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Enhancing public integrity through governance, risk, and compliance implementation: A quantitative analysis from Indonesia

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ABSTRACT

The decline in Indonesia's national integrity index in recent years indicates a significant increase in corruption, particularly in public sector organizations. Although the government has implemented various policies and regulations to mitigate corruption, the results have yet to show substantial improvement. One potential approach to addressing this issue is the governance, risk, and compliance (GRC) framework, a strategy designed to strengthen accountability, transparency, and compliance. This research aims to analyze the impact of GRC implementation in public sector organizations in Indonesia, both nationally and regionally. While previous studies have explored the GRC for reducing corruption through theoretical or qualitative assessments, this research provides a quantitative analysis to measure the direct correlation between GRC and public sector integrity. The research methodology employed in this study includes a literature review, descriptive analysis, Pearson correlation test, and panel data regression. The results of this research indicate that the governance component is associated with a significant improvement in integrity across all public sectors. In contrast, the compliance component is related to improvements in local government. Several recommendations were formulated to improve the national integrity index, including strategies for enhancing GRC implementation.

KEYWORDS:
Corruption; governance; risk; compliance; integrity; public sector

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INTRODUCTION

Indonesia's persistent struggle with corruption has once again come under the spotlight. According to the 2023 Corruption Perception Index (CPI) published by Transparency International, Indonesia experienced the steepest decline in transparency in the Asian region, ranking 115th out of 180 countries with a score of 34/100—the lowest in the past decade. This troubling position places Indonesia among the bottom third of the world's most corrupt countries, significantly lagging behind regional neighbors, such as Singapore, Malaysia, Timor-Leste, Vietnam, and Thailand (Transparency International Indonesia, 2023). Reinforcing this concern, the Indonesian Corruption Eradication Commission (KPK) reported in its 2023 Integrity Assessment Survey that the national integrity index fell into the "vulnerable" category, continuing a downward trend from 2021 to 2023. These figures highlight a growing integrity crisis, underscoring the systemic nature of corruption in Indonesia's public sector.

Corruption is a global issue that has a particularly detrimental impact in the public sector, where the misuse of power and authority undermines governance and erodes public trust. As Liu (2016) noted, when power deviates from its intended ethical course, corruption is the inevitable consequence. Indonesia's public institutions continue to grapple with pervasive corruption practices, including bribery, extortion, and abuse of office. In 2023 alone, 791 corruption cases involving 1,695 suspects were recorded, leading to state losses exceeding IDR 28.4 trillion (ICW, 2024). This situation is attributed to the erosion of social values, the prioritization of personal interest over public welfare, and the lack of transparency and accountability in public integrity systems (Pope, 2001).

Integrity is one of the key elements in eradicating corruption; it acts as a mechanism for checks and balances against corrupt behavior in matters of public interest, while ensuring the state meets its obligations to society's social rights (Pope, 2001). Nurjannah and Syamsir (2022) defined integrity as a commitment to carry out actions based on proper and ethical principles that aligned with norms and values, along with consistent dedication to upholding this commitment in any situation, regardless of opportunities or pressure to deviate from principles, expectations, or desired outcomes. Integrity is a foundational virtue in public organizations, encouraging actions oriented toward public welfare rather than personal gain (Endro, 2017). As such, it stands in direct opposition to corruption and is a key indicator of effective governance (Susilo et al., 2024).

Indonesia has undertaken various regulatory and institutional initiatives to curb corruption. These include the Integrity Assessment Survey (SPI), integrity zones, corruption-free areas (WBK), clean and serving bureaucracies (WBBM), and the National Strategy for Corruption Prevention (Stranas PK) established through Presidential Regulation No. 54 of 2018. Despite these extensive efforts, the deterioration in Indonesia's CPI and integrity index continues unabated. The ineffectiveness of these measures raises fundamental questions about whether these approaches are merely bureaucratic formalities with little impact or whether more substantive, integrated strategies are required to produce meaningful change.

Governance, risk, and compliance (GRC) is a promising alternative. GRC is a holistic organizational framework designed to support principled performance, providing an integrated approach to achieving organizational goals while managing uncertainty and upholding ethical standards (Siahaan et al., 2023). GRC is currently considered an effective solution for addressing various challenges that hinder the achievement of organizational objectives, particularly in the volatile, uncertain, complex, and ambiguous conditions faced by organizations worldwide today. GRC comprises three key components: governance, which focuses on the management's direction and control over the organization; risk, which focuses on identifying, analyzing, and responding to risks that may hinder achieving organizational objectives; and compliance, which focuses on adherence to regulatory requirements (Syueb et al., 2020). By embedding these components into institutional processes, GRC enables organizations to operate with integrity, notably by preventing and detecting corruption through robust governance mechanisms, risk-based controls, and strict compliance standards (Syueb et al., 2020).

