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BEYOND TECHNICAL REFORMS: DUAL-LAYER ORGANISATIONAL CULTURE AND GOVERNMENT ACCOUNTABILITY IN INDONESIA

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ABSTRACT

This study examines how a dual-layer organisational culture, the integration of Indonesia's national bureaucratic values (ASN BERAKHLAK) and Dayak local wisdom (Gumi Jari Janang Kalalawah), moderates the relationships among internal control systems, performance audits, performance-based budgeting, and government performance accountability in East Barito Regency. A quantitative design was employed using survey data from 100 civil servants. Structural equation modelling (SEM) with WarpPLS was applied to test the reliability, validity, and direct and moderating effects of the study variables. The results show that performance-based budgeting exerts the strongest positive effect on accountability, followed by internal control systems, whereas performance audits have no significant direct impact. Dual-layer organisational culture significantly strengthens the effects of internal control and budgeting but not auditing, highlighting the culture's selective moderating influence. The study is limited to one regency and cross-sectional data; future research should test the model across regions and over time. The findings suggest that effective accountability reform requires aligning formal governance mechanisms with culturally legitimate moral values and community norms. This study advances institutional and cultural governance theory by introducing a dual-layer cultural model that bridges modern bureaucratic professionalism with indigenous ethics to enhance public-sector accountability.

KEYWORDS: Government Accountability, Organisational Culture, Performance Audit, Performance-Based Budgeting, Internal Control Systems, Local Wisdom.

1. INTRODUCTION

Public sector accountability remains a pressing concern in developing countries, particularly Indonesia, where decentralisation has created opportunities for local empowerment and systemic corruption (Hadiz & Robison, 2017). Government accountability is widely recognised as a cornerstone of good governance. Despite significant administrative reforms, weak institutions, corruption, and limited public trust often undermine accountability mechanisms in developing countries. Indonesia continues to face these challenges, particularly at the local level. Mechanisms such as internal control systems, performance audits, and performance-based budgeting have been formally institutionalised; however, their effectiveness in ensuring government accountability is often limited by a weak governance culture (Nurmalasari et.al.,

2025).

Reform efforts in Indonesia have focused on strengthening internal control systems, conducting performance audits, and implementing performance-based budgets. Despite notable reforms, Indonesia continues to grapple with low accountability ratings in local governments, as evidenced by the evaluation of the Government Agency Performance Accountability System (*Sistem Akuntabilitas Kinerja Instansi Pemerintah, SAKIP*) by the Ministry of Administrative and Bureaucratic Reform, where many regencies still receive low scores (Kementerian PANRB, 2023). One of the regencies in Central Borneo Province, East Barito Regency, consistently received a 'CC' rating (poor performance), with only minor score fluctuations within the 50–54 range, far below the threshold for 'B' (good performance) from 2019 to 2023 (Figure 1).

