Vol. 6, No. 11, November 2026 pp. 554-570
e-ISSN 2774-700X
DOI: https://doi.org/10.59188/jurnalsosains.v6i11.32815



The Effect of Talent Management on Human Resource Performance Moderated by Human Resource Audit at The Public Works and Spatial Planning Office of Central Kalimantan Province

Imanuel
Universitas Islam Sultan Agung Semarang, Indonesia
Email : imanuelfh77a@gmail.com

Keywords:
Talent Management;
Human Resource Audit;
Human Resource Performance;
Pls-Sem;
Public Sector.

This is an open access article under the CC BY-SA license.

Copyright © 2026 by Imanuel. Published by
Green Publisher Indonesia

Abstract

Talent management in the public sector is a strategic factor influencing the effectiveness and efficiency of public service delivery. Government institutions face challenges related to talent mismatches, particularly gaps between employees' existing competencies and organizational requirements, which complicate the recruitment and retention of qualified personnel, especially when the private sector offers more competitive compensation and career development opportunities. Previous studies have reported inconsistent findings regarding the relationship between talent management and employee performance, while empirical evidence concerning the role of human resource (HR) audits remains inconclusive. These inconsistencies highlight the need to examine HR audits as a moderating variable. This study aimed to examine (1) the effect of talent management on HR performance and (2) the moderating role of HR audits in this relationship. Employing an explanatory research design, data were collected through structured, closed-ended questionnaires administered to 164 of the 167 targeted employees at the Public Works and Spatial Planning Office (Dinas Pekerjaan Umum dan Penataan Ruang, DPUPR) of Central Kalimantan Province, selected through purposive sampling. The data were analyzed using partial least squares structural equation modeling (PLS-SEM). The findings revealed that talent management had a positive and statistically significant effect on HR performance ($\beta = 0.498$; $t = 4.860$; $p < 0.001$), with career management emerging as the most influential indicator. HR audits significantly strengthened the relationship between talent management and HR performance (interaction coefficient = 0.426; $t = 4.059$; $p < 0.001$) and demonstrated a positive and statistically significant direct effect on HR performance ($\beta = 0.332$; $t = 2.684$; $p = 0.007$). The model explained 57.3% of the variance in HR performance ($R^2 = 0.573$) and demonstrated predictive relevance ($Q^2 = 0.473$). These findings indicated that effective talent management was positively associated with HR performance and that HR audits strengthened this relationship. Accordingly, the institution was encouraged to improve career management practices and conduct regular HR audits to enhance employee performance. Future research should incorporate additional explanatory variables and extend the investigation to other government institutions to improve the generalizability of the findings.

INTRODUCTION

Employee performance is a critical factor in determining an organization's effectiveness in fulfilling its duties and functions. High-performing civil servants contribute not only to public service productivity but also to service innovation, public satisfaction, and the timely achievement of development objectives and strategic targets (Blackman et al., 2012). Professional, systematic, and sustainable human resource management is therefore essential

for strengthening bureaucratic capacity and promoting effective governance (Munadil et al., 2024). Human resource management (HRM) encompasses the processes through which organizations plan, recruit, develop, evaluate, and retain employees to align individual competencies with organizational objectives (Ardian, 2020; Mathis, 2018; Metris et al., 2024; Rivai, 2018; Simamora, 2017). Furthermore, human resource (HR) planning is recognized as a fundamental component of organizational development and long-term sustainability (Satrio et al., 2023; Simarmata et al., 2021).

Talent management in the public sector is a strategic component that influences the effectiveness and efficiency of public service delivery. Amid global economic challenges and increasing labor market competition, government institutions face talent mismatches, characterized by gaps between existing employee competencies and organizational requirements. These challenges complicate the recruitment and retention of qualified personnel, particularly when private sector organizations offer more competitive compensation and career development opportunities. Consequently, public sector talent management requires a comprehensive and sustainable approach encompassing recruitment, competency development, and employee retention, supported by continuous training and coaching to enable civil servants to adapt to evolving organizational demands and public needs. Effective talent management can improve service quality while promoting employee engagement, organizational commitment, and productivity, ultimately strengthening public trust in government institutions (Kravariti et al., 2023).

The concept of talent management gained prominence following the publication of The War for Talent by McKinsey consultants in 1998, which emphasized the strategic importance of attracting, developing, and retaining highly qualified employees in an increasingly competitive labor market. Subsequent researchers highlighted the need for further empirical investigations into the relationship between talent management and organizational performance, particularly because of limited empirical evidence and the absence of a sufficiently developed theoretical foundation for talent management (Aina & Atan, 2020). Existing literature emphasizes the context-dependent nature of talent management practices (Gallardo-Gallardo et al., 2020), the importance of responsible and inclusive talent management approaches (Anlesinya & Amponsah-Tawiah, 2020; Kaliannan et al., 2023), and the need to critically reconsider the traditional war for talent metaphor (Kwon & Jang, 2022). Talent management encompasses the systematic identification of strategically important organizational positions, the development of talent pools comprising high-potential and high-performing employees, and the establishment of differentiated HR management practices. Its principal dimensions commonly include talent attraction, talent retention, learning and development, and career management (Kagwiria Lyria et al., 2017).

The Public Works and Spatial Planning Office (Dinas Pekerjaan Umum dan Penataan Ruang, DPUPR) of Central Kalimantan Province supports the governor in implementing governmental responsibilities related to public works and spatial planning under decentralization and deconcentration arrangements. Its responsibilities include formulating technical policies, coordinating development planning and programs, overseeing construction and spatial planning activities, providing licensing recommendations, and conducting supervision, administrative management, monitoring, evaluation, and reporting. Under Central

Kalimantan Governor Regulation No. 37 of 2022, the organizational structure comprises the Head of Office, Secretariat, technical divisions responsible for Water Resources, Highways (Bina Marga), Human Settlements (Cipta Karya), Construction Services, and Spatial Planning, as well as the Construction Materials Laboratory Technical Implementation Unit and Functional Position Group. The Finance, General Affairs, and Personnel Subdivision is responsible for financial and asset management, personnel administration, records management, bureaucratic reform, organizational culture, institutional evaluation, and reporting. The office's financial performance, as indicated by budget absorption, has demonstrated a favorable trend, as presented in Table 1.