Given this context, this study examines the impact of GRC implementation on integrity in Indonesia's public sector organizations, with a particular focus on its role in enhancing anticorruption efforts both nationally and regionally. This research builds on previous studies, such as Koeswayo et al. (2024), which investigated the influence of governance indicators on CPI scores, with national income per capita as a moderating variable. The study concludes that governance elements generally have a significant impact on the CPI, indicating that governance is a key component of GRC that affects integrity. Another research study by Siahaan et al. (2023) explored the benefits of integrated GRC frameworks in enhancing organizational performance and detecting corruption. In contrast with prior research, this study empirically investigates the impact of GRC on institutional integrity, focusing on the public sector's unique governance environment. It also includes a regional comparative analysis.

The novelty of this study lies in its dual-level examination—national and regional—of the GRC's influence on integrity, thereby identifying contextual patterns and enabling the formulation of targeted, evidence-based policy recommendations. The study also contributes to bridging a critical gap in the literature by empirically validating GRC as a strategic tool for public governance reform and anticorruption efforts within developing country settings. The central research question guiding this study is to what extent does the implementation of GRC influence integrity in Indonesia's public sector organizations, and how does this relationship manifest across different regional contexts?

Governance, Risk, and Compliance

The GRC concept was introduced in 2002 by the Open Compliance and Ethics Group (OCEG) and first formalized in the academic literature in 2007 by its founder, Scott L. Mitchell, in the International Journal of Disclosure and Governance. GRC is an integrated set of capabilities that enables organizations to engage in principled performance—namely, the ability to achieve objectives, manage uncertainties, and uphold integrity consistently (Racz et al., 2010). The framework encompasses three interrelated components—governance, risk, and compliance—each supported by strategy, processes, technology, and people. Effective GRC implementation is grounded in risk appetite, internal policies, and external regulations, aiming to enhance both organizational performance and ethical conduct (Karthick et al., 2023).

The significance of GRC implementation emerged in response to cases of financial misconduct in the United States, leading to the enactment of the Sarbanes-Oxley Act (SOX) in 2002. This regulation required publicly listed companies in the United States to establish and implement governance controls to ensure compliance with SOX requirements (Habsyi et al., 2021). Despite its global recognition, GRC implementation remains fragmented. According to the OCEG GRC Maturity Survey (2019), only 14% of organizations reported having fully integrated GRC systems, 23% were still operating in silos, and the majority had not yet achieved an adequate level of GRC maturity (GRC Forum Indonesia, 2020). In Indonesia, both public and private organizations continue to experience significant governance challenges (ACGA, 2023), underscoring the need for comprehensive GRC implementation.

Governance, the first pillar of GRC, encompasses the mechanisms, processes, and institutions through which organizations are directed, controlled, and held accountable. It includes a broad spectrum of principles, including transparency, accountability, strategic vision, efficiency, and the rule of law (OECD, 2023; Andayani et al., 2024). In the public sector, governance ensures that institutions uphold their mandate responsibly and transparently, reflecting the interests and rights of the public (Tambajong et al., 2023). This ensures that public interests are served through high-quality public services that promote overall societal well-being (KNKG, 2022).

The government has introduced several regulatory instruments to institutionalize governance in Indonesia. Specifically, Presidential Instruction Number 7 of 1999 on Performance Accountability of Government Agencies mandates that public institutions implement performance accountability mechanisms through the Sistem Akuntabilitas Kinerja Instansi Pemerintah (SAKIP, or Government Agency Performance Accountability System). SAKIP, which is evaluated periodically by the Ministry of Administrative and Bureaucratic Reform, comprises four key components: planning, measurement, reporting, and internal evaluation (PermenPAN-RB Number 88/2021). By linking institutional performance with accountability and transparency, public sector organizations in Indonesia are encouraged to continuously implement and improve good governance practices, minimizing the potential for corruption within their institutions.

The second component, risk, is defined under ISO 31000 as the effect of uncertainty on achieving objectives (ISO, 2018). Uncertainty can result in either negative or positive outcomes. Early conceptualizing perceived risk as a consequence of natural events that could neither be anticipated nor managed. However, modern risk theory considers it a measurable and manageable component of decision-making, not an external hazard (Woods, 2008). Risk is inherent in all processes and activities of organizations. Therefore, organizations must implement comprehensive risk management to ensure these risks do not hinder the achievement of organizational objectives.

