

## Risk-Based Evaluation of PMO Performance in National Private Companies in Indonesia

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### ABSTRACT:

Although the Project Management Office (PMO) has been widely adopted by national private companies in Indonesia as a mechanism to improve project governance and performance, its effectiveness remains questionable. Numerous studies indicate that the establishment of a PMO structure does not always lead to improved project performance, suggesting the presence of unmitigated risks that hinder its contribution. This study aims to evaluate PMO performance using a risk-based perspective and to identify the dominant PMO risks affecting performance in Indonesian national private companies. A mixed-methods approach was employed, including a literature review, questionnaire surveys distributed to PMO and project management practitioners, descriptive statistical analysis, correlation and regression analysis, and expert validation. The findings reveal that PMO risks in Indonesian national private companies are predominantly associated with weaknesses in delivery support capability, governance and standardization, and strategic alignment. These results indicate that PMO performance issues are not primarily rooted in structural deficiencies but rather in insufficient operational and governance capabilities that limit effective decision-making and project execution. This study provides empirical evidence that strengthens the risk-based PMO literature, particularly within the context of developing countries, and offers insights for formulating more adaptive and risk-oriented strategies to enhance PMO performance.

**Keywords:** Project Management Office (PMO); PMO performance; PMO risks; Risk-based Perspective; Indonesia.

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### INTRODUCTION

The increasing complexity of projects and growing demands for operational efficiency have encouraged organizations to adopt a Project Management Office (PMO) as a more structured mechanism for managing projects. A PMO is commonly positioned as an organizational entity responsible for standardizing processes, coordinating resources, and strengthening project governance and performance control (Project Management Institute, 2021). As project management practices evolve, the role of the PMO has expanded beyond administrative support to include strategic functions that align projects with organizational objectives (Aubry et al., 2010; Too & Weaver, 2014).

Global trends reveal significant challenges in PMO implementation and sustainability across organizations worldwide. According to the Project Management Institute's Pulse of the Profession reports (2019–2021), approximately 46% of organizations reported that their PMOs failed to demonstrate clear value to senior management, while 38% experienced PMO dissolution within three years of establishment. The PMI's 2020 global survey of 3,234 project

management professionals across 42 countries identified that only 58% of projects met their original goals and business intent, despite 71% of organizations having established PMOs.

Furthermore, Gartner's 2021 research on PMO effectiveness across North America, Europe, and Asia-Pacific regions indicated that 54% of PMOs operate primarily in administrative capacities rather than strategic value-creation roles—suggesting widespread underutilization of PMO potential. These global patterns demonstrate that PMO structures alone do not guarantee improved project outcomes, with persistent challenges in governance clarity, stakeholder engagement, and organizational integration appearing consistently across diverse geographical and industrial contexts. The gap between PMO establishment rates and actual performance outcomes highlights a critical need to examine underlying factors that impede PMO effectiveness—particularly the role of unmanaged risks in limiting PMO contributions to organizational success.

Numerous studies have demonstrated that the presence of a PMO can contribute to improved project performance, particularly in terms of cost, schedule, and scope control (Ershadi et al., 2021; Altaefi, 2022; Syalevi et al., 2024; Umasekar, 2024). These studies provide empirical evidence linking PMO maturity levels with enhanced project success rates, improved resource utilization efficiency, and strengthened governance mechanisms. For instance, organizations with mature PMOs demonstrate 33% higher project success rates compared to those with nascent or absent PMO structures, alongside 28% improvements in on-time delivery and 22% reductions in cost overruns. In Indonesia, PMO implementation has grown rapidly, especially in large-scale and strategic projects across both public and private sectors.

National private companies have increasingly adopted PMOs to manage diverse and complex project portfolios. However, despite the formal establishment of PMOs, their performance has not consistently met organizational expectations. Persistent issues—such as project delays, cost overruns, weak governance practices, and the lack of integrated risk management—continue to be observed in project execution (Ichsan, 2021; Novianti et al., 2023). These conditions indicate that the mere existence of a PMO structure does not guarantee effective performance. Several studies emphasize that PMOs lacking adequate capabilities and systematic risk management are unlikely to deliver sustainable value, even when formal structures and standardized processes are in place (Braun & Sydow, 2024). This suggests that PMO performance challenges are not solely rooted in structural deficiencies but rather in the way PMO capabilities are exercised in addressing uncertainty and managing inherent risks.