Table 1. Budget Realization of the DPUPR of Central Kalimantan Province, 2022–2024

Year	Budget Ceiling (IDR)	Realization (IDR)	Absorption (%)
2022	1,078,649,041,122	1,009,513,467,671	93.59
2023	1,284,495,891,186	1,194,660,136,959	93.01
2024	2,088,355,751,851	1,991,133,082,437	95.34

Source: Budget realization data of DPUPR of Central Kalimantan Province.

Budget absorption remained consistently above 93% from 2022 to 2024, indicating relatively strong budget execution performance. The annual increase in budget allocations reflected the government's prioritization of infrastructure development, while consistently high absorption rates suggested relatively effective project implementation and financial management. Nevertheless, several challenges persisted, including regional fiscal constraints, multiyear infrastructure projects, and the extensive geographical area covered by public services. The complexity of infrastructure development across geographically diverse regions, coupled with increasing demands for accelerated project completion, required civil servants to demonstrate optimal performance, adaptability, and professionalism. Within the bureaucratic reform framework, talent management serves as a strategic approach to ensuring that employees are assigned and developed according to their competencies, potential, and performance. This approach enables organizations to identify high-potential employees, assess competency profiles, and establish sustainable professional development programs to prepare future leaders and technical personnel, particularly through structured career development planning for civil servants (Sari et al., 2024).

Previous studies have reported inconsistent findings regarding the relationship between talent management and organizational performance. Aina and Atan (2020) and Widodo and Mawarto (2020) reported that talent management had no statistically significant effect on organizational performance, whereas Kravariti et al. (2023) and Saputra et al. (2020a) reported contrasting findings. Several other studies demonstrated positive relationships between talent management and organizational or employee performance (Ali Almohtaseb et al., 2020; Almaaitaha et al., 2020; Dermawan et al., 2022; Hongal & Kinange, 2020; Malika & Irfani, 2022; Rahmawati, 2019; Rinadra et al., 2023; Sopiah et al., 2020; Ulya, 2022). Similarly, empirical findings concerning the relationship between human resource (HR) audits and employee performance have been inconsistent. Saputra et al. (2020b) found that HR audits had no statistically significant effect on employee performance, while Surya Abbas et al. (2022) reported that selection audits did not have a statistically significant individual effect. In contrast, Aryanti and Sudarmadi (2020), Bahtiar et al. (2022), Arief (2021), and Hura (2017) identified positive and statistically significant relationships between audit practices,

particularly operational and internal audits, and employee performance. Audit mechanisms have also been examined in relation to audit committees, external auditors, and internal control systems (Wehrhahn & Velte, 2024). These divergent empirical findings, summarized in Table 2, highlight the need for further investigation into the relationships among talent management, HR audits, and employee performance, particularly within public sector institutions.

Table 2. Summary of Previous Findings and Research Gap

Study	Relationship examined	Finding
Aina and Atan (2020)	Talent management → organizational performance	Not significant
Widodo and Mawarto (2020)	Talent management → performance	Not significant
Kravariti et al. (2023)	Talent management → performance in the public sector	Positive and significant
Saputra et al. (2020a)	Talent management → employee performance	Positive and significant
Saputra et al. (2020b)	HR audit → employee performance	Not significant
Surya Abbas et al. (2022)	Selection (recruitment) audit → employee performance	Not significant (partial)
Aryanti and Sudarmadi (2020)	Operational audit and internal control → employee performance	Positive and significant
Bahtiar et al. (2022)	Internal audit, motivation, and work environment → employee performance	Positive and significant

Source: Compiled from previous studies as reported in the manuscript.

Table 2 presents inconsistent empirical findings regarding the relationships between talent management, human resource (HR) audits, and employee performance. Studies reporting statistically insignificant effects were conducted across different organizational contexts and employed varying operational definitions and measurements of the constructs, whereas studies identifying positive effects emphasized the importance of organizational support for employee development and the evaluative functions of audit practices. These inconsistencies suggest that the relationship between talent management and employee performance may be influenced by organizational support mechanisms. Accordingly, examining HR audits as a moderating variable is essential to understanding whether audit practices strengthen or weaken the relationship between talent management and employee performance.

An HR audit is a systematic evaluation of an organization's HR policies, procedures, and practices aimed at identifying areas for improvement and ensuring compliance with applicable laws, regulations, and organizational standards (Rivai, 2018). Through HR audits, organizations can identify deficiencies, assess the effectiveness of HR management practices, and recognize opportunities for improvement that may contribute to enhanced employee performance. Employee performance refers to the effectiveness and efficiency with which individuals accomplish assigned responsibilities and organizational objectives, as reflected in the quality and quantity of their work within a specified period (Robbins & Timothy, 2018; Robbins et al., 2020). Based on these theoretical considerations, this study positioned HR audits as a moderating variable that could strengthen or weaken the relationship between talent management and HR performance. Specifically, the study addressed the extent to which HR audits moderated the relationship between talent management and HR performance at the Public Works and Spatial Planning Office (Dinas Pekerjaan Umum dan Penataan Ruang,

DPUPR) of Central Kalimantan Province. The research objectives were to examine (1) the effect of talent management on HR performance and (2) the moderating role of HR audits in this relationship. Accordingly, two hypotheses were formulated: H1 proposed that talent management had a positive effect on HR performance, while H2 proposed that HR audits positively moderated the relationship between talent management and HR performance, such that the relationship became stronger at higher levels of HR audit effectiveness. This study was expected to contribute to the existing literature by providing empirical evidence regarding the moderating role of HR audits in the relationship between talent management and employee performance, while offering practical insights for strengthening HR management practices and improving employee performance in public sector institutions.

