

# Leadership and Apparatus Competence on Village Fund Accountability: The Mediating Role of Technology Utilization in Jayapura City

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## ABSTRACT

This study analyzes the effect of village head leadership and apparatus competence on the accountability of village fund management, with technology utilization as a mediating variable, in the customary villages (kampung adat) of Jayapura City, Papua, Indonesia. The study is motivated by the rising allocation of village funds, which has not been matched by a commensurate level of accountability, as indicated by a report from the Indonesian Financial and Development Supervisory Agency (BPKP, 2022) and several cases of fund misuse in Jayapura City. A quantitative approach with an explanatory research design was employed. The sample consisted of 100 respondents drawn from 10 customary villages, each represented by 10 respondents (village head, treasurer, secretary, bamuskamp, technical implementers, and community members). Data were collected through a five-point Likert-scale questionnaire and analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS with a bootstrapping procedure of 3,000 resamples. The results show that village head leadership and apparatus competence have a positive and significant effect on both technology utilization and the accountability of village fund management. Technology utilization positively affects accountability. Technology utilization also positively and significantly mediates the effects of leadership and apparatus competence on accountability, with variance accounted for (VAF) values of 36.8% and 37.2%, respectively, indicating partial mediation. The model explains 70.7% of the variance in village fund management accountability. These findings underscore the importance of synergy among leadership, competence, and digitalization in strengthening public-sector financial accountability at the village level, particularly in culturally distinctive regions such as Papua.

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## 1. INTRODUCTION

Villages in Indonesia have the autonomy to manage and regulate their own

affairs in accordance with Law Number 6 of 2014. In Papua, the term *kampung* is the local equivalent of *desa* (village). Development toward such autonomy is supported by substantial financial resources, including Village Funds from the central government, Village Fund Allocations from district governments, and Revenue-Sharing Funds. In 2025, the national village fund disbursement reached IDR 71 trillion. In Jayapura City, the total village fund ceiling for fiscal year 2024 ranged from IDR 113.8 billion to IDR 120.9 billion (Inspectorate of Jayapura City, 2025), with the largest portion originating from the Village Fund Allocation (approximately 68.5%), followed by Revenue-Sharing Funds (approximately 22%) and the central Village Fund (approximately 10%).

The large volume of funds managed creates vulnerability when governance is weak, including fund misuse, embezzlement, and administrative errors. Village financial management should be carried out in accordance with the principles of transparency, accountability, participation, orderliness, and budgetary discipline. In this context, accountability is understood as the obligation of those entrusted with public resources to account for their management transparently to parties entitled to assess them [1]. However, reality reveals serious problems. The BPKP report disclosed weaknesses in the planning, implementation, and reporting aspects of village fund use, including financial reports that did not meet standards, weak transaction recording, and delays in accountability reporting. These conditions are exacerbated by limited human-resource capacity at the village level. In Jayapura City, several cases have been recorded, including alleged misuse of direct cash assistance (BLT) disbursement in Yoka Village and cases involving development projects in Tobati Village and Koya Kosso.

Village governance is inseparable from the role of the leader as the principal holder of responsibility, including in village fund management. Leadership is understood as the ability to influence a group toward achieving a shared vision or goal [2], and transformational leaders in particular are able

to inspire followers to embrace change and innovate [3]. Village fund management can also be carried out effectively when accompanied by competent managing personnel, since preparing sound financial reports requires adequate knowledge, skills, and attitudes, as summarized in the competence model encompassing knowledge, skills, self-concept, traits, and motives [4]. In addition, the government has provided applications such as SISKEUDES (the Village Financial System) to support reporting and accountability. Technology utilization as a form of innovation adoption [5] in Jayapura City remains suboptimal owing to network limitations, low digital literacy among the apparatus, and cultural resistance to technology.

