these four antecedent factors with employee performance within a specific Indonesian public-sector context. This study aimed to analyze the direct and indirect effects among these variables, contributing to theoretical development and practical human resource management strategies in the public sector. The findings are expected to provide evidence-based insights for policymakers and managers at Disperindag West Java in developing more effective human resource strategies to improve innovation and performance.

Taken together, these conditions indicate that employee performance and innovation capability at Disperindag West Java are closely associated with the combined roles of transformational leadership, work motivation, competence, and organizational commitment. Although previous studies have examined these relationships individually, research integrating all four antecedents with innovation capability as a mediating variable explaining civil servant performance, particularly within a provincial industry and trade agency, remains limited. This research gap formed the basis of the present study entitled “The Effect of Transformational Leadership, Motivation, Competence, and Commitment on Innovation Capability and Its Implications for the Performance of Civil Servants at the Department of Industry and Trade of West Java Province.”

Based on the background described above, this study aimed to examine and analyze: (1) the conditions of transformational leadership, work motivation, competence, and commitment among ASN at Disperindag West Java; (2) ASN innovation capability; (3) ASN performance; (4) the simultaneous and partial effects of transformational leadership, motivation, competence, and commitment on innovation capability; and (5) the effect of innovation capability on ASN performance.

METHOD

This study employed a quantitative approach to analyze numerical data using statistical methods. In accordance with its descriptive and verificative objectives, the study applied a combination of descriptive and explanatory survey methods. Data were collected directly from respondents to describe the research variables, including transformational leadership, work motivation, competence, commitment, innovation capability, and employee performance, and to test the formulated causal hypotheses. The unit of analysis consisted of individual ASN employees at the Department of Industry and Trade (Dinas Perindustrian dan Perdagangan [Disperindag]) of West Java Province. The study used a cross-sectional design, with data collected once during the research period from March to October 2025.

Research Design and Variables

The research design followed a standard sequence: preliminary study and background formulation, problem identification, review of relevant theory and prior findings, hypothesis formulation, selection of research method and analytical tools, instrument testing (validity and reliability), data collection and analysis, hypothesis testing, and conclusions and recommendations (adapted from Sugiyono, 2020). The study involved three sets of variables: four exogenous (independent) variables — transformational leadership (X1), work motivation (X2), competence (X3), and commitment (X4); one intervening variable — innovation

capability (Y); and one endogenous (dependent) variable — employee performance (Z). Each variable was operationalized into dimensions and indicators derived from established theory (e.g., Bass and Avolio’s transformational leadership dimensions of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) and translated into Likert-scale questionnaire items (1 = strongly disagree to 5 = strongly agree, with reverse scoring for negatively worded items).

Population and Sample

The population comprised all ASN employees of Disperindag Jabar, consisting of civil servants (PNS), government employees under work agreements (P3K), and part-time P3K staff, totaling 350 employees (Table 3). Given the relatively small and fully accessible population, a saturated sampling (census) technique was used, in which the entire population served as the sample (n = 350).

Table 3. Population and Sample of ASN at Disperindag West Java Province

Employee Category	Number
Civil Servants (PNS)	265
Government Employees under Work Agreement (P3K)	32
Part-time P3K Employees	53
Total	350

Source: Disperindag West Java Province, 2026.

Instrument Testing and Data Analysis

Validity was tested using SPSS 27 by correlating each item score with the total score, and reliability was assessed with Cronbach’s alpha, using a critical value of 0.700 as the acceptance threshold. Normality was tested using the one-sample Kolmogorov–Smirnov test, with data considered normally distributed when the significance level was ≥ 0.05 . Descriptive analysis was used to characterize each variable, with mean scores classified into five categories (very poor, poor, fairly good, good, very good) based on class-interval ranges. Verificative analysis, used to test the research hypotheses, employed Structural Equation Modeling (SEM) with the LISREL 8.80 program. SEM was selected because it allows three tasks to be performed simultaneously: assessment of the validity and reliability of latent constructs (equivalent to confirmatory factor analysis), estimation of a predictive path model, and construction of a structural model showing direct and indirect effects among latent variables. Two structural equations were estimated:

Structural Model 1 (formation of innovation capability): $Y = \gamma_1 X_1 + \gamma_2 X_2 + \gamma_3 X_3 + \gamma_4 X_4 + \zeta_1$