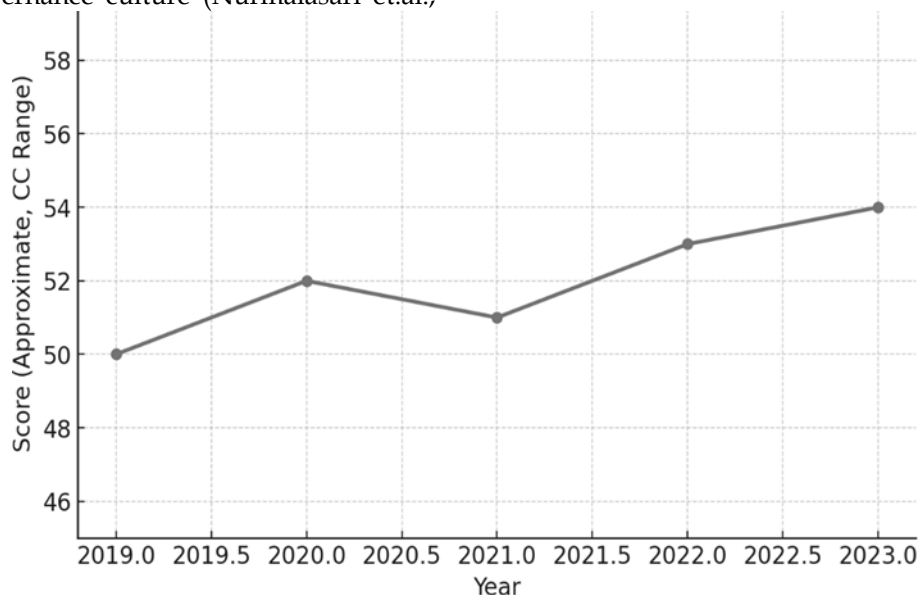


Figure 1: East Barito Regency Ratings, 2019–2023.

Source: Ministry Of Administrative and Bureaucratic Reform (Kementerian PANRB), SAKIP Evaluation Reports 2019–2023 (Kementerian PANRB, 2023).

In Indonesia's grading scheme, 'CC' indicates poor performance, reflecting limited effectiveness in planning, budgeting, program implementation, monitoring, and reporting. The SAKIP evaluation uses a scale ranging from 'AA' (excellent) to 'D' (very poor). This grading approach is comparable to performance accountability assessments in OECD countries, where governments are evaluated based on effectiveness, transparency, and compliance with performance targets (OECD, 2019). However, unlike many Western systems that emphasise independent audit institutions, Indonesia's grading scheme integrates administrative oversight and the cultural dimensions of bureaucratic reform. This makes the CC rating signal a technical weakness and an

indicator of deeper institutional and cultural misalignment.

At the national level, the Indonesian government has introduced the National Bureau of Culture, institutionalised through the BERAKHLAK framework, an acronym for *Berorientasi Pelayanan, Akuntabel, Kompeten, Harmonis, Loyal, Adaptif, dan Kolaboratif* (Service-Oriented, Accountable, Competent, Harmonious, Loyal, Adaptive, and Collaborative) in 2021 by the Ministry of Administrative and Bureaucratic Reform. It represents a formalised ethics code for civil servants, similar to the UK's Nolan Principles or Canada's Values and Ethics Code.

At the local level, in the East Barito Regency,

Central Borneo, civil servants are also embedded within the local wisdom of the Dayak Tribe's values, as expressed in the philosophy of *Gumi Jari Janang Kalalawah* (GJJK). Approximately translated as "the earth and the hands entrusted to us must be preserved with integrity," this phrase embodies Dayak cosmology, where harmony between humans, community, and nature must be maintained. Governance implies a moral responsibility for public officials to act as stewards of collective resources, accountable not only to formal institutions but also to ancestral values and community trust. This principle emphasises harmony between humans, society, and nature, framing public office as a moral responsibility entrusted by the community and ancestors.

The Dayak philosophy of GJJK represents an indigenous ethical system that predates the establishment of modern bureaucratic institutions. Grounded in Kaharingan, the spiritual belief system of the Dayak people, articulates a cosmology that underscores the interdependence among human beings, the community, and the natural environment. Within this normative order, public officials are perceived as custodians of moral equilibrium and not merely as administrative actors. Consequently, acts such as corruption, negligence, or the misuse of public resources are interpreted as transgressions that violate not only legal norms but also ancestral trust and the harmony of the cosmos. The Dayak ethical system exemplifies how accountability and governance may be sustained through moral expectations embedded within communal traditions, complementing formal bureaucratic control mechanisms with culturally rooted forms of normative regulation.

Empirical and theoretical studies consistently indicate that organisational culture shapes the efficacy of formal control and budgeting mechanisms. Subramaniam and Ashkanasy (2001) demonstrate that managers' perceptions of organisational culture moderate the relationship between budgetary participation and managerial outcomes, while research on internal audit effectiveness shows that its impact depends on contextual resources such as management support, auditor authority, and organisational relationships (Alzeban & Gwilliam, 2014; Mihret & Yismaw, 2007). More recent moderated mediation models reveal that internal control systems influence ethical and performance outcomes only under specific organisational dispositions, such as mindfulness or ethical climate (Nguyen & Hoai, 2023).