A review of prior research reveals several gaps. In the international context, studies of public-sector leadership show that leadership style influences the performance of government agencies [6], and that e-government adoption is associated with governance in both rural and urban areas [7]. Human-resource competence is also an important factor in budget-based public financial governance [8]. In the Indonesian context, village head leadership has been shown to play a role in realizing village fund management accountability [9], while apparatus competence, organizational commitment, transparency, and community participation have been examined for their effects on accountability [10]. Research on the utilization of information technology generally positions it as an independent or simple intervening variable in relation to accountability [11], rather than as a mediating variable that bridges the effects of leadership and competence on accountability.

Based on these gaps, the novelty of this study lies in the combination of three elements not previously found together in the literature. First, in terms of the model, this study positions technology utilization as a mediating variable bridging the effects of leadership and competence on accountability—differing from prior studies that generally treat technology as an independent or simple intervening variable

[11]. Second, in terms of context, this study was conducted in customary villages of Jayapura City, which feature a duality of customary and administrative institutions as well as digitalization constraints characteristic of border regions, whereas most prior studies are set in areas with different infrastructure and social structures. Third, in methodological terms, the use of PLS-SEM with VAF-based mediation testing enables the separation of direct and indirect effects, so that the role of technology can be gauged proportionally rather than merely declared significant or not. Together, these three elements make the study relevant both for developing public-sector accountability models and for formulating village fund governance policy in regions with similar characteristics.

This study aims to determine and analyze: (1) the effect of village head leadership on technology utilization; (2) the effect of apparatus competence on technology utilization; (3) the effect of village head leadership on village fund management accountability; (4) the effect of apparatus competence on village fund management accountability; (5) the effect of village head leadership on accountability through technology utilization; (6) the effect of apparatus competence on accountability through technology utilization; and (7) the effect of technology utilization on village fund management accountability.

## 2. METHODS

This study used a quantitative approach with an explanatory research design to explain the causal relationships among variables and to test the formulated hypotheses. The study was complemented by a case study of 10 customary villages in Jayapura City, Papua, to gain an in-depth understanding of village fund management within the local context and the cultural wisdom of the local community. The location was selected because it is a strategic border region that exhibits variation in leadership quality and in technology utilization across

villages. The study was conducted over six months.

The research sample comprised 10 customary villages. Each village was represented by the village head, treasurer, secretary, *bamuskamp*, technical implementers, and five community members, so that each village contributed 10 respondents. Thus, the total sample was 10 villages  $\times$  10 respondents = 100 respondents ( $n = 100$ ).

The research variables consisted of two independent variables, namely village head leadership (X1) and apparatus competence (X2); one mediating variable, namely technology utilization (Y); and one dependent variable, namely village fund management accountability (Z). Leadership was measured through seven dimensions (14 items), apparatus competence through four dimensions (12 items), technology utilization through four dimensions (11 items), and accountability through five dimensions (10 items). The operationalization of variables referred to Robbins & Judge (2015) for leadership, Sutrisno (2017) for apparatus competence, and Rogers (2003) for technology utilization; the accountability indicators were derived from Law No. 6 of 2014 (Indonesia, 2014).

Primary data were collected through a five-point Likert-scale questionnaire, complemented by in-depth interviews, observation, and documentation (including a review of accountability reports and SISKEUDES application data). Secondary data were obtained from the Village Empowerment Agency at the Mayor's Office. Instrument validity was tested using product-moment correlation, with an item deemed valid if its correlation coefficient was at least 0.30 [12], [13]. Reliability was tested using the Spearman-Brown formula, with the criterion that a coefficient above 0.70 indicated reliability [12], [13].

Data analysis used descriptive and inferential statistics. Inferential statistics employed partial least squares structural equation modeling (PLS-SEM), as it is suitable for complex models with mediating variables and a modest sample size ( $n = 100$ ). The measurement model was evaluated through

convergent validity (factor loadings, Cronbach's alpha, composite reliability, and average variance extracted [AVE]) and discriminant validity (cross-loadings, the Fornell-Larcker criterion, and the heterotrait-monotrait [HTMT] ratio). Following [14], factor loadings were expected to exceed 0.70, indicators with loadings below 0.40 were to be eliminated, composite reliability was expected to exceed 0.70, and AVE to exceed 0.50. Path coefficients, t-values, and p-values were computed through bootstrapping with 3,000 resamples, while predictive power was assessed through  $R^2$ . Mediation was tested using the indirect-effect approach and the variance accounted for (VAF) criterion. Direct-effect hypotheses were accepted if the t-value exceeded 1.96 and the significance value was at or below 0.05; indirect effects were assessed through testing on the mediation path [15], [16].