Structural Model 2 (formation of employee performance): $Z = \beta Y + \zeta_2$

Simultaneous hypotheses (H1) were tested using the F-distribution, rejecting H0 when $F_{count} > F_{table}$; partial hypotheses (H2–H6) were tested using the t-distribution, rejecting H0 when $t_{count} > t_{table}$, at a 5% significance level. Model adequacy was further evaluated using Goodness-of-Fit (GOF) indices, including the Chi-square statistic, GFI, AGFI, RMSEA, ECVI, TLI/NNFI, NFI, IFI, CFI, PGFI, and PNFI, and by four criteria for econometric model feasibility: theoretical plausibility, accuracy of parameter estimates, explanatory ability, and forecasting ability.

RESULTS AND DISCUSSION

Respondent Characteristics

Of the 350 ASN respondents, the majority were male (73.14%) and aged 31–40 years (39.60%), reflecting a workforce in its productive career stage. Most respondents held a Bachelor's degree (S1, 44.55%), consistent with the professional and technical demands of the agency's work, and the largest tenure group had 6–15 years of service (42.08%), indicating a reasonably experienced workforce (Table 4).

Table 4. Respondent Characteristics (n = 350)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	256	73.14
	Female	94	26.86
Age	< 30 years	52	14.85
	31–40 years	139	39.60
	41–50 years	113	32.18
	> 50 years	47	13.37
Education	Senior High School	90	25.74
	Diploma	78	22.28
	Bachelor's (S1)	156	44.55
	Master's (S2)	26	7.43
Tenure	< 5 years	52	14.85
	6–15 years	147	42.08
	16–25 years	107	30.69
	> 26 years	43	12.38

Source: Processed questionnaire data, 2026.

Instrument Validity, Reliability, and Normality

All 114 questionnaire items across the six variables were tested for validity by correlating item scores with total variable scores; every item exceeded the critical r-value and was retained. Reliability testing (Table 5) showed Cronbach's alpha coefficients well above the 0.700 threshold for all six variables, confirming that the research instrument was both valid and reliable.

Table 5. Reliability Test Results

Variable	Cronbach's Alpha	Critical Value	Conclusion
Transformational Leadership	0.900	0.700	Reliable
Work Motivation	0.890	0.700	Reliable
Competence	0.935	0.700	Reliable
Commitment	0.946	0.700	Reliable

Variable	Cronbach's Alpha	Critical Value	Conclusion
Innovation Capability	0.903	0.700	Reliable
Employee Performance	0.907	0.700	Reliable

Source: SPSS 27 output, 2026.

The one-sample Kolmogorov–Smirnov normality test (Table 6) produced Asymp. Sig. (2-tailed) values above 0.05 for all six variables, indicating that the data for every construct were normally distributed and therefore suitable for parametric SEM analysis.

Table 6. One-Sample Kolmogorov–Smirnov Normality Test

Variable	Mean	Std. Deviation	Asymp. Sig. (2-tailed)
Transformational Leadership	48.47	8.69	0.102
Work Motivation	61.75	9.44	0.093
Competence	56.69	10.39	0.115
Commitment	57.06	11.17	0.179
Innovation Capability	53.34	9.50	0.154
Employee Performance	95.01	13.20	0.076

Source: SPSS 27 output, 2026 (n = 350 for all variables).

Descriptive Analysis of Research Variables

Respondents' mean scores for each variable were classified into five categories using class intervals of 0.8 (1.00–1.80 very poor; 1.81–2.60 poor; 2.61–3.40 fairly good; 3.41–4.20 good; 4.21–5.00 very good). Table 7 summarizes the overall mean, standard deviation, and category for each of the six research variables.

Table 7. Summary of Descriptive Analysis by Variable

Variable	Mean	Std. Dev.	Highest Dimension	Lowest Dimension	Category
Transformational Leadership	3.231	0.314	Idealized Influence	Individualized Consideration	Fairly Good→Good
Work Motivation	3.250	0.323	Need for Affiliation	Need for Power	Fairly Good→Good
Competence	3.335	0.341	Managerial Competence	Technical Competence	Fairly Good→Good
Commitment	3.162	0.341	Continuance Commitment	Affective Commitment	Fairly Good→Good
Innovation Capability	3.334	0.343	Trialability	Compatibility	Fairly Good→Good

Variable	Mean	Std. Dev.	Highest Dimension	Lowest Dimension	Category
Employee Performance	3.276	0.356	Quality of Work Output	Cooperation	Fairly Good→Good

Source: Processed data, 2026.