In Indonesia, implementing risk management in public sector organizations is mandated through Government Regulation Number 60 of 2008 on the Government Internal Control System, known as SPIP. This regulation requires all government institutions—both at the central and regional levels—to conduct internal controls over the execution of government activities using the SPIP framework. The monitoring and evaluation of risk management within the public sector is performed by the Financial and Development Supervisory Agency (known as BPKP) through Regulation Number 5 of 2021 concerning the Maturity Assessment of the Implementation of the Integrated Government Internal Control System in Ministries/Agencies/Local Governments. Risk elements are measured using the Risk Management Index (MRI), which, employing a set of structured risk evaluation parameters, indicates the effectiveness and maturity of risk management implementation. A higher MRI score indicates that the organization has established effective risk management practices, encompassing process-related risks as well as corruption risks and various forms of organizational misconduct.

The third element of GRC—compliance—ensures that organizations adhere to legal, regulatory, and ethical standards. It encompasses both external mandates and internal codes of conduct and operational guidelines (OCEG; Asnar & Massacci, 2011). From a theoretical standpoint, compliance originates from Milgram's (1963) foundational work, which defined it as adherence to authority or established norms (Novianti & Dewi, 2023). More broadly, compliance is defined as conforming to specific guidelines, standards, or legal frameworks established by authoritative institutions or organizations in a given field (Maulana & Iradianty, 2022).

Compliance in the public sector ensures transparent and lawful operations. In Indonesia, the Ombudsman oversees public service compliance, as outlined in Law No. 37 of 2008. Its assessment framework includes input, process, output, and complaints, aiming to prevent maladministration and reinforce service quality. Compliance serves as a preventive mechanism against corruption (Siahaan et al., 2023) and also supports the development of a rules-based, accountable state.

The Integrity Assessment Survey

The Integrity Assessment Survey (Survei Penilaian Integritas, SPI) is a diagnostic instrument developed by KPK, an independent institution tasked with eradicating corruption in Indonesia through professional, intensive, and sustainable measures. SPI was designed as a tool to map the corruption risks arising in the performance of public duties and the delivery of public services by government institutions in Indonesia (Susilo et al., 2023). Beyond risk mapping, the SPI also aims to generate effective recommendations that public institutions can adopt as part of their anticorruption action plans. It also functions as an instrument to enhance institutional and public awareness of the risks and systemic vulnerabilities associated with integrity public sector breaches.

SPI collects data at the microlevel through three different respondent perspectives: internal stakeholders, external service users, and independent experts or evaluators (Susilo et al., 2023). These perspectives were selected because of their familiarity with the institutional context, understanding of prevailing integrity conditions, and awareness of the anticorruption measures currently in place. With its structured indicators, broad institutional and geographical coverage, and scientifically validated methodology, SPI conducts reliable and representative assessments of the integrity landscape across Indonesia's public sector.

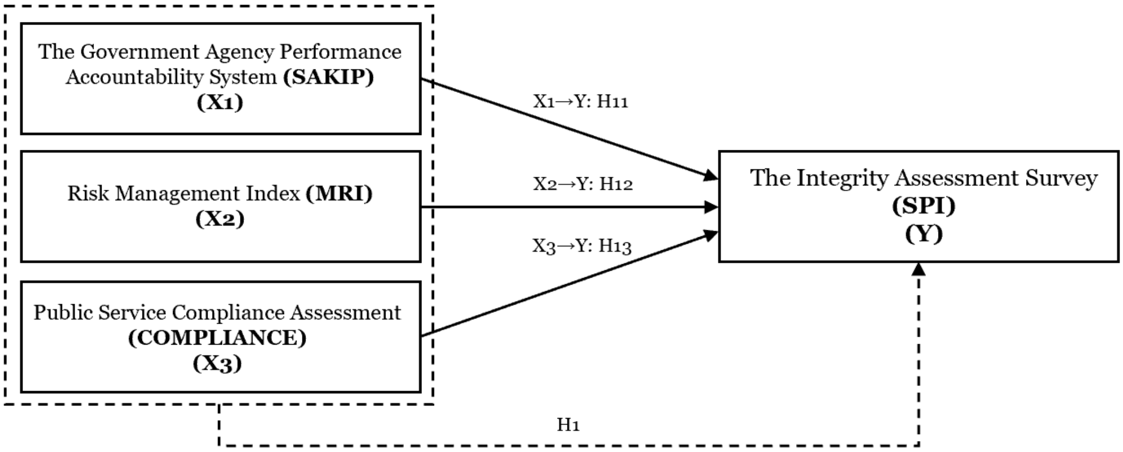
The SPI process begins with systematic data collection, followed by the formulation of risk-based recommendations and the development of corresponding policies. These policies are later evaluated for effectiveness, and the institutions undergo a second round of risk mapping to observe whether integrity risks have diminished, persisted, or re-emerged in new forms. Based on the aggregated data, the SPI scores were classified into three integrity categories: vulnerable (scores < 73), alert (scores 73–77), and maintained (scores 78–100). Higher scores indicate better organizational capacity to mitigate corruption risks and implement responsive integrity safeguards. Through this continuous cycle, organizations can assess corruption risk levels and develop effective and optimal strategies to improve systems and prevent corruption (Susilo et al., 2019).