### 3. RESULTS AND DISCUSSION

#### 3.1 Respondent Characteristics

Of the 100 respondents, the majority were male (64; 64%) and the remainder female (36; 36%). By age, the largest groups were in the 40–50 year range (33; 33%) and the 30–39 year range (32; 32%), followed by those under 30 (18; 18%) and over 50 (17; 17%). In terms of education, the majority held a senior high school qualification (73; 73%), followed by a bachelor's degree (23; 23%), a diploma (3; 3%), and junior high school (1; 1%). By position, respondents comprised community members (61; 61%), finance staff (24; 24%), treasurers (5; 5%), secretaries (5; 5%), village heads (3; 3%), *bamuskap* (1; 1%), and a fisherman (1; 1%). By length of service, the majority were in the 1–5 year range (76; 76%), followed by 6–10 years (10; 10%), more than 30 years (6; 6%), 21–30 years (5; 5%), and 11–20 years (3; 3%).

#### 3.2 Validity and Reliability

The validity test showed that all statement items had correlation coefficients greater than the critical value of 0.30. For the

leadership variable, coefficients ranged from 0.581 to 0.802; apparatus competence from 0.669 to 0.836; technology utilization from 0.824 to 0.895; and accountability from 0.671 to 0.857. Thus, all items were declared valid. The reliability test showed that all variables had coefficients above 0.70, namely village head leadership (0.960), village apparatus competence (0.971), technology utilization (0.974), and village fund accountability (0.970). All instruments were therefore declared reliable.

#### 3.3 Descriptive Analysis

The descriptive analysis showed high respondent perceptions across all four variables. The village head leadership variable obtained a mean of 4.49, categorized as good, with the highest dimensional score on social and cultural concern (4.57). Apparatus competence obtained a mean of 4.38, with the highest dimension being socio-cultural competence (4.51). Technology utilization obtained a mean of 4.19, categorized as effective, with the highest dimension being adoption and frequency of use (4.22). Village fund management accountability obtained a mean of 4.34, categorized as high, with the highest dimension being accountability of responsibility reporting (4.45).

#### 3.4 Measurement Model

The convergent validity results showed that all dimensions had factor loadings above 0.70, with Cronbach's alpha and composite reliability values above 0.70. For the leadership variable, AVE was 0.689 (Cronbach's alpha 0.925; CR 0.939); apparatus competence AVE 0.788 (0.912; 0.937); technology utilization AVE 0.878 (0.954; 0.967); and accountability AVE 0.741 (0.912; 0.935). The technology-utilization AVE of 0.878 indicates that, on average, 87.8% of the information in each dimension is reflected through its latent variable. Detailed results are presented in Table 2.

Table 2. Convergent Validity (Factor Loadings, Cronbach's Alpha, CR, AVE)

Variable	Dimension	Loading	Cronbach's $\alpha$	CR	AVE
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Leadership (X1)	X1.1	0.821	0.925	0.939	0.689
	X1.2	0.820			
	X1.3	0.852			
	X1.4	0.876			
	X1.5	0.845			
	X1.6	0.798			
	X1.7	0.797			
Apparatus Competence (X2)	X2.1	0.912	0.912	0.937	0.788
	X2.2	0.906			
	X2.3	0.863			
	X2.4	0.868			
Technology Utilization (Y)	Y.1	0.935	0.954	0.967	0.878
	Y.2	0.938			
	Y.3	0.938			
	Y.4	0.937			
Accountability (Z)	Z.1	0.871	0.912	0.935	0.741
	Z.2	0.912			
	Z.3	0.865			
	Z.4	0.895			
	Z.5	0.753			

Note: All loadings exceed 0.70; Cronbach’s alpha and CR exceed 0.70; AVE exceeds 0.50, so all constructs meet convergent validity [14]hair . Y = technology utilization; Z = village fund management accountability.