All six variables fall within the "fairly good moving toward good" range, corroborating the phenomena identified in the introduction. Transformational Leadership is strongest in Idealized Influence but weakest in Individualized Consideration, suggesting leaders project competence and integrity but have not yet fully personalized their attention to subordinates. Work Motivation is anchored by a strong Need for Affiliation but a comparatively weak Need for Power, indicating a workforce with good interpersonal cohesion but limited drive to take initiative or influence change. Competence is strongest managerially but weakest technically and socio-culturally, while Commitment is dominated by Continuance Commitment (staying out of necessity) rather than Affective Commitment (staying out of genuine attachment) — a pattern with direct implications for sustaining innovation. Innovation Capability is held back most by low Compatibility, meaning that innovative ideas are not always well aligned with organizational needs, and Employee Performance, while strong on individual work quality, is weakest on Cooperation, pointing to a need for more collaborative, cross-unit ways of working.

Correlation among Exogenous Variables

Pearson correlation analysis among the four exogenous variables (Table 8) showed strong, statistically significant relationships. The strongest correlation was between Transformational Leadership and Commitment ($r = 0.787$), and the weakest — though still strong — was between Work Motivation and Competence ($r = 0.680$). All correlations were significant at $p < 0.001$ except that between Transformational Leadership and Commitment, whose reported significance value (0.176) is not statistically consistent with the size of its correlation coefficient at $n = 350$ and should be interpreted with caution pending re-verification of the underlying computation.

Table 8. Correlation Matrix among Exogenous Variables

	Transf. Leadership	Work Motivation	Competence	Commitment
Transformational Leadership	1	0.782**	0.776**	0.787
Work Motivation	0.782**	1	0.680**	0.698**
Competence	0.776**	0.680**	1	0.714**
Commitment	0.787	0.698**	0.714**	1

** Correlation is significant at the 0.01 level (2-tailed); $n = 350$.

Structural Equation Model

The full measurement and structural model, estimated with LISREL 8.80, is shown in Figure 1. All indicator loading factors exceeded the conventional 0.70 threshold, confirming that each latent variable was well represented by its indicators.