Hypotheses Development

Implementing GRC allows organizations to integrate governance mechanisms, risk management practices, and regulatory compliance into their operational frameworks. This integrated approach aims to support institutional goals while ensuring accountability, transparency, and ethical behavior throughout the organization. Thus, GRC is not merely a management tool; it reflects an organization's commitment to integrity, embedded at both the systemic and individual levels (Siahaan et al., 2023; Racz et al., 2010).

Despite growing awareness of GRC's strategic value, its adoption within Indonesia's public sector remains fragmented. Many institutions have yet to implement a fully integrated GRC approach that links governance accountability, proactive risk monitoring, and regulatory compliance with anticorruption outcomes. These three variables serve as the study's independent constructs, while the Integrity Assessment Survey (SPI) is used as the dependent variable, capturing the level of institutional integrity. Given the integrative nature of GRC and its potential impact on public sector ethics, this study posits the central hypothesis (H1): The implementation of GRC significantly affects institutional integrity, as measured by the SPI.

This study also examines the influence of each GRC component on SPI to elucidate the specific contribution of each component. These hypotheses are evaluated through multiple regression analysis, aiming to provide empirical evidence on the extent to which integrated GRC mechanisms contribute to strengthening public integrity across Indonesian governmental institutions. The conceptual framework guiding this study is illustrated in Figure 1, which depicts the hypothesized relationships between the three dimensions of GRC.



Note:

———→	: partial relationship between variable X and Y
- - - - - - →	: simultaneous relationship between variable X and Y
H1	: X1 (SAKIP), X2 (MRI) and X3 (COMPLIANCE) simultaneously has a significant effect on SPI (Y)
X1→Y: H11	: X1 (SAKIP) has a significant effect on SPI (Y)
X2→Y: H12	: X2 (MRI) has a significant effect on SPI (Y)
X3→Y: H13	: X3 (COMPLIANCE) has a significant effect on SPI (Y)

Figure 1. Conceptual Framework

RESEARCH METHOD

This study employs a quantitative methodology to analyze the relationship between the implementation of GRC and public sector integrity in Indonesia. The unit analysis encompasses 522 public sector organizations at both the central and regional levels, spanning 38 provinces throughout the country, and is observed over the 2022–2023 period. A structured review of relevant literature and regulatory documents was conducted to operationalize the GRC framework into measurable variables appropriate for Indonesia's public sector. Specifically, SAKIP scores were used to reflect governance (X1), the MRI to capture risk management (X2), and the Ombudsman's compliance scores to measure regulatory compliance (X3). The dependent variable, institutional integrity (Y), was measured using SPI, developed by the KPK. All variables and their sources are summarized in Table 1.

The analysis proceeded in several stages. First, descriptive statistics were used to examine the distribution and characteristics of each variable. Next, Pearson correlation analysis was conducted to identify the direction and strength of the relationships between variables. Finally, panel data regression analysis was employed to test the causal effects of the GRC dimensions (X1, X2, and X3) on institutional integrity (Y). All statistical procedures were performed using EViews 13. To enhance analytical depth, the study also conducted regional-level regression analyses to account for geographical disparities in development, governance capacity, and institutional maturity. This approach aligns with the growth pole theory proposed by François Perroux (1950), which posits that regional development is uneven and tends to concentrate in specific geographic centers. Building on this, Komarovskiy and Bondaruk (2013) argued that regions should be treated as distinct analytical units, each shaped by unique structural interdependencies that influenced their governance performance.

Table 1. Variables and Data Sources

Variable	Notation	Source Document	Issuing Institution
Integrity	Y	Integrity Assessment Survey Report	The Corruption Eradication Commission (KPK)
Governance	X1	Government Agency Performance Accountability System (SAKIP) Report	Ministry of State Apparatus Utilization and Bureaucratic Reform
Risk Management	X2	Risk Management Index (MRI) Report	Financial and Development Supervisory Agency (BPKP)
Compliance	X3	Compliance Assessment of Public Service Delivery	Ombudsman of the Republic of Indonesia

Empirical evidence from Dewanto and Rahmawati (2021) supports this view, highlighting persistent disparities in institutional development between the western and eastern regions of Indonesia. Such disparities can significantly affect the capacity of public institutions to implement governance and integrity frameworks effectively. Therefore, a disaggregated regional analysis is critical for generating context-sensitive recommendations.