However, most prior studies were conducted in

private or corporate organisations within developed economies, where cultural values are relatively homogeneous and embedded in Western managerial paradigms. These contexts differ substantially from public sector institutions in developing countries, where formal bureaucratic norms coexist with local belief systems and moral traditions. Despite the growing recognition that institutional performance is culturally embedded (North, 1990; Schein, 2010). There remains a paucity of empirical research examining how indigenous or regional values interact with formal bureaucratic systems to shape accountability outcomes.

To address this gap, the present study proposes a dual-layer organisational culture model that integrates the codified national bureaucratic culture with the indigenous moral authority of Dayak wisdom, *Gumi Jari Janang Kalalawah* (GJJK). This hybrid configuration reflects North's (1990) conceptualisation of institutions comprising formal rules and informal norms that jointly govern behaviour. This study extends the institutional and cultural governance theory by examining how these cultural layers moderate the effects of internal control, performance audit, and performance-based budgeting on accountability in the public administration of the Easy Barito Regency. The findings are expected to contribute to the international literature by illustrating how developing regions can strengthen governance reform not through imitation of Western control systems, but through contextual integration of formal mechanisms with culturally legitimate value systems. This approach deepens the understanding of the culture-control interface and offers a grounded model of how indigenous ethics can reinforce modern administrative reforms.

2. METHOD

2.1. *Research Design*

This study adopts a quantitative research approach using a survey design to test the proposed conceptual model empirically. The population comprised all civil servants in East Barito Regency, Central Borneo Province, Indonesia. Respondents were selected using a stratified sampling technique based on employment rank, ensuring proportional representation across different hierarchical levels within local government bureaucracy. A total of 100 respondents were included in the final sample, which met the minimum sample size recommended for structural equation modelling (SEM) analysis.

The use of a census-based approach is methodologically appropriate given the bounded

nature of the organisational population under study. In public-sector research involving clearly defined administrative units, census designs are widely accepted as they maximise population coverage and reduce sampling bias (Bryman, 2016; Groves et al., 2011). The sample size ($n = 100$) is also consistent with established guidelines for PLS-SEM, which emphasise model complexity and measurement quality rather than large sample requirements (Hair, Hult, et al., 2022a). Prior empirical studies further support this approach; for example, Imam and Astini (2022) applied SEM-PLS with a comparable sample size drawn from a government organisation. All of these considerations justify the adequacy of the sample for the present SEM analysis.

Data were collected through a structured questionnaire using a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). The questionnaire items were adapted from instruments validated in prior studies and adjusted for linguistic and contextual relevance to the Indonesian public sector. Reliability and validity were assessed using Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE), ensuring internal consistency and construct validity in accordance with the methodological standards (Hair et al., 2022).

Data collection combined online and offline survey methods to increase response coverage. The online survey was administered through Google Forms distributed via WhatsApp to digitally active respondents, while the offline survey involved the direct distribution of printed questionnaires to civil servants at their respective offices, to include non-digital participants. This dual-mode approach enhances the representativeness and inclusivity of the sample.

Data analysis employed structural equation modelling (SEM) using the WarpPLS software. The analytical model followed a reflective specification appropriate for testing multidimensional latent constructs with reflective indicators and dimensions. As hypothesised in the conceptual framework, SEM was used to estimate the relationships among internal control systems, performance audits, performance-based budgeting, dual-layer organisational culture, and government performance accountability.