METHOD

This study employed an explanatory research design to examine the relationships among talent management, human resource (HR) audits, and HR performance through hypothesis testing. The study population comprised 288 employees of the Public Works and Spatial Planning Office (Dinas Pekerjaan Umum dan Penataan Ruang, DPUPR) of Central Kalimantan Province (Sugiyono, 2018). The target sample size was determined using Slovin's formula with a 5% margin of error (Ghozali, 2018), resulting in 167 respondents. Participants were selected through purposive sampling based on the following criteria: (1) civil servants or contract employees actively involved in operational activities; (2) a minimum of one year of employment; (3) direct involvement in the responsibilities of their respective work units; and (4) willingness to complete the questionnaire. Primary data were collected using structured, closed-ended questionnaires measuring talent management, HR audits, and HR performance on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Secondary data, including employee records and relevant literature, were obtained from the DPUPR of Central Kalimantan Province and previous studies related to the research variables. The operational definitions and measurement indicators are presented in Table 3.

Methodological note: The sample size calculation requires clarification. Using Slovin's formula with $N = 288$ and $e = 0.05$ produces $n = 167.44$, which rounds up to 168 respondents, rather than 167, when determining a minimum required sample size. Furthermore, because purposive sampling is a nonprobability sampling technique, the 5% margin of error should not be interpreted as a statistically guaranteed sampling precision.

the variables are presented in Table 3.

Table 3. Operational Definitions and Indicators of the Variables

No	Variable and definition	Indicators	Source
1	Talent management (X): the systematic identification of key positions, development of a talent pool with high potential and high performance, and development of a differentiated human resource architecture	1) Talent attraction 2) Talent retention 3) Learning and development 4) Career management	Kagwiria Lyria et al. (2017)
2	HR audit (Z): a systematic evaluation of HR management policies, practices, and performance to ensure conformity with organizational needs and to improve effectiveness and accountability	1) Effectiveness of HR function performance 2) Compliance 3) Efficiency of HR use 4) Employee quality	Rivai (2018)
3	HR performance (Y): the effectiveness and efficiency with which human resources achieve the organization's goals and targets, based on the quality and quantity of their output in a given period	1) Quality of work 2) Quantity 3) Timeliness 4) Effectiveness 5) Independence	Robbins and Timothy (2018)

Source: Compiled from the literature (2026).

Descriptive analysis was conducted to summarize respondents' assessments of each research variable. Responses were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Mean scores were categorized as low (1.00–2.33), moderate (2.34–3.66), or high (3.67–5.00). Inferential analysis was performed using partial least squares structural equation modeling (PLS-SEM). The measurement (outer) model was evaluated for convergent validity, discriminant validity, and internal consistency reliability. Convergent validity was assessed using outer loading values greater than 0.70 and average variance extracted (AVE) values greater than 0.50 (Hair, 1995). Discriminant validity was examined using the Fornell–Larcker criterion, the heterotrait–monotrait ratio (HTMT) with a threshold below 0.90, and indicator cross-loadings. Internal consistency reliability was evaluated using composite reliability and Cronbach's alpha, with values above 0.70 considered acceptable. Multicollinearity was assessed using inner variance inflation factor (VIF) values below 5. The structural (inner) model was evaluated using the coefficient of determination (R^2) and predictive relevance (Q^2). R^2 values of 0.19, 0.33, and 0.67 were used as reference points for weak, moderate, and substantial explanatory power, respectively. Q^2 values greater than zero indicated predictive relevance, with values of 0.02, 0.15, and 0.35 serving as reference points for small, medium, and large predictive relevance, respectively (Hair, 2021). Hypotheses were tested using bootstrapped t-statistics and p-values at a 5% significance level ($\alpha = 0.05$). For two-tailed tests, relationships were considered statistically significant when the absolute t-statistic exceeded 1.96 or the p-value was below 0.05.

RESULTS AND DISCUSSION

Respondent Characteristics

The study targeted 167 respondents, and 164 questionnaires met the criteria and could be analyzed, giving a response rate of 98.20% (164/167 × 100%). This very high participation indicates good data quality, and the difference of three respondents from the target does not significantly affect the representativeness of the sample. The respondents' characteristics by gender, age, education, and length of service are summarized in Table 4.

Table 4. Respondent Characteristics (n = 164)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	112	68.3
	Female	52	31.7
Age	25–30 years	33	20.1
	31–40 years	54	32.9
	41–50 years	51	31.1
	> 50 years	26	15.9
Last education	Senior high school/vocational	35	21.3
	Diploma	32	19.5
	Bachelor's degree	87	53.0
	Postgraduate	10	6.1
Length of service	5–10 years	29	17.7
	11–20 years	53	32.3
	21–30 years	60	36.6
	> 30 years	22	13.4

Source: Primary data processed (2026).

Most respondents were men (68.3%), which is understandable because work at the DPUPR is largely technical, field-based, and related to infrastructure supervision and physical operations, while the presence of women (31.7%) shows their involvement in administrative, technical, and managerial functions. This gender composition may influence perceptions of talent management, HR audit, and performance, especially regarding equal opportunities for career development, division of roles, and competency-based performance evaluation. Most respondents were aged 31–40 years (32.9%) and 41–50 years (31.1%), indicating a productive and professionally mature workforce with adequate experience and adaptability; this age structure can strengthen talent management because employees still have room for competency and career development, and HR audit may be more effective because productive-age employees tend to respond well to evaluation and coaching.