To address this, public sector institutions were grouped into four regional clusters to improve analytical robustness and balance data distribution: 1) Central Government, comprising all ministries and national-level agencies; 2) Western Region, encompassing Sumatra, Java, West Kalimantan and Central Kalimantan; 3) Middle Region, encompassing East Kalimantan, South Kalimantan, North Kalimantan, Sulawesi, Bali and the Nusa Tenggara Island; and 4) Eastern Region, including the Maluku and Papua Islands. This regional classification enables the study to consider institutional, social, and economic heterogeneity in interpreting the effects of GRC implementation on public integrity across diverse governance contexts.

RESULT AND DISCUSSION

Descriptive Analysis of Public Sector Organizations in 2022–2023

This study examined 522 public sector institutions in Indonesia, comprising 25 ministries and agencies, as well as 497 local governments. Descriptive statistics were employed to identify the characteristics of each variable, as summarized in Table 2. The results show that the average SPI score among Indonesian public sector institutions is 71.039, placing them in the "vulnerable" category of integrity performance. The SAKIP implementation score averaged 64.449, categorized as "good." The MRI score averaged 2.182, corresponding to a "repeatable" maturity level, while the compliance score averaged 77.062, which falls within Category C (moderate). Collectively, these results indicate that although SAKIP, MRI, and compliance mechanisms are in place across ministries, agencies, and local government, their implementation remains insufficient to elevate institutional integrity beyond the vulnerable range reflected by the SPI.

The maximum and minimum scores indicate significant differences in SPI scores and the implementation of SAKIP, MRI, and compliance among Indonesian public sector institutions. The relatively high standard deviations, skewness, and kurtosis values indicate substantial heterogeneity in implementation quality. The Jarque–Bera test results confirm that the distribution of each variable deviates significantly from normality, suggesting the presence of extreme values and potential structural imbalances. Such statistical anomalies may be linked to institutional capacity gaps, uneven resource allocation, or other contextual factors that warrant deeper qualitative investigation (Gujarati & Porter, 2009).

Table 2. Descriptive Analysis

	SPI (Y)	SAKIP (X1)	MRI (X2)	COMPLIANCE (X3)
Mean	71.039	64.449	2.182	77.062
Median	71.695	65.000	2.000	81.080
Maximum	85.480	95.000	4.000	98.170
Minimum	45.260	15.000	1.000	7.870
Std. Dev.	5.818	9.474	0.525	15.492
Skewness	−0.581	−0.822	0.217	−1.403
Kurtosis	3.735	5.981	3.183	5.364
Jarque–Bera	82.315	504.176	9.679	585.427
Probability	0.000	0.000	0.008	0.000
Sum	74164.83	67285.00	2278.000	80452.32
Sum Sq. Dev.	35306.71	93608.31	287.422	250333.5
Observations	1044	1044	1044	1044

Correlation Analysis

The Pearson correlation analysis was conducted to examine the relationship among the variables in this study, with the results presented in Table 3. The findings indicate that all variables are positively and statistically significant correlated with SPI, as evidenced by p-values of 0.000 (<0.05). However, the correlations vary from weak to moderate. Notably, SPI shows a moderately strong correlation with SAKIP and Compliance, whereas its correlation with MRI is weaker. This pattern suggests that improvements in institutional integrity, as measured by SPI, are more closely linked to the quality of governance (via SAKIP) and the degree of compliance with public service standards than to the maturity of risk management practices.

Table 3. The Pearson Correlation Test

Correlation Probability	SPI (Y)	SAKIP (X1)	MRI (X2)	Compliance (X3)
Y	1.000			

X1	0.516	1.000		
	0.000	-------		
X2	0.339	0.435	1.000	
	0.000	0.000	-------	
X3	0.524	0.469	0.359	1.000
	0.000	0.000	0.000	-------

The relatively weak correlation between MRI and SPI can be explained by several contextual factors. First, the current implementation of MRI in Indonesia's public sector has been largely procedural, focusing on formal documentation over substantive risk mitigation practices. Second, many institutions have limited awareness and capacity to effectively embed risk management into daily operations. Third, the MRI is a recently introduced instrument (2022), and there has been insufficient time for its systematic integration and for its potential effects on institutional integrity to materialize. In contrast, both SAKIP and compliance assessment have been institutionalized for a longer period and are inherently more outcome-oriented. Their focus on performance accountability, service quality, and citizen-centered governance provides a direct pathway for influencing integrity outcomes. As such, these systems appear to exert a more substantial and more immediate effect on SPI performance across public sector institutions.

Regional Regression Analysis

The panel data regression analysis was conducted to test the proposed hypotheses, with the results presented in Table 4. The findings reveal that SAKIP exerts a statistically significant positive effect on institutional integrity (SPI), as evidenced by a p-value of 0.032 ($p < 0.05$). In contrast, MRI and compliance yielded p-values of 0.210 and 0.663, respectively ($p > 0.05$), signifying no statistically significant relationship with SPI when assessed individually. Despite these individual differences, the F-statistic demonstrates that the three independent variables collectively exert a significant joint influence on SPI ($p = 0.000$). The adjusted R-squared value of 0.721 indicates that the model explains 72.1% of the variation in institutional integrity across the observed public sector institutions. This substantial explanatory power highlights the strategic importance of integrated GRC mechanisms, particularly governance elements anchored in performance accountability through SAKIP.