2.2. Measurement

Each latent variable in this study is operationalised through multiple observable indicators, grounded in established theory and prior empirical work, ensuring conceptual consistency and measurement rigour. Government performance accountability was measured across four dimensions: performance planning, performance measurement, performance reporting, and internal evaluation, reflecting the architecture of the Indonesian Government Agency Performance Accountability System (SAKIP). The internal control system construct draws on prior public-sector applications (e.g. Nurmalasari et al., 2025), with indicators defined along the control environment, risk assessment, control activities, information and communication, and monitoring. The performance audit variable is captured through the classic triad of economy, efficiency, and effectiveness, consistent with audit theory and empirical public audit studies (Ríos et al., 2017), and measured based on the Indonesian Financial and Development Supervision for performance-based budgeting. A five-dimensional measurement is used (input, output, outcome, benefit, impact), following Robinson's (2013) model and reflecting Indonesia's reform experiences (Azam & Bouckaert, 2025; Surianti & Dalimunthe, 2015). Finally, organisational culture in this study is conceptualised as a dual-layer construct that integrates national bureaucratic values with the local wisdom of the Dayak community, encapsulated in the philosophy of Gumi Jari Janang Kalalawah (GJJK). It is operationalised through eight key dimensions: service orientation, accountability, competence, harmony, loyalty, adaptability, and collaboration, enriched by the Dayak values of cooperation (gotong royong), faith harmony, and a collective commitment to building a region that remains prosperous and sustainable for future generations.

3. RESULTS

3.1. Instrument Validity and Reliability Testing

The results of the validity and reliability test of the research questionnaire are presented in Table 1.

Table 1: Results Of Questionnaire Validity and Reliability Testing.

Variable	Cronbach's alpha	Composite reliability	Average Variance Extracted (AVE)
Performance Audit	0.953	0.959	0.662
Internal Control System	0.964	0.968	0.668
Performance Accountability	0.908	0.929	0.686
Performance-Based Budgeting	0.962	0.967	0.727

Dual-layer Organisational Culture	0.974	0.976	0.681
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The measurement model satisfied the recommended reliability and validity criteria. Cronbach's Alpha and Composite Reliability (CR) coefficients for all constructs exceed 0.90, well above the minimum acceptable threshold of 0.70 typically cited in social science research. (Hair *et al.*, 2022). In addition, all Average Variance Extracted (AVE) values are greater than 0.66, surpassing the recommended minimum level of 0.50 (Fornell & Larcker, 1981). These results indicate that more than half of the variance in each indicator was accounted for by its corresponding latent construct, thereby confirming the convergent validity of the measurement model.

Overall, the constructs' performance audit, internal control system, performance accountability,

performance-based budgeting, and dual-layer organisational culture exhibit high reliability and convergent validity. These measurement properties provide a solid empirical foundation for advancing the stage of structural model analysis.

3.2. Structural Equation Modelling (SEM) Analysis

The moderating model posits that dual-layer organisational culture strengthens the relationships between the three independent variables and performance accountability. Table 2 presents the model fit indices derived from the SEM-WarpPLS analysis

Table 2: Goodness-Of-Fit Results.

Index	Criterion	Value	Result
Average Path Coefficient (APC)	Significant if $p < 0.05$	APC = 0.290, $p < 0.001$	Significant
Average R-Squared (ARS)	Significant if $p < 0.05$	ARS = 0.847, $p < 0.001$	Significant
Average Adjusted R-Squared (AARS)	Significant if $p < 0.05$	AARS = 0.851, $p < 0.001$	Significant

The structural model demonstrates strong overall fit. The values of APC (0.290; $p < 0.001$), ARS (0.847; $p < 0.001$), and AARS (0.851; $p < 0.001$) were all statistically significant, confirming the robust relationships among the constructs and substantial explanatory power for the endogenous variables. (Kock, 2015). Multicollinearity diagnostics showed AVIF = 4.903 and AFVIF = 4.925, below the critical threshold of five, indicating no serious multicollinearity issues. A Tenenhaus GoF value of 0.765 indicates a large model fit, while SPR (0.857), RSCR (0.991), SSR (1.000), and NLBCDR (1.000) met or exceeded the recommended benchmarks. These results confirm that the SEM model is statistically sound and is suitable for hypothesis testing.

3.3. Variable Profiles

The analysis shows that all independent variables, internal control systems, performance audits, and performance-based budgets, exhibit high mean scores ranging from 3.7 to 4.8. This indicates that respondents perceived implementation of these

practices as good to very good. According to Hair *et al.* (2018), mean values above 3.5 on a five-point scale reflect favourable respondent perceptions of the measured construct.