The highest factor loading for leadership was on the justice-and-integrity dimension, and the lowest on the social-and-cultural-concern dimension. For apparatus competence, the highest loading was on technical competence and the lowest on socio-cultural competence. For accountability, the highest loading was on implementation accountability and the lowest on accountability of responsibility reporting.

The discriminant validity results showed no cross-loading value greater than

its corresponding outer loading. Under the Fornell-Larcker criterion, the square root of AVE for each variable (X1 = 0.830; X2 = 0.888; Y = 0.937; Z = 0.861) was greater than its correlation with other latent variables. All HTMT values were below 0.90, and most were below 0.85 (the highest being Z–Y at 0.802). The three tests demonstrate that the four latent variables possess strong discriminant validity. Detailed results are presented in Tables 3 and 4.

Table 3. Discriminant Validity – Fornell-Larcker Criterion

	X1	X2	Y	Z
X1	<b>0.830</b>			
X2	0.487	<b>0.888</b>		
Y	0.577	0.605	<b>0.937</b>	
Z	0.660	0.688	0.761	<b>0.861</b>

Note: Diagonal values (in bold) are the square roots of AVE; below-diagonal values are correlations among latent variables. Each square root of AVE exceeds its correlations with other variables, confirming discriminant validity.

Table 4. Discriminant Validity – Heterotrait-Monotrait (HTMT) Ratio

	X1	X2	Y
X2	0.529		
Y	0.610	0.620	
Z	0.713	0.732	0.802

Note: All HTMT values are below 0.90 and most are below 0.85, confirming strong discriminant validity (Hair et al., 2022).

### 3.5 Structural Model and Hypothesis Testing

The R<sup>2</sup> values indicate that village head leadership and apparatus competence explain 47.1% of the variance in technology utilization, while leadership, competence, and

technology utilization jointly explain 70.7% of the variance in village fund management accountability. The full structural model is shown in Figure 1, and a summary of the hypothesis tests is presented in Table 5.

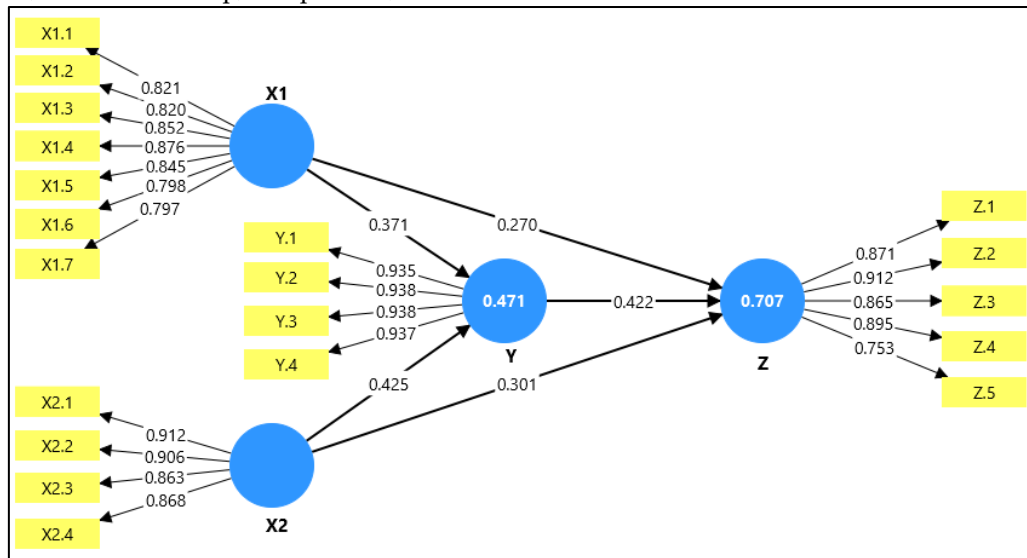


Figure 1. Full structural model path diagram (PLS-SEM)