Table 4. Panel Regression Result–Full Sample

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	63.862	2.897	22.047	0.000
X1	0.089	0.042	2.146	**0.032**
X2	0.506	0.403	1.256	0.210
X3	0.006	0.014	0.436	0.663

To account for heterogeneity across regions, as mentioned before, the public institutions were divided into four clusters: Central Government (25 ministries/agencies), Western Region (299 local governments), Middle Region (146 local governments), and Eastern Region (52 local governments). Descriptive analysis shows that average SPI scores across all regions fall within the “alert” to “vulnerable” categories, underscoring the urgent need for improvements in institutional integrity. SAKIP implementation ranges from adequate (CC) to very good (BB), while MRI maturity levels vary from Level 1 (Ad Hoc) to Level 2 (Repeatable). Compliance assessments exhibit even greater variation, ranging from high quality (B) to low quality (D). These results point to uneven institutional capacity across regions, reflecting deeper structural and contextual disparities.

The results of the Pearson correlation analysis confirmed that the relationships between SPI, SAKIP, MRI, and compliance were statistically significant across all regions, albeit with different strengths. Moderately strong correlations were observed in the Central Government and Western Indonesia, whereas a weak correlation was found in the Middle and Eastern Indonesia clusters. This disparity may reflect underlying differences in institutional maturity, governance culture, resource availability, and sociopolitical contexts, suggesting the need for improvement strategies that utilize alternative factors to enhance integrity.

In the Central Government, only the SAKIP showed a significant influence on SPI ($p = 0.032$). In the western region, both SAKIP and compliance had significant effects ($p = 0.000$). In contrast, in the Middle and Eastern Indonesia, compliance was the only variable significantly affecting SPI ($p = 0.035$ and on variable Y, with a probability value of 0.041 ($p < 0.05$). The results of the simultaneous test (F-test) showed that all regions had a probability of 0.000, indicating that the independent variables collectively have a significant effect on the dependent variable. The adjusted R-squared values vary across regions, indicating structural and contextual differences that influence the integrity mechanisms. For instance, high compliance scores in the Western Indonesia region may reflect more mature bureaucratic cultures and greater citizen oversight, while Eastern Indonesia may struggle with systemic service delivery constraints (Dewanto & Rahmawati, 2021). The hypothesis test results of the panel data regression analysis for all regions are presented in Table 5.

Table 5. Hypothesis Test Result for All Regions

Region Clusters	Panel Data Regression Analysis		
	Partial Test (*T*-Test)	Simultaneous Test (*F*-Test)	R-Squared
Central Government	**X1 = 0.032** X2 = 0.289 X3 = 0.058	0.000	0.208
Western Region	**X1 = 0.000** X2 = 0.610 **X3 = 0.000**	0.000	0.143
Middle Region	X1 = 0.192 X2 = 0.832 **X3 = 0.035**	0.000	0.623
East Region	X1 = 0.720 X2 = 0.684 **X3 = 0.041**	0.001	0.479

The findings from both the aggregate and regional analyses reveal that specific governance variables have a significant influence on public sector integrity in Indonesia. These results provide an empirical foundation for designing targeted, evidence-based strategies aimed at strengthening institutional integrity, optimizing resource allocation, and ensuring that interventions yield measurable impact.

At the aggregate level, the analysis reveals that governance—particularly the implementation of SAKIP—has a significant relationship in improving institutional integrity. At the regional level, both SAKIP and compliance demonstrate a substantial relationship in enhancing integrity. These findings reinforce prior studies by Koeswayo et al. (2024) and Muktiyanto et al. (2019), which found that strong governance frameworks play a central role in preventing corruption within public sector institutions. Governance indicators have proven effective in mitigating corruption, emphasizing the importance of strategic recommendations to focus on strengthening good governance practices within organizations.

Compliance, conversely, appears to have a particularly salient impact on government at the local level, where institutional vulnerabilities are higher. Given that regional corruption cases are among the most prevalent types of institutional misconduct in Indonesia, enhancing compliance mechanisms in these areas should be a strategic priority. Effective compliance safeguards against maladministration, promotes transparency, and fosters a culture of accountability and ethical conduct.