More than half of the respondents held a bachelor's degree (53.0%), indicating adequate academic capacity to understand work procedures, technical regulations, technology use, and analysis-based decision-making. This can support the identification, development, and placement of employees based on competence and strengthen understanding of HR audit as an evaluation instrument. The largest group had 21–30 years of service (36.6%), followed by 11–20 years (32.3%), meaning that most employees understand the organizational culture, procedures, bureaucratic dynamics, and technical characteristics of their work. Long experience is an important asset because it improves task accuracy, problem solving, and cross-functional coordination.

Descriptive Analysis of Research Variables

The descriptive statistics of the three variables are presented in Table 5. All indicators fall in the high category (3.67–5.00).

Table 5. Descriptive Statistics of Research Variables

Code	Indicator	N	Min	Max	Mean
Talent management (X)					
X-1	Talent attraction	164	2	5	3.92
X-2	Talent retention	164	2	5	3.82
X-3	Learning and development	164	2	5	3.92
X-4	Career management	164	2	5	3.95
	Variable mean				**3.90**
HR performance (Y)					
Y-1	Quality of work	164	2	5	3.93
Y-2	Quantity	164	3	5	3.95
Y-3	Timeliness	164	3	5	3.95
Y-4	Effectiveness	164	3	5	3.90
Y-5	Independence	164	3	5	3.97
	Variable mean				**3.94**
HR audit (Z)					
Z-1	Effectiveness of HR function performance	164	2	5	3.93
Z-2	Compliance	164	3	5	3.98
Z-3	Efficiency of HR use	164	2	5	3.92
Z-4	Employee quality	164	3	5	3.88
	Variable mean				**3.93**

Source: Primary data processed (2026).

Talent management has an overall mean of 3.90 (high), indicating that the organization is considered to have made fairly optimal efforts to attract, retain, develop, and manage employees' careers. Career management has the highest mean (3.95), meaning that respondents perceive good attention to career paths, capacity-building opportunities, and placement based on potential and organizational needs, while talent retention has the lowest mean (3.82), indicating that retaining potential employees, although good, is the aspect most in need of strengthening. HR performance has an overall mean of 3.94 (high). Independence has the highest mean (3.97), showing that employees can carry out tasks independently, take initiative, and complete work without excessive dependence on others, while effectiveness has the lowest mean (3.90), leaving room to optimize work processes, resource use, and target achievement. HR audit has an overall mean of 3.93 (high). Compliance has the highest mean (3.98), indicating good adherence to rules, procedures, and policies in HR management, whereas employee quality has the lowest mean (3.88), which can still be improved through training, competency development, performance evaluation, and continuous coaching.

Measurement Model Evaluation

Data were analyzed using PLS with SmartPLS. The measurement model shows how manifest variables represent the latent variables and was evaluated for validity and reliability. Table 6 shows that all outer loadings exceed 0.70, ranging from 0.744 (quality of work) to 0.879 (career management), so all indicators validly reflect their constructs. Career management is the strongest indicator of talent management, effectiveness (0.868) the strongest indicator of HR performance, and efficiency of HR use (0.861) the strongest indicator of HR audit.

Table 6. Outer Loadings of Research Indicators

Variable	Indicator	Outer loading	Remark
Talent management (X)	Talent attraction	0.855	Valid
	Talent retention	0.861	Valid
	Learning and development	0.819	Valid
	Career management	0.879	Valid
HR performance (Y)	Quality of work	0.744	Valid
	Quantity	0.830	Valid
	Timeliness	0.822	Valid
	Effectiveness	0.868	Valid
	Independence	0.807	Valid
HR audit (Z)	Effectiveness of HR function performance	0.848	Valid
	Compliance	0.859	Valid
	Efficiency of HR use	0.861	Valid
	Employee quality	0.849	Valid

Source: Primary data processed (2026).

Discriminant validity was tested using three approaches. As shown in Table 7, the square root of the AVE of each construct (diagonal values) is greater than its correlations with the other constructs, so the Fornell–Larcker criterion is met.

Table 7. Fornell–Larcker Criterion

Construct	HR audit	HR performance	Talent management
HR audit	0.854		
HR performance	0.517	0.815	
Talent management	0.401	0.543	0.854

Note: Diagonal values are the square root of the AVE. Source: Primary data processed (2026).

Table 8 shows that all HTMT values are below 0.90, so discriminant validity based on the HTMT criterion is accepted.

Table 8. Heterotrait–Monotrait Ratio (HTMT)

Construct pair	HTMT
HR performance ↔ HR audit	0.562
Talent management ↔ HR audit	0.461
Talent management ↔ HR performance	0.597

Source: Primary data processed (2026).

The cross loadings in Table 9 show that each indicator correlates more strongly with its own construct than with the other constructs, and all correlations are positive, so all constructs meet the discriminant validity criterion.

Table 9. Cross Loadings

Indicator	HR audit	HR performance	Talent management
X_1	0.290	0.443	0.855
X_2	0.277	0.489	0.861
X_3	0.448	0.369	0.819
X_4	0.376	0.527	0.879
Y_1	0.231	0.744	0.349
Y_2	0.474	0.830	0.370
Y_3	0.538	0.822	0.526
Y_4	0.428	0.868	0.502
Y_5	0.354	0.807	0.419

Indicator	HR audit	HR performance	Talent management
Z_1	0.848	0.493	0.395
Z_2	0.859	0.419	0.407
Z_3	0.861	0.401	0.277
Z_4	0.849	0.442	0.282

Source: Primary data processed (2026).

Reliability was assessed through Cronbach's alpha, composite reliability, and AVE (Table 10). All constructs have Cronbach's alpha (0.857–0.895) and composite reliability (0.897–0.927) above 0.70 and AVE values (0.636–0.760) above 0.50, so the instruments for talent management, HR audit, and HR performance are highly reliable. Combined with the validity tests, all indicators are valid and reliable measures of their latent variables.