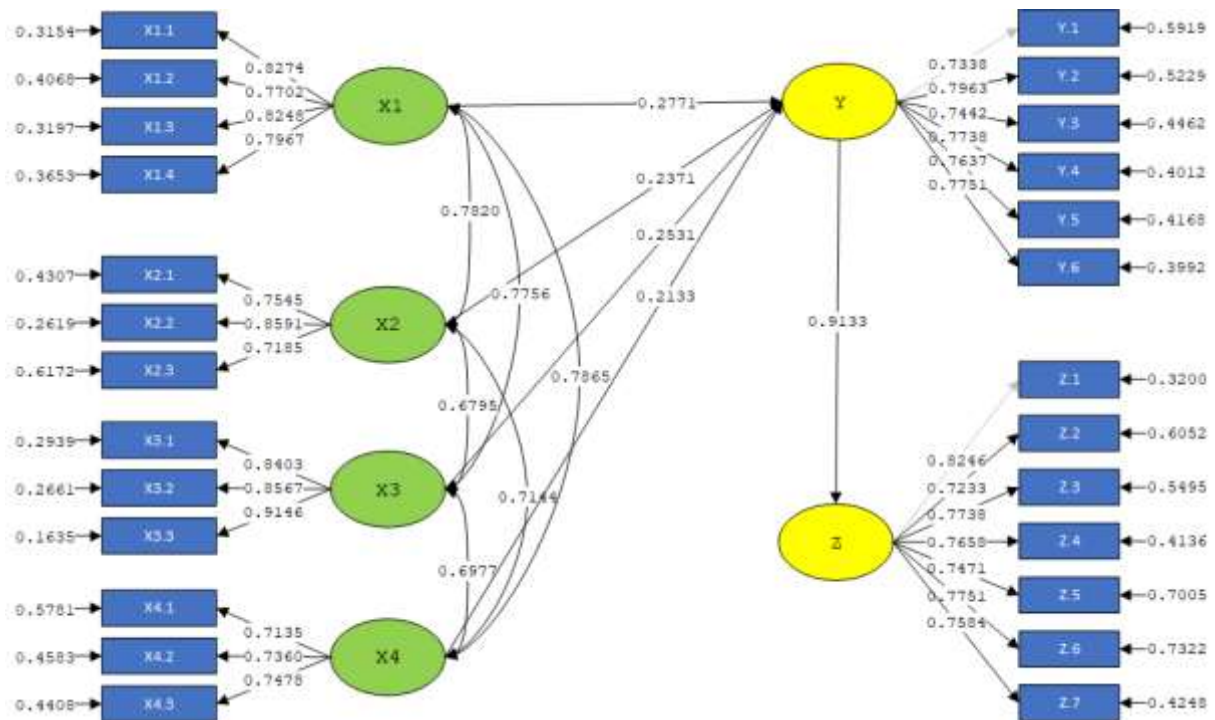


Figure 1. Full SEM Measurement and Structural Model

Structural Model 1: Effects on Innovation Capability

The first structural equation, linking Transformational Leadership (X1), Work Motivation (X2), Competence (X3), and Commitment (X4) to Innovation Capability (Y), is presented in Figure 2 and summarized by the equation:

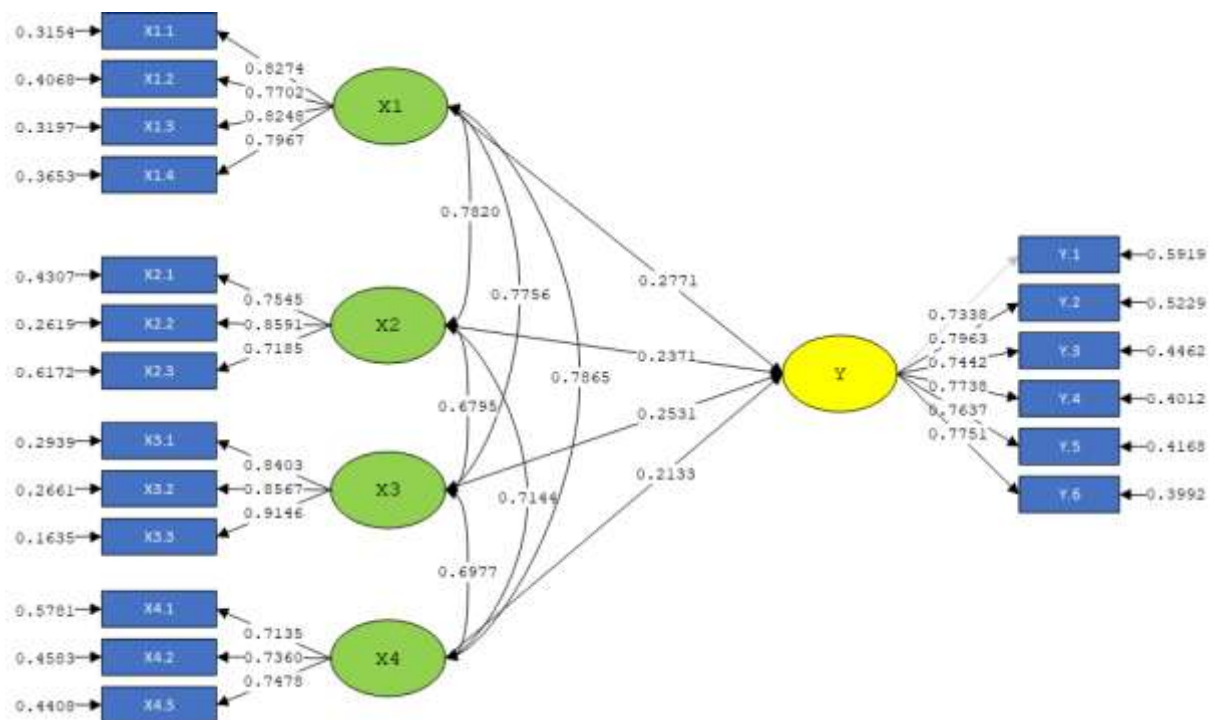


Figure 2. Path Diagram of Structural Model 1 (X1, X2, X3, X4 → Y)

$$Y = 0.2771 X1 + 0.2371 X2 + 0.2531 X3 + 0.2133 X4, \text{ Error Variance} = 0.2237, R^2 = 0.7763$$

All four path coefficients were positive, indicating that increases in Transformational Leadership, Work Motivation, Competence, and Commitment are each associated with an increase in Innovation Capability, of 0.2771, 0.2371, 0.2531, and 0.2133 units respectively. Jointly, the four exogenous variables explained 77.63% of the variance in Innovation Capability ($R^2 = 0.7763$), leaving 22.37% explained by factors outside the model (e.g., work culture, work environment, compensation, and communication).