Another key dimension of integrity enhancement lies in the integration of GRC mechanisms. Current practices in Indonesia often treat governance, risk management, and compliance as isolated silos, thereby undermining GRC's potential to serve as a comprehensive integrity framework (GRC Forum Indonesia, 2020). By integrating GRC into organizational management, organizations can achieve their objectives while managing uncertainty and upholding ethical standards. This approach aligns with the findings of Siahaan et al. (2023) that integrated GRC systems significantly enhance institutional performance and can prevent and detect corruption. Accordingly, strengthening each GRC component and embedding them into an integrated management framework should be prioritized as a national strategy. Such an approach will enhance coherence in integrity policies, promote efficiency in oversight functions, and optimize efforts to improve public sector integrity across all levels of government.

Strategic Recommendations for Integrity Improvement

Strengthening Governance through SAKIP

The public sector's implementation of SAKIP in Indonesia generally encompasses performance planning, measurement, reporting, and evaluation, each serving as a structural driver of integrity in achieving organizational goals and performance targets. Properly implemented, the SAKIP promotes transparency, aligns budget execution with organizational objectives, embeds accountability into day-to-day operations, and strengthens systems that can mitigate corruption risks or other misconduct. Effective implementation of governance promotes goal-oriented and results-driven performance, enabling organizations to improve performance and meet predetermined objectives consistently.

To enhance the SAKIP's contribution to integrity, strategic adjustments are necessary. A synthesis of the regulatory instruments outlined in the Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform of the Republic of Indonesia Number 88 of 2021 on the Evaluation of Government Institution Performance Accountability, as well as the integrity assessment elements from the Integrity Perception Survey conducted by the KPK, reveals the following key strategies presented in Table 6.

Table 6. Strategic Recommendations for SAKIP Improvement

Strategic Recommendations
a. Institutionalize a top-down commitment to performance and integrity, led by executive leadership and cascaded across all organizational levels.
b. Integrate risk-based planning into performance target setting to identify and mitigate corruption vulnerabilities.
c. Revise key performance indicators to include integrity-focused indicators, not only output fulfillment.
d. Reform human resource management to incorporate merit-based and integrity-sensitive recruitment, promotion, talent management, and reward and punishment systems.
e. Promote integrity awareness through regular internal campaigns, learning sessions, and targeted behavioral interventions.
f. Institutionalize anticorruption messaging and preventive measures as core elements of the performance framework.
g. Expand public participation in planning, implementation, and evaluation processes; enhance accessibility to complaints and feedback mechanisms.
h. Implement digital transformation to integrate processes and activities, thereby enhancing performance effectiveness, efficiency, and transparency.
i. Strengthen internal and external oversight mechanisms through systematic monitoring, evaluation, and periodic reporting activities.
j. Foster the integration of SAKIP, SPIP, and public service compliance within a unified GRC framework.
k. Nurture a results-oriented organizational culture that internalizes integrity as a core institutional value.

All public sector institutions can apply these strategies, which must be tailored to the unique characteristics of each institution. For example, organizations in the central and western regions with stronger SAKIP implementation should prioritize optimization, focusing on cultural transformation, awareness building, and system integration. Conversely, entities in the Middle and Eastern regions should focus on foundational improvements by strengthening leadership commitment, internal capabilities, and system adoption.

Enhancing compliance in public service delivery

Achieving public service compliance by public sector organizations in Indonesia generally encompasses four dimensions: input, process, output, and complaint. Public service compliance refers to delivering fast, easy, affordable, well-organized, and quality services while also minimizing poor management behavior by public service providers. In terms of integrity, the exemplary implementation of public service compliance fosters a culture of clean, honest, transparent, and accountable work that prioritizes society's interests as the primary focus of public services. Therefore, this will reduce the likelihood of misconduct or deviations by public service providers.

From an integrity perspective, compliance is a direct proxy for ethical performance and adherence to citizen-centered values. Building on a synthesis of the Ombudsman's Public Service Compliance Assessment and the integrity assessment elements from the Integrity Perception Survey by KPK, the key strategic recommendations to enhance public service compliance are presented in Table 7.

Table 7. Strategic Recommendations to Enhance Public Service Compliance

Strategic Recommendations
a. Establishing a commitment to deliver good quality public service based on integrity, starting from top management as a role model, to the operational level.
b. Strengthening internal supervision by establishing a special supervisory unit, appointing an agent of change, and conducting internal audits regularly.
c. Establishing clear, consistent, and legally compliant rules, policies, and regulations in accordance with applicable laws.
d. Promote service transparency through digitalization, proactive information disclosure, and robust complaint handling systems, including whistleblower mechanisms.
e. Establishing rules and procedures related to human resource management that incorporate integrity aspects, starting from planning, recruitment systems, development, talent management, and reward and punishment systems, to ensure compliance and uphold integrity among employees.
f. Provide ongoing integrity and ethics training to enhance staff compliance and literacy.
g. Strengthening internal and external socialization, campaigns, and appeals related to the public service compliance implemented by the organization as a form of commitment to upholding integrity.
h. Encouraging public participation in the monitoring and evaluation of public services to ensure integrity within public sector organizations.
i. Align compliance systems with SAKIP and SPIP to create coherence within a unified GRC framework.
j. Fostering an organizational culture of compliance that reflects integrity, accountability, and responsible performance in accordance with applicable laws and regulations.