Table 10. Reliability Test Results

Construct	Cronbach's alpha	Composite reliability	AVE
HR audit	0.895	0.927	0.760
HR performance	0.857	0.897	0.636
Talent management	0.877	0.915	0.730

Source: Primary data processed (2026).

Multicollinearity was tested using inner VIF values. As shown in Table 11, all VIF values are below 5 (1.056–1.121), so there is no multicollinearity problem in the model.

Table 11. Multicollinearity Test (Inner VIF)

Path	VIF
HR audit → HR performance	1.085
HR audit × Talent management → HR performance	1.121
Talent management → HR performance	1.056

Source: Primary data processed (2026).

Goodness of Fit

The goodness of fit of the structural model was evaluated using R-square and Q-square (Table 12). The R-square of HR performance is 0.573, meaning that 57.3% of the variation in HR performance is explained by talent management and HR audit, while the remaining 42.7% is influenced by other variables outside the study; this value lies between 0.33 and 0.67 and thus falls in the moderate category. The Q-square value of 0.473 is greater than 0.35, indicating that the model has strong predictive relevance and that the estimated parameters are consistent with the observed values.

Table 12. R-Square and Q-Square Values

Endogenous variable	R-square	Q^2 predict
HR performance	0.573	0.473

Source: Primary data processed (2026).

Structural Model Evaluation and Hypothesis Testing

Hypotheses were tested using t-statistics with a t-table value of 1.96 at the 5% significance level. The structural model is shown in Figure 1, and the path coefficients are presented in Table 13.

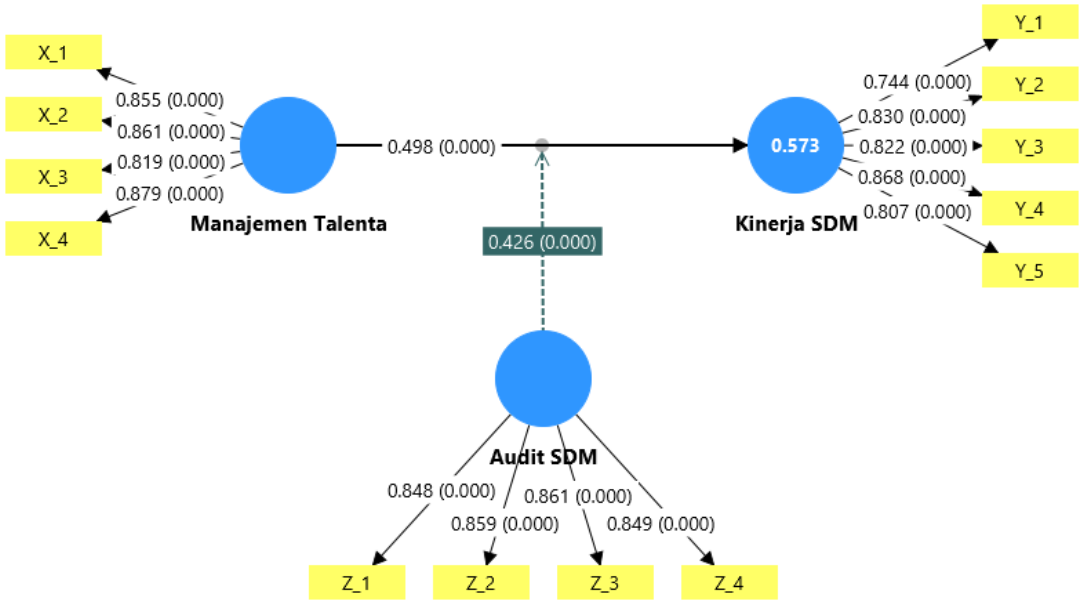


Figure 1. Full Model of the Moderated PLS-SEM

Source: Data processed with SmartPLS (2026). Values in parentheses are p-values; Manajemen Talenta = talent management; Kinerja SDM = HR performance; Audit SDM = HR audit.

Table 13. Path Coefficients

Path	Original sample (O)	Sample mean (M)	SD	T statistics	P values
HR audit → HR performance	0.332	0.331	0.124	2.684	0.007
HR audit × Talent management → HR performance	0.426	0.412	0.105	4.059	0.000
Talent management → HR performance	0.498	0.510	0.103	4.860	0.000

Source: Data processed with SmartPLS (2026).

The first hypothesis (H1) states that the better the talent management, the better the HR performance. The path coefficient of talent management on HR performance is 0.498, with a t-count of 4.860 > 1.96 and p = 0.000 < 0.05, so talent management has a positive and significant effect on HR performance and H1 is accepted. The second hypothesis (H2) states that the better the HR audit, the stronger the effect of talent management on HR performance. The coefficient of the interaction term (HR audit × talent management) is 0.426, with a t-count of 4.059 > 1.96 and p = 0.000 < 0.05, so HR audit significantly strengthens the relationship between talent management and HR performance and H2 is accepted. In addition, HR audit has a positive and significant direct effect on HR performance (0.332; t = 2.684; p = 0.007).

The Effect of Talent Management on HR Performance

The results show that talent management has a positive and significant effect on HR performance. This supports previous studies showing that talent management significantly improves performance (Ali Almohtaseb et al., 2020; Hongal & Kinange, 2020; Sopiah et al., 2020; Ulya, 2022), including in the public sector (Kravariti et al., 2023), and differs from the findings of Aina and Atan (2020) and Widodo and Mawarto (2020). Talent management was reflected by talent attraction, talent retention, learning and development, and career management, while HR performance was reflected by quality of work, quantity, timeliness, effectiveness, and independence.