Decomposing total influence into direct and indirect components (Table 9) shows that although Transformational Leadership has the largest direct effect (7.68%), none of the four predictors is a dominant driver in isolation, because each variable's direct effect is smaller than its combined indirect effect through the other three predictors. Considering total effects, Transformational Leadership contributes the most to Innovation Capability (22.90%), followed by Competence (19.78%), Work Motivation (18.37%), and Commitment (16.58%).

Table 9. Direct and Indirect Effects on Innovation Capability

Variable	Path Coeff.	Direct Effect	Indirect Effect	Total Effect
Transformational Leadership	0.2771	7.68%	15.23%	22.90%
Work Motivation	0.2371	5.62%	12.74%	18.37%
Competence	0.2531	6.41%	13.37%	19.78%
Commitment	0.2133	4.55%	12.03%	16.58%
Total	—	24.26%	53.38%	77.63%

Source: LISREL 8.80 output, 2026.

Hypothesis Testing — Structural Model 1

The simultaneous test (H1) produced $F_{count} = 299.3744$, far exceeding F_{table} ($F_{0.05,4,350} = 2.6307$), so H_0 was rejected: Transformational Leadership, Work Motivation, Competence, and Commitment jointly and significantly affect Innovation Capability. Partial tests (H2–H5), summarized in Table 10, likewise rejected H_0 for each individual predictor at $\alpha = 5\%$ ($t_{table} = 1.9669$).

Table 10. Partial Hypothesis Test Results — Structural Model 1

Hypothesis	Path	Coefficient	t-value	t-table	Conclusion
H2	$X_1 \rightarrow Y$	0.2771	6.8583	1.9669	Significant
H3	$X_2 \rightarrow Y$	0.2371	4.5996	1.9669	Significant
H4	$X_3 \rightarrow Y$	0.2531	5.2893	1.9669	Significant
H5	$X_4 \rightarrow Y$	0.2133	2.5894	1.9669	Significant

Source: LISREL 8.80 output, 2026.

Structural Model 2: Effect on Employee Performance

The second structural equation, linking Innovation Capability (Y) to Employee Performance (Z), is presented in Figure 3:

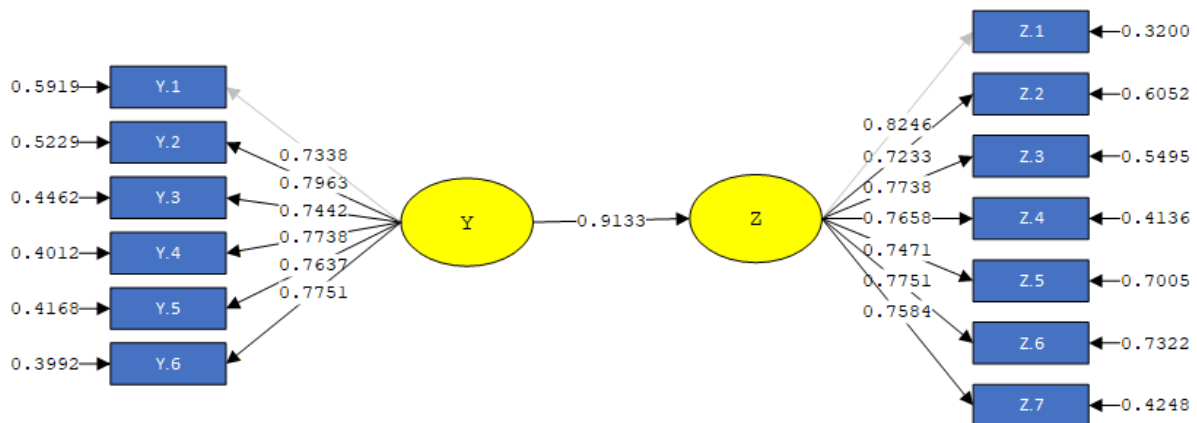


Figure 3. Path Diagram of Structural Model 2 (Y → Z)