All factor loadings range between 0.70 and 0.92, exceeding the recommended minimum of 0.70 (Hair *et al.*, 2022). All indicators were statistically significant at $p < 0.001$, confirming the strong relationships between the indicators and their constructs. The combined evidence of high mean scores, strong factor loadings, and statistical significance supports the reliability and validity of the measurement model, justifying its use in subsequent structural analyses (Hair *et al.*, 2022; Kline, 2023).

3.4. The Moderating Effects of Dual-Layer Organisational Culture

The moderating role of dual-layer organisational culture was tested using the SEM-WarpPLS, and the results are summarised in Table 3.

Table 3: Moderating Effects of Dual-Layer Organisational Culture.

Relationship	Path coefficient (β)	p-value	Result
Internal Control System \times Dual-layer Organisational Culture \rightarrow Performance Accountability	0.243	< 0.001	Significant (Dual-layer organisational culture strengthens relationship)

Performance Audit × Dual-layer Organisational Culture → Performance Accountability	-0.008	0.457	Not Significant
Performance-Based Budgeting × Dual-layer Organisational Culture → Performance Accountability	0.197	0.004	Significant (Dual-layer organisational culture strengthens relationship)

The findings reveal that a dual-layer organisational culture strengthens the effect of the Internal Control System on Performance Accountability ($\beta = 0.243$; $p < 0.001$). This suggests that internal control mechanisms enhance accountability more effectively when they are embedded within an adaptive, collaborative, and performance-oriented culture. The dual-layer organisational culture also significantly strengthened the relationship between performance-based budgeting and performance accountability ($\beta = 0.197$; $p = 0.004$). Cultures that support innovation, learning, and results orientation improve the effectiveness of performance-based budgeting in fostering accountability. In contrast, performance audits do not show a significant moderation effect (β

$= -0.008$; $p = 0.457$), suggesting that effectiveness in promoting accountability depends more on implementing audit recommendations than on cultural context. The results indicate that culture is a contextual enhancer of control and budgeting mechanisms, but not of audit-driven accountability.

3.5. Total Effects Analysis

The total effect test results are summarised in Table 4. The results show that performance-based budgeting exerted the strongest total effect on performance accountability ($\beta = 0.683$; $p < 0.001$). This underscores that outcome-oriented budgeting is the primary instrument for enhancing accountability in public organisations.

Table 4: Total Effects Results.

Relationship	Path coefficient (β)	p-value	Result
Internal Control System → Performance Accountability	0.258	< 0.001	Significant
Performance Audit → Performance Accountability	-0.006	0.46	Not Significant
Performance-Based Budgeting → Performance Accountability	0.683	< 0.001	Significant

The internal control system also demonstrates a positive and significant influence on performance accountability ($\beta = 0.258$; $p < 0.001$), although it has a smaller effect than performance-based budgeting. By contrast, performance audits do not show a significant total effect ($\beta = -0.006$; $p = 0.466$), indicating that audits alone do not significantly enhance accountability without systematic follow-up.

All hypothesised relationships among the study variables are illustrated in Figure 2, which presents the structural model linking the independent

variables, internal control system, performance audit, and performance-based budget, to the dependent variable, performance accountability. The figure also depicts the moderating role of dual-layer organisational culture, which influences the strength and direction of these relationships. Each pathway reflects the estimated coefficients, demonstrating both the direct and moderated effects within the model. This visual representation provided a comprehensive overview of how governance mechanisms interact with cultural factors to shape performance accountability in the public sector.