Talent management has its highest outer loading on career management, while HR performance has its highest loading on effectiveness. This indicates that the better the career management applied by the organization, the more effective employees' work becomes. When the organization provides clear career development directions, open promotion opportunities, and a fair and planned career system, employees are more motivated to work optimally toward organizational targets. Employees with clear career paths tend to be more focused, enthusiastic, and able to complete work accurately and efficiently, and organizational support for career development also increases their self-confidence, loyalty, and commitment. The organization should therefore strengthen career management through career planning, competency development, objective performance evaluation, and opportunities for self-development (Sari et al., 2024).

Conversely, talent management has its lowest outer loading on learning and development, and HR performance has its lowest loading on quality of work. This suggests that improving learning and development activities will contribute to better work quality: the better the organization provides learning, training, competency development, and work mentoring, the more employees can produce accurate, neat, professional work that meets organizational standards. Employees who obtain training and skill development opportunities have a better understanding of their tasks, greater ability to complete work effectively, and higher accuracy, and learning and development also helps them adapt to changes in the work environment and organizational needs, consistent with the view that inclusive talent development is a key talent management approach (Kaliannan et al., 2023).

The Moderating Role of HR Audit

The results prove that HR audit strengthens the relationship between talent management and HR performance, meaning that a high-quality HR audit amplifies the effect of talent management on performance. This is in line with previous studies showing that internal audit, operational audit, and internal control have positive and significant effects on employee performance (Aryanti & Sudarmadi, 2020; Bahtiar et al., 2022), while differing from studies that found no significant effect of HR audit (Saputra et al., 2020b; Surya Abbas et al., 2022). HR audit was measured through the effectiveness of HR function performance, compliance, efficiency of HR use, and employee quality.

Career management is the strongest indicator of talent management and effectiveness the strongest indicator of performance, while efficiency of HR use is the most dominant indicator of HR audit. This suggests that efficient HR management strengthens the relationship between career management and work effectiveness: when the organization places employees according to their competencies, makes optimal use of their abilities, and manages the workforce appropriately and efficiently, the career development it provides has a greater effect on work effectiveness. The success of talent management is thus determined not only by career development programs but also by the organization's ability to ensure that human resources are used effectively and efficiently.

Learning and development, quality of work, and the effectiveness of HR function performance are the indicators with the lowest outer loadings in their respective constructs, indicating that employee learning, work quality, and the effectiveness of the HR function still require strengthening. The results suggest that the more effective the HR function, the stronger

the effect of learning and development on work quality. Training and development programs will not deliver maximum results if the HR function is not running effectively; when the HR function carries out planning, evaluation, supervision, and employee development well, learning becomes better targeted and directly improves work quality. An effective HR audit therefore ensures that employee development activities truly support improvements in employees' abilities, accuracy, and work quality (Rivai, 2018).

Beyond its moderating role, HR audit also has a positive and significant direct effect on HR performance (0.332; p = 0.007). This indicates that systematic evaluation of HR functions, compliance, efficiency, and employee quality contributes to performance in its own right, consistent with studies showing that internal and operational audits improve employee performance (Arief, 2021; Hura, 2017). Taken together, the coefficients show that talent management has the strongest direct effect (0.498), followed by the interaction between talent management and HR audit (0.426) and the direct effect of HR audit (0.332). The relatively large interaction effect implies that talent management programs deliver greater performance gains when they are accompanied by regular and effective HR audits that check whether placement, development, and career decisions are consistent with organizational needs.

These findings have practical implications for the DPUPR of Central Kalimantan Province. Strengthening career management, including transparent career paths, promotion opportunities, and objective performance evaluation, can improve employees' work effectiveness, while more targeted learning and development programs can raise work quality, which is currently the weakest reflection of performance. At the same time, periodic HR audits focusing on the efficiency of HR use and the effectiveness of HR functions can ensure that talent management programs are implemented appropriately, that employees are placed according to their competencies, and that development activities produce measurable improvements in performance. Because talent retention is the lowest-rated talent management indicator, the office should also pay attention to retaining high-potential employees so that investments in development continue to benefit the organization.

CONCLUSION

Based on the partial least squares structural equation modeling (PLS-SEM) analysis of data collected from 164 employees of the Public Works and Spatial Planning Office (Dinas Pekerjaan Umum dan Penataan Ruang, DPUPR) of Central Kalimantan Province, the findings demonstrated that talent management had a positive and statistically significant effect on human resource (HR) performance ($\beta = 0.498$; $t = 4.860$; $p < 0.001$). This indicated that more effective talent management practices were associated with higher employee performance. Career management emerged as the most influential indicator of talent management, while effectiveness was the most prominent indicator of HR performance, suggesting that clearly defined career paths, promotion opportunities, and structured career development programs contributed to improved employee effectiveness. Furthermore, HR audits positively and significantly moderated the relationship between talent management and HR performance (interaction coefficient = 0.426; $t = 4.059$; $p < 0.001$) and demonstrated a positive and statistically significant direct effect on HR performance ($\beta = 0.332$; $t = 2.684$; $p = 0.007$). The efficiency of HR utilization emerged as the most influential indicator of HR audits, highlighting the importance of aligning employee assignments with individual competencies to support

effective talent development. The structural model explained 57.3% of the variance in HR performance ($R^2 = 0.573$) and demonstrated predictive relevance ($Q^2 = 0.473$). Based on these findings, the DPUPR of Central Kalimantan Province was encouraged to strengthen its career management system and conduct periodic HR audits to improve the effectiveness and efficiency of talent management practices. Particular attention should be given to learning and development, work quality, and HR function effectiveness, which exhibited the lowest indicator contributions, through targeted training programs and strengthened HR management practices. Future research should incorporate additional variables influencing HR performance and expand the investigation to other public sector institutions to enhance the generalizability of the findings.

FUNDING

This research and the preparation of this article were carried out independently without funding support from external parties.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest, whether personal, commercial, or financial, that could affect the conduct and results of this research.