$$Z = 0.9133 Y, \text{ Error Variance} = 0.1659, R^2 = 0.8341$$

Innovation Capability had a strong, positive effect on Employee Performance (path coefficient = 0.9133), explaining 83.41% of the variance in performance, with the remaining 16.59% attributable to factors outside the model (e.g., job satisfaction, teamwork, work ethic, and work loyalty). The partial hypothesis test (H6) produced $t_{\text{count}} = 12.2475$, exceeding $t_{\text{table}} = 1.9668$, so H_0 was rejected: Innovation Capability significantly affects Employee Performance (Table 11). Because the total effect in Structural Model 1 ($R^2 = 77.63\%$) is smaller than that in Structural Model 2 ($R^2 = 83.41\%$), Innovation Capability is confirmed as a dominant intervening variable that channels the influence of leadership, motivation, competence, and commitment into employee performance.

Table 11. Hypothesis Test Result — Structural Model 2

Hypothesis	Path	Coefficient	t-value	t-table	Conclusion
H6	$Y \rightarrow Z$	0.9133	12.2475	1.9668	Significant

Source: LISREL 8.80 output, 2026.

Model Fit and Feasibility

Overall model fit was assessed using standard Goodness-of-Fit (GOF) indices (Table 12). Every index met its recommended threshold, indicating that the estimated model fits the observed data well.

Table 12. Goodness-of-Fit (GOF) Indices

GOF Measure	Estimate	Criterion	Result
Chi-square (X^2) / p-value	1.0332 / 0.0736	$p > 0.05$	Good Fit
Goodness-of-Fit Index (GFI)	0.9416	≥ 0.90	Good Fit
Root Mean Square Error of Approx. (RMSEA)	0.0431	≤ 0.05	Good Fit
Expected Cross-Validation Index (ECVI)	6.1589	≈ 1 / between saturated & independence ECVI	Good Fit
Tucker-Lewis Index / NNFI	0.9208	≥ 0.90	Good Fit
Normed Fit Index (NFI)	0.9186	≥ 0.90	Good Fit
Adjusted Goodness-of-Fit Index (AGFI)	0.9241	≥ 0.90	Good Fit

GOF Measure	Estimate	Criterion	Result
Incremental Fit Index (IFI)	0.9300	≥ 0.90	Good Fit
Comparative Fit Index (CFI)	0.9299	≥ 0.90	Good Fit
Parsimonious GFI (PGFI)	0.9274	≈ 1	Good Fit
Parsimonious NFI (PNFI)	0.9140	≈ 1	Good Fit

Source: LISREL 8.72/8.80 output, 2026.

Model feasibility was further confirmed against four criteria for a good econometric model. Theoretical plausibility was satisfied, as every pre-estimation hypothesized sign matched the post-estimation empirical sign (Table 13). Accuracy of parameter estimates was supported by low estimation error and significant p-values ($p = 0.000 < 0.05$) for all hypotheses. Explanatory ability was confirmed, as the standard error of every path coefficient was smaller than half its absolute value ($SE < \frac{1}{2}|\text{coefficient}|$) for both structural models. Forecasting ability was demonstrated by high coefficients of determination (77.63% and 83.41%), both well above the 50% benchmark commonly used to indicate strong predictive capacity.

Table 13. Theoretical Plausibility — Pre- vs. Post-Estimation Sign Comparison

Relationship	Pre-Estimation	Post-Estimation	Match
Transformational Leadership → Innovation Capability	+	+	Consistent
Work Motivation → Innovation Capability	+	+	Consistent
Competence → Innovation Capability	+	+	Consistent
Commitment → Innovation Capability	+	+	Consistent
Innovation Capability → Employee Performance	+	+	Consistent

Source: Authors' analysis, 2026.

The combined effect of Transformational Leadership, Work Motivation, Competence, and Commitment on Innovation Capability was statistically significant (total effect 77.63%), confirming that innovation among Disperindag Jabar's civil servants is best understood as the product of a holistic human-resource ecosystem rather than any single factor. Because each variable's direct effect on Innovation Capability was consistently smaller than its indirect effect through the other three predictors, none of the four can be regarded as dominant in isolation — a finding one expert interviewee (Prof. Dr. H. Dedi Hadian, M.M., Universitas Pasundan Bandung) described as evidence that "bureaucratic innovation is not the product of a single factor, but of an orchestrated ecosystem," in which leadership provides direction, motivation supplies willingness, competence provides capability, and commitment sustains consistency. Practically, this implies that strengthening only one lever for instance, leadership training alone — is unlikely to be sufficient; interventions need to be designed as an integrated package covering all four dimensions, supported by structured training, coaching, and constructive feedback to leaders and staff alike.