Table 5. Summary of Hypothesis Testing

Path	Coefficient	t-statistic	p-value	f <sup>2</sup>	Decision
X1 ⇒ Y	0.371	3.449	0.001	0.198	Accepted
X2 ⇒ Y	0.425	4.479	0.000	0.260	Accepted
X1 ⇒ Z	0.270	3.534	0.000	0.158	Accepted
X2 ⇒ Z	0.301	3.076	0.002	0.188	Accepted
Y ⇒ Z	0.422	4.143	0.000	0.322	Accepted
X1 ⇒ Y ⇒ Z	0.157 (indirect); total 0.427	2.589	0.010	—	Accepted (VAF 36.8%)
X2 ⇒ Y ⇒ Z	0.179 (indirect); total 0.481	3.244	0.001	—	Accepted (VAF 37.2%)

Note: Y = technology utilization; Z = village fund management accountability. Thresholds:  $t = 1.96$ ;  $p = 0.05$ . Interpretation of  $f^2$  (Hair et al., 2022): large > 0.35; medium > 0.15; small > 0.02.

All direct-effect paths had t-values greater than 1.96 and p-values below 0.05, so all hypotheses were accepted. Village head leadership had a positive and significant effect on technology utilization (coefficient 0.371;  $t$  3.449;  $p$  0.001), with a medium effect size ( $f^2$  0.198). Apparatus competence had a positive and significant effect on technology utilization (0.425;  $t$  4.479;  $p$  0.000), with a medium effect size ( $f^2$  0.260). Directly, leadership positively affected accountability (0.270;  $t$  3.534;  $p$  0.000;  $f^2$  0.158), as did

apparatus competence (0.301;  $t$  3.076;  $p$  0.002;  $f^2$  0.188). Technology utilization positively affected accountability (0.422;  $t$  4.143;  $p$  0.000;  $f^2$  0.322).

For the indirect effects, village head leadership had a positive and significant effect on accountability through technology utilization (indirect effect 0.157;  $t$  2.589;  $p$  0.010), with a VAF of 36.8%. Apparatus competence also had a positive and significant effect on accountability through technology utilization (indirect effect 0.179;  $t$

3.244;  $p < 0.001$ ), with a VAF of 37.2%. Both VAF values fall within the range indicating partial mediation.

### Discussion

The results show that village head leadership has a positive and significant effect on technology utilization. This finding is consistent with the study by [17], which showed that village leadership influences the success of information-technology development. Substantively, leadership not only directs the organization but also serves as a principal driver of digital transformation. Effective leaders create a vision regarding the importance of technology, provide support for the use of digital systems, reduce resistance to change, and increase individuals' confidence in using technology. Thus, technology utilization is not merely a matter of facility availability but also depends on how leaders manage change.

Apparatus competence likewise has a positive and significant effect on technology utilization. This result affirms that individual competence is a key determinant of technology acceptance. Personnel with technical ability and digital literacy more readily adopt and utilize technology.

Directly, village head leadership positively affects village fund management accountability. This result aligns with [1] view that public accountability is strongly influenced by the commitment and integrity of leaders in managing public resources. In the context of village funds, the integrity of the village head becomes a key factor in preventing irregularities and increasing public trust. Apparatus competence also positively affects accountability; competent personnel are better able to operate accounting and financial-reporting systems correctly, consistent with [1] view that the accountability of public financial management is strongly influenced by the quality of the human resources managing it.

Technology utilization positively affects village fund management accountability. Information technology is a strategic instrument for strengthening public financial governance at the village level, as it

enhances transparency, data accuracy, and ease of access to information. This result supports the finding that the utilization of information technology affects the accountability of village fund management [11].