AUTHOR CONTRIBUTION

Imanuel contributed to the research design, data collection and processing, system development, analysis of results, and preparation of the manuscript.

GENERATIVE ARTIFICIAL INTELLIGENCE USAGE STATEMENT

In preparing this article, the author used generative artificial intelligence (AI) as a tool to refine language, organize the structure of the writing, and correct grammar. The use of AI was limited and remained under the author's supervision. All data, analyses, interpretations, and scientific substance in this article have been checked and verified by the author, who is fully responsible for the accuracy, originality, and final content of the manuscript.

REFERENCES

Aina, R. Al, & Atan, T. (2020). The impact of implementing talent management practices on sustainable organizational performance. *Sustainability (Switzerland)*, *12*(20), 1–21. https://doi.org/10.3390/su12208372

Ali Almohtaseb, A., A Kareem Shaheen, H., Mohummed Alomari, K., & Yousef Almahameed, M. A. (2020). Impact of Talent Management on Organizational Performance: The Moderating Role of an Effective Performance Management System. *International Journal of Business and Management*, *15*(4), 11. https://doi.org/10.5539/ijbm.v15n4p11

Almaaitaha, M. F., Alsafadia, Y., Altahata, S. M., & Yousfib, A. M. (2020). The effect of talent management on organizational performance improvement: The mediating role of organizational commitment. *Management Science Letters*, *10*(12), 2937–2944. https://doi.org/10.5267/j.msl.2020.4.012

Anlesinya, A., & Amponsah-Tawiah, K. (2020). Towards a responsible talent management model. *European Journal of Training and Development*, *44*(2–3), 279–303. https://doi.org/10.1108/EJTD-07-2019-0114

Ardian, R. Y. (2020). Manajemen Sumber Daya Manusia. *Tsaqofah: Jurnal Pendidikan Islam*, *4*(2).

Arief, R. (2021). PENGARUH PENERAPAN STANDAR OPERASIONAL PROSEDUR (SOP), GAYA KEPEMIMPINAN, DAN AUDIT INTERNAL TERHADAP KINERJA KARYAWAN (STUDI KASUS PADA PT. MEGA PESANGGRAHAN INDAH). *Jurnal Ekonomika Dan Manajemen*, *9*(2), 125–143.

Aryanti, R. A., & Sudarmadi, D. (2020). EFFECT OF OPERATIONAL AUDIT AND INTERNAL CONTROL OF EMPLOYEE PERFORMANCE. *Audit Dan Sistem Informasi Akuntansi*, *4*(2).

Bahtiar, A., Putra, R. G., Meidawati, N., & Puspaningsih, A. (2022). The influence of internal audit, motivation, and work environment on employee performance. *Journal of Contemporary Accounting*, 150–161. https://doi.org/10.20885/jca.vol3.iss3.art4

Blackman, D. A., Buick, F., O'Donnell, M., O'Flynn, J. L., & West, D. (2012). Developing high performance: Performance management in the Australian Public Service. *Crawford School Research Paper*, (12–09).

Dermawan, M. R., Multazam, A., Atmaja, I. G. D., & Palimbong, Y. (2022). Pengaruh Manajemen Talenta Dan Manajemen Pengetahuan Terhadap Peningkatan Kinerja Karyawan Di PT. Pas Indonesia Timur. *Empiricism Journal*, *3*(1), 108–113. https://doi.org/10.36312/ej.v3i1.899

Gallardo-Gallardo, E., Thunnissen, M., & Scullion, H. (2020). Talent management: context matters. In *International Journal of Human Resource Management* (Vol. 31, Number 4, pp. 457–473). Routledge. https://doi.org/10.1080/09585192.2019.1642645

Ghozali, I. (2018). *Metode penelitian*. 35–47.

Hair, J. F. (1995). *MultiVariate Data Analysis.* Jakarta:Gramedia Pustaka Utama.

Hair, J. F. (2021). Next-generation prediction metrics for composite-based PLS-SEM. *Industrial Management and Data Systems*, *121*(1), 5–11. https://doi.org/10.1108/IMDS-08-2020-0505

Hongal, P., & Kinange, Dr. U. (2020). A Study on Talent Management and its Impact on Organization Performance- An Empirical Review. *International Journal of Engineering and Management Research*, *10*(01), 64–71. https://doi.org/10.31033/ijemr.10.1.12

Hura, A. (2017). PENGARUH AUDIT OPERASIONAL DAN EFEKTIVITAS AUDIT INTERNAL TERHADAP DAMPAK KINERJA KARYAWAN PADA PT. DHANAR MAS CONCREN. *Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi, 1*(1), 101–115.

Kagwiria Lyria, R., Namusonge, G. S., & Karanja, K. (2017). The effect of talent attraction on organizational performance of firms listed in the Nairobi Securities Exchange. In *Journal of Human Resource and Leadership ISSN xxxx-xxxx* (Vol. 1, Number 2). www.iprjb.org

Kaliannan, M., Darmalinggam, D., Dorasamy, M., & Abraham, M. (2023). Inclusive talent development as a key talent management approach: A systematic literature review. *Human Resource Management Review*, *33*(1). https://doi.org/10.1016/j.hrmr.2022.100926

Kravariti, F., Tasoulis, K., Scullion, H., & Alali, M. K. (2023). Talent management and performance in the public sector: the role of organisational and line managerial support for development. *International Journal of Human Resource Management*, *34*(9), 1782–1807. https://doi.org/10.1080/09585192.2022.2032265

Kwon, K., & Jang, S. (2022). There is no good war for talent: a critical review of the literature on talent management. *Employee Relations*, *44*(1), 94–120. https://doi.org/10.1108/ER-08-2020-0374

Malika, D., & Irfani, A. (2022). Pengaruh Manajemen Talenta terhadap Kinerja Karyawan pada PT. X. *Jurnal Riset Manajemen Dan Bisnis*, 43–46. https://doi.org/10.29313/jrmb.v2i1.933

Mathis, R. (2018). *Manajemen Sumber Daya Manusia.* Salemba Empat.