Transformational Leadership and Innovation Capability

Transformational Leadership showed the largest total effect on Innovation Capability (22.90%) and a significant partial effect (path coefficient 0.2771, $t = 6.8583 > 1.9669$), supporting H2. This is consistent with international evidence that transformational leadership fosters employee creativity, particularly when intrinsic motivation is present (Shafi et al., 2020), mediates innovation, motivation, and commitment in improving organizational performance (Suhara et al., 2025), and enhances performance through organizational commitment from a social-exchange perspective (Rachman, 2021). At Disperindag Jabar, leaders were found to be relatively strong on Idealized Influence but weaker on Individualized Consideration; interview data corroborated this pattern, with practitioners noting that leaders have not yet been fully distributed as role models across all levels of the organization. The practical implication is that leadership development should move beyond broad directive behavior toward more individualized coaching, two-way communication, and consistent role-modeling of the change leaders wish to see.

Work Motivation and Innovation Capability

Work Motivation had the third-largest total effect on Innovation Capability (18.37%) and a significant partial effect (path coefficient 0.2371, $t = 4.5996 > 1.9669$), supporting H3. This finding aligns with research showing that transformational leadership and intrinsic motivation jointly shape job competence and satisfaction (Oktafia et al., 2024) and that motivation mediates the relationship between leadership style and innovative employee performance (Susilowati, 2022). Employees at Disperindag Jabar were found to rely heavily on affiliation needs but showed comparatively low needs for achievement and power, suggesting that current motivation is oriented toward routine task completion rather than creative risk-taking. Strengthening non-material sources of motivation — recognition, opportunities for growth, trust in handling new assignments, and access to training — was identified by expert informants as a more sustainable lever than financial incentives alone.

Competence and Innovation Capability

Competence exerted the second-largest total effect on Innovation Capability (19.78%), with a significant partial effect (path coefficient 0.2531, $t = 5.2893 > 1.9669$), supporting H4. This is consistent with findings that human-resource competence and transformational leadership jointly shape employee performance, mediated by motivation (Anies Wijayanti et al., 2024), and that competence has clear conceptual and practical implications for performance assessment (Holmes et al., 2021). Managerial competence was rated highest among ASN at Disperindag Jabar, while socio-cultural competence — the ability to engage constructively with the public, business actors, and other stakeholders — was rated lowest, despite being central to the agency's mandate. Expert interviewees consistently identified socio-cultural competence as a core competency rather than an optional soft skill, recommending its integration into mandatory training curricula (e.g., through the West Java Human Resource Development Agency, BPSDM).

Commitment and Innovation Capability

Commitment had the smallest, though still statistically significant, total effect on Innovation Capability (16.58%; path coefficient 0.2133, $t = 2.5894 > 1.9669$), supporting H5.

This is consistent with prior findings linking transformational leadership, job satisfaction, and organizational commitment to organizational citizenship behavior (Purwanto et al., 2021; Ganeva et al., 2024; Hermawan et al., 2024). Employees at Disperindag Jabar were found to remain in the organization more out of continuance commitment (practical necessity) than affective commitment (genuine attachment) — a pattern experts linked to a lack of shared organizational identity and limited informal engagement. Because affective commitment is generally a stronger driver of discretionary, innovative effort than continuance commitment, cultivating a stronger sense of belonging — through positive organizational culture, participatory decision-making, and recognition of contributions — was recommended as a priority.

Innovation Capability and Employee Performance

Innovation Capability had a strong, significant effect on Employee Performance (path coefficient 0.9133, $t = 12.2475 > 1.9668$, $R^2 = 83.41\%$), supporting H6 and confirming Innovation Capability as the dominant intervening variable in the model — its explanatory power on performance (83.41%) exceeded the combined explanatory power of the four exogenous variables on innovation capability itself (77.63%). This finding is consistent with studies showing that innovative work behavior mediates the effect of digital literacy and transformational leadership on employee performance (Putra et al., 2023) and that innovative leadership and competence jointly shape performance outcomes (Mujiharjo et al., 2024). Substantively, this means that investments in leadership, motivation, competence, and commitment will only translate into improved civil-service performance if they are channeled through genuine innovation in everyday work — in service processes, data management, inter-agency coordination, and problem-solving — rather than remaining confined to individual attitudes or capacities.