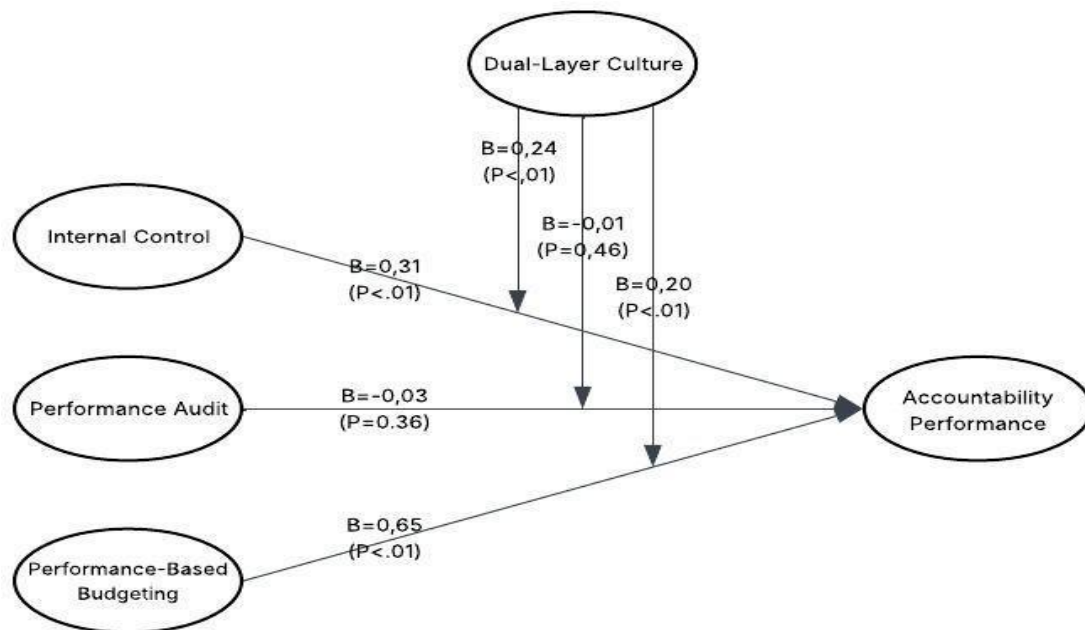


Figure 2: Structural Model of Research Variables.

4. DISCUSSION

The findings of this study confirm that formal control mechanisms remain vital drivers of public sector accountability, but their effectiveness is significantly conditioned by cultural context. Consistent with the first hypothesis (H1), internal controls strongly influence government performance accountability, reaffirming the institutional perspective that well-designed control systems enhance compliance and transparency when properly implemented (North, 1990). This outcome aligns with previous evidence from other public-sector contexts (e.g., Mihret & Yismaw, 2007; Alzeban & Gwilliam, 2014), suggesting that robust internal control frameworks provide an essential structural foundation for accountable governance.

In contrast, the second hypothesis (H2) indicates that performance audits do not significantly affect performance accountability. This divergence from conventional expectations may reflect the limited responsiveness of audited entities or the symbolic rather than the substantive role of auditing in local governance systems. While audit mechanisms are designed to strengthen accountability, their influence appears to weaken when institutional and cultural support structures are insufficient, a condition also observed by Mihret and Yismaw (2007) in the Ethiopian public sector.

The positive effect of performance-based budgeting (H3) corroborates prior studies in both developed and emerging contexts, demonstrating that aligning budgets with measurable outcomes

enhances transparency and performance orientation. This finding also suggests that when budgeting systems are participatory and goal-driven, they provide a behavioural framework that promotes responsibility among government officials, echoing Subramaniam and Ashkanasy's (2001) argument that alignment between formal systems and organisational values improves managerial outcomes.

Crucially, the results concerning the moderating role of dual-layer organisational culture provide new theoretical insight. Consistent with H4 and H6, the interaction effects reveal that integrating national bureaucratic values with indigenous Dayak moral principles amplifies the influence of internal control and performance-based budgeting on accountability. This confirms that formal mechanisms are the most effective when reinforced by culturally legitimate values. In North's (1990) terms, hybridising formal rules and informal norms creates institutional synergy that strengthens compliance and trust. Schein's (2010) organisational culture theory further supports this interpretation: when shared assumptions about responsibility, integrity, and communal obligation are deeply internalised, control and budgeting systems become more than procedural requirements; they evolve into moral commitments.