These recommendations are particularly relevant for institutions in the western, middle, and eastern regions, where compliance performance is uneven. For organizations with higher compliance performance, the strategy should focus on reinforcing and optimizing key elements, such as strengthening internal supervision, improving service transparency, and enhancing outreach and socialization. For organizations with lower compliance scores, the initial priority should be to establish a robust compliance infrastructure and embed integrity as a core service value. By implementing these strategies, public sector organizations are expected to foster a culture of integrity, thereby contributing to the achievement of transparent and accountable governance that is free from corruption.

Advancing integrity through the integrated GRC

Integrated GRC synthesizes governance, risk management, and compliance into a cohesive and strategic framework. When fully implemented, integrated GRC enables organizations to operate with accountability, anticipate and mitigate risks, and consistently comply with regulations. This approach fosters principled performance and reduces the risk of fragmented oversight and redundant processes.

From a corruption prevention standpoint, implementing integrated GRC can strengthen an organization's internal and external controls, reducing the likelihood of corruption. These findings align with Siahaan et al. (2023), who find that the implementation of integrated GRC effectively helps prevent and detect corruption. Therefore, the successful implementation of an integrated GRC must be initiated with a strong commitment from all levels, from top management to the operational level, to collaboratively establish a system that fosters effective governance, risk management, and compliance. Having adequate resources— including human resources, technological infrastructure, and standardized policies and regulations—is essential to ensure the seamless adoption of integrated GRC, particularly in Indonesian public sector organizations. Finally, continuous monitoring and supervision are necessary to ensure its application is properly aligned with GRC objectives and to maintain the effectiveness and sustainability of the integrated GRC

To facilitate the implementation of integrated GRC, the GRC Forum Indonesia has released a set of GRC excellence components that serve as guidelines for the public and private sectors. Each component comprises several criteria that encompass the aspects of processes, people, and tools. Furthermore, OCEG introduced the GRC Capability Model 3.5 in 2024, a globally applicable framework. This latest version is designed to be adopted by organizations of all types, facilitating the integrated implementation of GRC. This model is structured around four core components—learn, align, perform, and review—that guide organizations in designing and evaluating GRC systems. Organizations can select the model that best aligns with their processes while adapting it to relevant laws and regulations. Despite some differences, all models share a common goal: ensuring the effective and optimal implementation of integrated GRC to help organizations achieve their objectives, manage uncertainty, and act with integrity.

Successfully adopting the integrated GRC requires a strong commitment from top management to the operational levels to work together, establishing a system that promotes effective governance, risk management, and compliance. Additionally, sufficient resources are essential, including skilled personnel, technological infrastructure, also standardized policies and regulations, to ensure that integrated GRC becomes a driving force for public sector reform in Indonesia. Finally, continuous monitoring and evaluation are essential for ensuring that GRC implementation remains effective, sustainable, and aligned with all relevant aspects of the GRC framework. By institutionalizing the integrated GRC, public sector organizations in Indonesia can systematically enhance integrity, reduce corruption risks, also promote a more resilient and accountable governance ecosystem.

CONCLUSION

The integrity rating of public sector organizations in Indonesia is considered vulnerable, as reflected in the SPI scores and the prevalence of corruption cases. This underscores the urgent need for comprehensive, strategic efforts to strengthen integrity across all levels of government. One promising approach to address this issue is through the systematic implementation of the GRC mechanism.

The results of the national-level regression analysis indicate that implementing the SAKIP, representing governance, has a statistically significant relationship with integrity (SPI). Furthermore, regional-level regression analysis revealed that both the SAKIP and public service compliance practices significantly contributed to improvements in integrity, particularly in subnational government entities. These findings suggest that strengthening governance and compliance mechanisms is a critical lever for improving integrity in the public sector. Accordingly, strategic efforts to strengthen integrity should prioritize the reinforcement of the SAKIP and compliance dimensions, with targeted interventions based on regional contexts.

Furthermore, public sector organizations in Indonesia should implement a structured and comprehensive approach to integrating governance, risk management, and compliance within the GRC framework. This aligns with the analysis results, showing that the three elements of GRC simultaneously have a significant impact on improving integrity. Therefore, embedding GRC as a unified, institutionalized system within public sector organizations is expected to enhance organizational performance and serve as a preventive measure against corruption. Through this integrated approach, public sector integrity can be strengthened in a structured, sustainable, and impactful manner.

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