Triangulation with Expert Judgment

To strengthen interpretation of the quantitative findings, the researchers conducted structured interviews with three experts representing academic, practitioner, and policy perspectives: Prof. Dr. H. Dedi Hadian, M.M. (Professor of Human Resource Management, Universitas Pasundan Bandung), Erik Wahyu Purwanegara, S.P., M.M. (Head of the Consumer Protection and Trade Order Division, Disperindag Jabar), and Dr. Ir. Dewi Yuliani, M.T. (Coordinator of Widyaiswara, West Java Human Resource Development Agency/BPSDM). All three experts affirmed the empirical patterns identified by the SEM analysis and offered convergent recommendations: (1) pair the existing empathetic, affiliation-oriented culture with stronger strategic vision and consistent role-modeling by leaders; (2) channel the workforce's need for affiliation into healthy, achievement-oriented initiative-taking, supported by mentoring and coaching from direct supervisors; (3) treat socio-cultural competence as a core competency and embed it in mandatory training alongside technical and managerial competence; (4) deliberately cultivate affective commitment through non-formal engagement activities, participatory culture, and recognition, rather than relying on continuance commitment alone; (5) ensure that innovative ideas are evaluated for compatibility with organizational needs and regulatory constraints so that ease of innovating is matched by strategic relevance; and (6) institutionalize collaboration — for example through shared

workspaces and cross-unit coordination mechanisms — so that strong individual performance translates into collective organizational outcomes. This convergence between quantitative results and qualitative expert judgment strengthens confidence in the study's conclusions and points toward a coherent, integrated agenda for HR development at Disperindag Jabar.

CONCLUSION

This study demonstrated that transformational leadership, work motivation, competence, and commitment each had significant positive effects on innovation capability, both simultaneously (explaining 77.63% of the variance) and partially, among ASN employees at the Department of Industry and Trade (Dinas Perindustrian dan Perdagangan [Disperindag]) of West Java Province. None of the four variables was individually dominant, indicating that innovation capability resulted from a balanced and integrated human resource ecosystem rather than from a single determining factor. Transformational leadership had the strongest contribution to innovation capability, followed by competence, work motivation, and commitment. Furthermore, innovation capability had a strong, significant, and dominant mediating effect on employee performance, explaining 83.41% of the variance. This finding confirmed that innovation capability served as a primary mechanism through which leadership, motivation, competence, and commitment contributed to improved civil servant performance. Descriptively, all six research variables were categorized as “fairly good toward good,” with variations among employees. Leadership demonstrated strong idealized influence but weaker individualized consideration; motivation was primarily driven by affiliation needs but remained limited in achievement and power needs; competence was stronger in managerial aspects but weaker in technical and sociocultural dimensions; commitment was more strongly characterized by continuance commitment than affective commitment; innovation capability was most constrained by compatibility with organizational needs; and performance was stronger in individual work quality than in cooperation. These patterns were further supported through triangulation with three experts from academic, practitioner, and policy backgrounds, strengthening the credibility of the findings. Overall, the estimated structural model met the required goodness-of-fit criteria and fulfilled the standard assessments of model feasibility, supporting the theoretical and practical validity of the proposed framework.

Based on these findings, the management of Disperindag West Java Province should implement an integrated development strategy that strengthens the four antecedent variables simultaneously rather than addressing them separately. This strategy may include structured training programs, individualized coaching and mentoring, clearer communication of organizational vision and performance standards, and constructive feedback mechanisms for both leaders and employees. Particular attention should be directed toward strengthening individualized consideration in leadership practices, encouraging achievement-oriented and initiative-driven motivation, developing technical and sociocultural competence alongside existing managerial capabilities, and fostering affective organizational commitment through participatory culture and employee recognition rather than relying primarily on continuance-based commitment. Because innovation capability represents a key pathway to improved performance, the organization should establish mechanisms to evaluate innovative ideas based on organizational relevance and regulatory requirements, while strengthening collaborative structures, such as cross-unit coordination and knowledge-sharing mechanisms, to transform

individual performance into collective organizational outcomes. Future research should consider additional variables beyond the current model, including compensation, work environment, organizational culture, facilities and infrastructure, and teamwork; expand the research scope to other provinces to enable comparative analysis; and apply complementary analytical approaches, such as panel-data analysis, to further validate and generalize the findings.

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