Conversely, the fifth hypothesis (H5) finds that dual-layer organisational culture does not moderate the relationship between performance audits and accountability. This finding suggests that audit processes, often externally imposed and procedural,

may be less responsive to local moral frameworks. Unlike internal controls or budgeting, which are embedded in day-to-day administrative routines, auditing typically occurs episodically and under external oversight, limiting its capacity to be shaped by indigenous ethical systems.

4.1. Theoretical Implications

The present research extends the theoretical scope to public-sector institutions in developing regions, where formal bureaucratic systems coexist with indigenous moral orders. The empirical evidence supports North's (1990) institutional proposition that effective governance depends on the interaction between formal rules and informal norms. It corroborates Schein's (2010) model of culture as the underlying layer shaping the interpretation and enforcement of formal mechanisms. The finding that dual-layer organisational culture moderates the effects of internal control and performance-based budgeting, while not affecting performance audits, adds granularity to institutional theory by showing that the degree of cultural embedding varies across governance instruments.

Moreover, this study introduces the concept of dual-layer organisational culture as a theoretical construct: the integration of national bureaucratic culture (rooted in state regulation, compliance, and standardisation) and indigenous cultural wisdom (anchored in local ethics and communal legitimacy). This construct expands cultural governance theory by illustrating how cultural hybridity can generate complementary rather than conflicting institutional logics. It offers a conceptual bridge between Western rational bureaucratic models and non-Western value systems, enriching global public administration scholarship from a culturally grounded governance perspective. These findings extend the understanding of good governance and organisational culture theories within decentralised public administration. They demonstrate that accountability is not merely a technical process or a set of procedures. It is a living system that is shaped by human values, collective beliefs, and ethical practices. Effective governance, therefore, depends as much on nurturing a culture of trust and responsibility as it does on implementing formal control mechanisms. When culture and systems align, accountability becomes a rule to follow and a shared value to uphold.

4.2. Practical And Policy Implications

These findings have several important implications for policymakers and practitioners

seeking to strengthen accountability in public administration. They suggest that effective governance reform requires technical refinement of control and budgeting systems and deliberate efforts to align these mechanisms with local moral and cultural foundations. Incorporating indigenous ethical principles into civil service codes of conduct and performance evaluation frameworks can help to bridge the gap between bureaucratic rules and community expectations of moral integrity. Similarly, embedding cultural awareness and value-based leadership training into government capacity-building programs can reinforce the ethical dimension of internal control and budgeting practices, ensuring that accountability is sustained through conviction rather than mere compliance.

4.3. Research Limitations

This research was conducted within a single regional setting, the East Barito Regency in Central Borneo, and its findings may reflect the area's unique social and institutional characteristics. Therefore, caution should be taken in generalising these results to other regions or countries with different governance cultures. Additionally, the analysis captures perceptions and relationships at one point because the data were collected through a cross-sectional survey. The reliance on self-reported responses may also introduce perceptual bias, although all constructs were carefully validated for reliability and consistency.

4.4. Future Research Directions

Studies comparing multiple regions or governance levels could reveal how cultural diversity and administrative structures influence accountability. Incorporating qualitative methods, such as in-depth interviews, ethnography, or participatory observation, would also help uncover the human stories and organisational nuances that quantitative data alone cannot fully capture.

5. CONCLUSION

This study demonstrates that performance-based budgeting exerts the strongest influence on government accountability among the key governance mechanisms examined, followed by the role of internal control systems. These findings reaffirm the importance of aligning financial planning with measurable outcomes and maintaining robust internal oversight to ensure that the performance targets are credible and enforceable. By contrast, performance audits were found to have no significant direct effect, indicating that auditing

alone cannot guarantee accountability unless its recommendations are systematically integrated into managerial routines and decision-making processes.