A notable finding is that technology utilization mediates the relationships partially rather than fully. On the leadership path, of the total effect of 0.427 on accountability, only 0.157 flows through technology (VAF 36.8%), leaving 0.270 as a direct effect. A similar pattern appears on the competence path: of the total effect of 0.481, approximately 0.179 flows through technology (VAF 37.2%), while 0.301 is direct. In other words, on both paths the majority of the effect—approximately 63%—operates without the intermediation of technology. This finding is important because it qualifies an assumption frequently raised in discussions of government digitalization, namely that technology is the principal determinant of accountability. The present results suggest instead that technology strengthens, but does not replace, the human role: the integrity of leadership and the competence of the apparatus remain foundations that act on accountability independently. This finding is consistent with studies that position technology as a supporting factor rather than a substitute for governance [11] and supports the argument that, in contexts with limited digital infrastructure, the strengthening of human capacity should not be deferred while awaiting technological maturity.

Theoretically, this study reinforces the integration of leadership theory, human-resource competence, and technology adoption in explaining the accountability of public-sector financial management, particularly in regional contexts such as Papua. The partial-mediation finding enriches both theories by incorporating the digital dimension as an indirect-effect pathway, while positioning technology as an intervening mechanism that explains how leadership and competence enhance accountability.

The contextual contribution of this study lies in the characteristics of Jayapura

City that distinguish it from village fund studies in other regions. First, there is a duality between customary and administrative villages, with differing leadership and governance systems; village fund management is inseparable from the role of customary institutions such as the *ondoafi* (customary chief), which influences the selection of village heads and the conduct of oversight. The strength of this socio-cultural dimension is reflected in the data: for the leadership variable, the social-and-cultural-concern dimension obtained the highest descriptive score (4.57), and for apparatus competence, the socio-cultural dimension likewise ranked highest (4.51). This indicates that, in the Papuan context, the legitimacy of leadership and competence rests not solely on technical-administrative capacity but also on the ability to uphold customary values and resolve conflict in a culturally grounded manner. Second, the real constraints on digitalization—network limitations, low digital literacy, and cultural resistance to technology—help explain why the effect of technology is partially mediating rather than dominant: technology has not been fully internalized in governance practice and therefore cannot yet displace the central role of human actors. This finding implies that digitalization interventions in regions with similar characteristics should be designed alongside the strengthening of leadership and competence, rather than as a substitute for them.

In practical terms, the results affirm that the combination of strong leadership, adequate apparatus competence, and effective technology utilization is the key to enhancing accountability. The implication is that regional governments should design capacity-building programs for village heads and apparatus through training in leadership, financial management, and digital literacy, and should provide adequate technological infrastructure. For oversight institutions, these results can serve as a basis for strengthening data-driven, technology-based oversight (digital audit), so that potential irregularities can be detected earlier.

This study has several limitations to consider when interpreting the results. First, the respondent composition was dominated by community members (61%) as beneficiaries, while fund-managing personnel constituted a minority. The inclusion of community members aligns with the conception of accountability as responsibility to parties entitled to assess it [1], so their perceptions are relevant as stakeholders; nonetheless, some assessments of apparatus competence are external in nature, and generalization to internal-technical dimensions should be made with caution. Second, the data were collected using a single instrument, from a single perceptual source, at a single point in time, which leaves open the possibility of common method bias; nevertheless, the discriminant validity results—particularly the HTMT values, all below 0.85—indicate that the four constructs remain well differentiated and do not collapse into a single factor. Third, the study was conducted only in a specific area of Jayapura City, so the results may not be generalizable to all of Papua or to other regions. Fourth, the variables were limited to leadership, apparatus competence, technology utilization, and accountability, while other variables such as organizational culture, internal control, community participation, and regulatory factors were not examined. Fifth, the cross-sectional design could not capture long-term dynamics. Future research should use respondents more focused on managing actors, apply procedural and statistical controls for common method bias, and consider longitudinal designs or mixed methods.

#### 4. CONCLUSION

Based on the results, seven conclusions can be drawn. First, village head leadership positively affects technology utilization. Second, village apparatus competence positively affects technology utilization. Third, village head leadership directly and positively affects village fund management accountability. Fourth, apparatus competence directly and positively

affects village fund management accountability. Fifth, village head leadership, indirectly through technology utilization, has a positive and significant effect on accountability. Sixth, apparatus competence, indirectly through technology utilization, has a positive and significant effect on accountability. Seventh, technology utilization positively affects village fund management accountability. Accordingly, sound leadership and adequate apparatus

competence, when supported by effective technology utilization, enhance the accountability of village fund management in the customary villages of Jayapura City, Papua. Future research should add variables such as internal control, community participation, organizational culture, and regulatory factors; employ mixed methods; and broaden the study area so that the results are more robust and generalizable.