Metris, Meyana, Y. E., Mardika, N. H., Srem, A. I. A., Annisa, N. N., Pandiangan, H., & Arman, Z. (2024). *Manajemen sumber daya manusia* (D. Metris, D. Prawatiningsih, A. Haryono, S. Widjajani, & A. Khafid, Eds.; 1st ed.). Pena Muda Media Yayasan Tri Edukasi Ilmiah.

Munadil, R., Mumang, A. B., & Arifin, I. (2024). Pengembangan Sumber Daya Manusia: Kunci Keberhasilan Pembangunan Jangka Panjang.... *Jurnal Edukasi Dan ...*. https://journal.ininnawaparaedu.com/edusos/article/view/60

Rahmawati, H. A. (2019). PENGARUH MANAJEMENT TALENTA TERHADAP KINERJA KARYAWAN MELALUI RETENSI KARYAWAN PADA PD. BPR BANK DAERAH LAMONGAN. *Jurnal Ilmu Manajemen*, *7*(2), 419–430.

Rinadra, M. Al, Fauzi, A., Galvanis, W. J., & … (2023). Analisis Manajemen Talenta, Pengembangan Karir, dan Pengembangan Talenta Terhadap Kinerja Karyawan (Tinjauan Literatur). *Jurnal Ilmu ...*. https://dinastirev.org/JIMT/article/view/1613

Rivai, V. (2018). *Manajemen Sumber Daya Manusia Untuk Perusahaan* (2nd ed.). Pt. Raja Grafindo Persada.

Robbins, G. S. P., Coulter, M. A., & De Cenzo, D. A. (2020). *Fundamentals of Management.*. Harlow:Pearson Education.

Robbins, S. P., & Timothy, A. J. (2018). *Perilaku Organisasi, Edisi Kedua belas, Salemba Empat, Jakarta.* (Edisi Kedua Belas). Salemba Empat.

Saputra, R. T., Ratnasari, S. L., & Tanjung, R. (2020a). PENGARUH MANAJEMEN TALENTA, PERENCANAAN SDM, DAN AUDIT SDM TERHADAP KINERJA KARYAWAN. *Jurnal Trias Politika*, *4*.

Saputra, R. T., Ratnasari, S. L., & Tanjung, R. (2020b). PENGARUH MANAJEMEN TALENTA, PERENCANAAN SDM, DAN AUDIT SDM TERHADAP KINERJA KARYAWAN. *Jurnal Trias Politika*, *4*.

Sari, H. P., Oktaviana, D., & Christina, O. (2024). Urgensi Pola Perencanaan Karir Aparatur Sipil Negara Dalam Upaya Peningkatan Kinerja. *Sosial Simbiosis: Jurnal ...*. https://journal.lpkd.or.id/index.php/Sosial/article/view/450

Satrio, F., Yuwono, P., Dewata Bimantoro, C., Humairani, A., Nikmah, Z., & Manajemen, P. S. (2023). Pengelolaan SDM Dan Perencanaan Sumber Daya Manusia Dalam Kemajuan Suatu Organisasi. *Trending: Jurnal Ekonomi, Akuntansi Dan Manajemen*, *1*(2).

Simamora, H. (2017). *Manajemen Sumber Daya Manusia*. STIE YKPN.

Simarmata, N. I. P., Delyana R Pulungan, Bonaraja Purba Unang Toto Handiman, H., Marto Silalahi, Diena Dwidienawati Tjiptadi, Luthfi Parinduri, Hengki Mangiring Parulian Simarmata, Erlina Dwi Ratnasari, Muhamad Faisal, & Iskandar Kato. (2021). *Perencanaan Sumber Daya Manusia*. Yayasan Kita Menulis.

Sopiah, S., Kurniawan, D. T., Nora, E., & Narmaditya, B. S. (2020). Does talent management affect employee performance?: The moderating role of work engagement. *Journal of Asian Finance, Economics and Business*, *7*(7), 335–341. https://doi.org/10.13106/jafeb.2020.vol7.no7.335

Sugiyono. (2018). Metode Penelitian Metode Penelitian. *Metode Penelitian*, 22–34.

Surya Abbas, D., Ismail, T., Taqi, M., Yazid, H., Raya Palka NoKm, J., & Cipocok Jaya, K. (2022). THE IMPLEMENTATION OF A MANAGEMENT AUDIT ON HR RECRUITMENT TO ASSESS THE EFFECTIVENESS OF EMPLOYEE

PERFORMANCE. *Jurnal Riset Akuntansi Kontemporer*, *14*(2), 243–251. https://journal.unpas.ac.id/index.php/jrak/index

Ulya, H. (2022). PENGARUH MANAJEMEN TALENTA, PERENCANAAN SDM, DAN AUDIT SDM TERHADAP KINERJA KARYAWAN EFFECT OF TALENT MANAGEMENT, HR PLANNING, AND HR AUDIT ON EMPLOYEE PERFORMANCE. *Magister Manajemen, Sekolah Pascasarjana Universitas Pancasila*.

Wehrhahn, C., & Velte, P. (2024). The relationship between audit committees, external auditors, and internal control systems: a literature review and a research agenda. In *Journal of Financial Reporting and Accounting*. Emerald Publishing. https://doi.org/10.1108/JFRA-05-2024-0312

Widodo, & Mawarto. (2020). Investigating the role of innovative behavior in mediating the effect of transformational leader- ship and talent management on performance. *Management Science Letters*, *10*(10), 2175–2182. https://doi.org/10.5267/j.msl.2020.3.019