This study underscores the moderating role of dual-layer organisational culture in strengthening the relationship between formal governance mechanisms and accountability outcomes. This duality within the Indonesian public sector is embodied in the convergence of the national bureaucratic ethos, reflected in the ASN BERAKHLAK values, with local moral wisdom, particularly the Dayak philosophy of *Gumi Jari Janang Kalalawah*. This cultural synthesis fosters a governance environment in which modern administrative professionalism coexists with deep-rooted ethical traditions, reinforcing moral responsibility, collective harmony, and integrity in public service. This study suggests that sustainable accountability in developing country contexts is achieved through the formal design of control

systems and their alignment with locally legitimate cultural values.

While this study is situated within the Indonesian public sector, the dual-layer organisational culture model may also offer a useful point of reference for comparative and cross-cultural research. By distinguishing between formal bureaucratic values and locally embedded moral norms, the model provides a structured way to examine how cultural context shapes the functioning of accountability mechanisms. Future studies could apply this framework in other administrative settings with clearly defined institutional boundaries to assess whether similar patterns emerge when national governance norms interact with regional or community-based value systems. Such applications would allow for cautious comparison across contexts while remaining sensitive to institutional and cultural differences.

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REFERENCES

- Alzeban, A., & Gwilliam, D. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting, Auditing and Taxation*, 23(2), 74–86. <https://doi.org/10.1016/j.intaccudtax.2014.06.001>
- Azam, M., & Bouckaert, G. (2025). How does performance-based budgeting reform affect the extent of performance information use? An empirical study of Indonesia. *International Review of Administrative Sciences*, 91(2), 00208523251313921.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Groves, R. M., Fowler Jr, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2011). *Survey methodology*. John Wiley & Sons.
- Hadiz, V. R., & Robison, R. (2017). Competing populisms in post-authoritarian Indonesia. *International Political Science Review*, 38(4), 488–502.
- Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2022). *Multivariate Data Analysis*. In *Kindle Edition* (008 ed.). Cengage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022a). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022b). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). Sage.
- Imam, S. F., & Astini, R. (2022). Effect Of Green Transformation Leadership On Government Performance Accountability: Through Organizational Learning. *International Journal of Law Policy and Governance*, 1(1), 1–14. <https://doi.org/10.54099/ijlpg.v1i1.194>

- Kementerian PANRB. (2023). *Laporan Hasil Evaluasi SAKIP 2023*. Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration (Ijec)*, 11(4), 1-10.
- Mihret, D. G., & Yismaw, A. W. (2007). Internal audit effectiveness: an Ethiopian public sector case study. *Managerial Auditing Journal*, 22(5), 470-484.
- Nguyen, N. P., & Hoai, T. T. (2023). Internal controls driven by mindfulness toward enhanced ethical behaviors: Empirical evidence from Vietnam. *Heliyon*, 9(7), e18002. <https://doi.org/10.1016/j.heliyon.2023.e18002>
- North, D. C. (1990). Institutions, institutional change and economic performance. In *Cambridge University*.
- Nurmalasari, D., Priyarsono, D. S., & Sari, L. K. (2025). Do internal controls improve integrity? A comparative study of central and regional governments. *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara*, 11(1), 139-156.
- OECD. (2019). *Government at a Glance 2019* (Government at a Glance). OECD. <https://doi.org/10.1787/8ccf5c38-en>
- Ríos, A., Benito, B., & Bastida, F. (2017). Factors explaining public participation in the central government budget process. *Australian Journal of Public Administration*, 76(1), 48-64.
- Robinson, M. (2013). Performance budgeting. In *The international handbook of public financial management* (pp. 237-258). Springer.
- Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.
- Subramaniam, N., & Ashkanasy, N. M. (2001). The Effect of Organisational Culture Perceptions on the Relationship Between Budgetary Participation and Managerial Job-Related Outcomes. *Australian Journal of Management*, 26(1), 35-54. <https://doi.org/10.1177/031289620102600103>
- Surianti, M., & Dalimunthe, A. R. (2015). The implementation of performance based budgeting in public sector (Indonesia case: A literature review). *Research Journal of Finance and Accounting*, 6(12), 198-210.