## REFERENCES

- [1] M. B. A. Mardiasmo, *Akuntansi sektor publik-edisi terbaru*. Penerbit Andi, 2021.
- [2] S. P. Robbins and T. A. Judge, "Perilaku organisasi edisi 16," *Jakarta: Salemba Empat*, pp. 109–182, 2015.
- [3] B. M. Bass and M. Bass Bernard, "Leadership and performance beyond expectations," 1985.
- [4] L. M. Spencer and P. S. M. Spencer, *Competence at Work models for superior performance*. John Wiley & Sons, 2008.
- [5] E. Rogers, "Diffusion of Innovations 5th." Free press, 2003.
- [6] C. O. Okeke and G. Williams, "LEADERSHIP STYLES AND PERFORMANCE OF FEDERAL GOVERNMENT AGENCIES IN ANAMBRA STATE, NIGERIA".
- [7] B. Zhang and Y. Zhu, "Comparing attitudes towards adoption of e-government between urban users and rural users: an empirical study in Chongqing municipality, China," *Behav. Inf. Technol.*, vol. 40, no. 11, pp. 1154–1168, 2021.
- [8] A. Rodiyah, S. Sriyono, and S. Hermawan, "Competency-Based Budget Implementation Performance, Organizational Commitment, and Leadership," *Amkop Manag. Account. Rev.*, vol. 5, no. 1, pp. 166–181, 2025.
- [9] N. V. Sarinastiti and L. Bhilawa, "Kepemimpinan kepala desa dan pengawasan masyarakat dalam mewujudkan akuntabilitas pengelolaan dana desa," *J. Akad. Akunt.*, vol. 6, no. 2, pp. 199–214, 2023.
- [10] H. Fitra, E. Syofyan, E. Masdupi, E. Mulyani, S. Taqwa, and H. Halmawati, "Pengaruh Kompetensi Aparatur, Komitmen Organisasi, Transparansi dan Partisipasi Masyarakat terhadap Akuntabilitas Pengelolaan Dana Desa. Ekonomis," *J. Econ. Bus.*, vol. 8, no. 2, p. 1526, 2024.
- [11] A. Valentinus, N. Ismail, and S. Kapa, "PENGARUH KOMPETENSI APARATUR, PARTISIPASI MASYARAKAT, DAN PEMANFAATAN TEKNOLOGI INFORMASI TERHADAP AKUNTABILITAS PENGELOLAAN DANA DESA: Studi Kasus Desa Di Kecamatan Wewaria Kabupaten Ende," *J. Ris. Ilmu Akunt.*, vol. 2, no. 1, pp. 1–10, 2021.
- [12] C. Barker, N. Pistrang, and R. Elliott, "Research Methods in Clinical Psychology".
- [13] M. B. A. Riduwan, "Metode dan teknik menyusun tesis," *Bandung Alf*, 2010.
- [14] J. Hair and A. Alamer, "Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example," *Res. Methods Appl. Linguist.*, vol. 1, no. 3, Dec. 2022, doi: 10.1016/j.rmal.2022.100027.
- [15] R. M. Baron and D. A. Kenny, "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.," *J. Pers. Soc. Psychol.*, vol. 51, no. 6, p. 1173, 1986.
- [16] M. E. Sobel, "Asymptotic confidence intervals for indirect effects in structural equation models," *Sociol. Methodol.*, vol. 13, pp. 290–312, 1982.
- [17] O. Turan, A. Durusu, and R. Yumurtaci, "Driving Urban Energy Sustainability: A Techno-Economic Perspective on Nanogrid Solutions," *Energies*, vol. 16, no. 24, 2023, doi: 10.3390/en16248084.