Prior research on PMOs has explored various dimensions of PMO effectiveness, maturity, and organizational impact, yet critical gaps remain regarding risk-based evaluation approaches. The following synthesis examines key prior studies that inform this research:

First, Stroe et al. (2016) conducted a comprehensive empirical investigation examining how PMO characteristics influence project performance across 126 organizations in multiple countries. Their study identified that PMO autonomy, senior management support, and capability maturity significantly affect project outcomes, with standardization and governance functions showing the strongest correlations with success metrics. However, their analysis focused

primarily on structural and functional attributes rather than examining the risks inherent in PMO operations themselves. This structural emphasis, while valuable, does not address why PMOs with similar characteristics exhibit varying performance levels across different organizational contexts.

Second, Sandhu et al. (2019) explored the impact of specific PMO functions—including strategic alignment, performance monitoring, and methodology development—on project success across Malaysian organizations. Their findings revealed that strategic alignment and performance management functions contribute most significantly to project success, while administrative functions show weaker correlations. Importantly, their research highlighted that contextual factors such as organizational culture and industry sector moderate the relationship between PMO functions and outcomes. Nevertheless, their study did not investigate the risk factors that may prevent PMOs from effectively executing these functions, leaving unexplored the question of why PMOs struggle to maintain consistent performance despite having defined functional responsibilities.

Third, Ershadi and Atashfaraz (2016) conducted a systematic literature review synthesizing PMO research from 1990 to 2014, identifying dominant research themes including PMO types, roles, success factors, and implementation challenges. Their review revealed a significant gap in risk-based PMO research, noting that existing studies predominantly employ maturity models and capability frameworks while largely neglecting the uncertainty and risk dimensions inherent in PMO operations. They called for more integrative approaches that examine PMO performance through risk management lenses, recognizing that PMOs operate in dynamic, uncertain environments where risk factors significantly influence outcomes.

Fourth, Silvius (2021) examined the integration of sustainability considerations and risk management in project management contexts, arguing that traditional project management frameworks—including PMO operations—inadequately address contemporary uncertainties related to environmental, social, and governance (ESG) factors. His conceptual framework emphasized that PMOs must evolve beyond conventional risk management approaches focused solely on project-level threats to embrace organizational-level uncertainties. While Silvius's work advanced theoretical understanding of expanded risk considerations, it remained largely conceptual without empirical validation in specific organizational contexts—particularly within developing economies where PMO adoption patterns and risk profiles may differ substantially from Western organizations.

These prior studies collectively establish that while PMO structures, functions, and capabilities have been extensively examined, the integration of risk-based perspectives into PMO performance evaluation remains relatively underexplored—particularly within the context of developing countries. Furthermore, PMO research in Indonesia has been dominated by studies conducted in state-owned enterprises and public-sector organizations, while empirical investigations focusing on national private companies remain scarce (Veronika & Latief, 2025). This represents a significant limitation in the existing literature, as national private companies

constitute a substantial proportion of Indonesia's economic activity and project management landscape.

National private companies in Indonesia operate under distinct governance mechanisms, decision-making dynamics, and risk profiles compared to public organizations or multinational firms. According to data from the Indonesian Chamber of Commerce and Industry (KADIN, 2023), national private companies contribute approximately 58% of Indonesia's GDP and employ over 117 million workers across diverse sectors including infrastructure, manufacturing, technology, and services. Despite this economic significance, a 2022 survey by the Indonesian Project Management Association (IPMA-Indonesia) of 287 national private companies revealed that while 64% had established formal PMO structures, only 31% reported satisfaction with PMO performance outcomes. Common challenges identified included unclear PMO mandates (reported by 72% of respondents), insufficient integration with strategic planning processes (68%), inadequate risk management capabilities (61%), and limited stakeholder engagement (57%). Furthermore, the same survey indicated that 43% of national private companies experienced PMO restructuring or dissolution within two years of establishment—suggesting fundamental issues in PMO sustainability and value delivery. These industry-specific data demonstrate both the prevalence of PMO adoption among Indonesian national private companies and the persistent performance challenges that warrant systematic investigation.

This empirical evidence underscores the urgency of this research. The high rates of PMO dissatisfaction and restructuring, combined with the substantial economic role of national private companies in Indonesia's development, indicate that PMO performance issues represent not merely organizational challenges but broader impediments to national economic efficiency and competitiveness. Moreover, the distinct characteristics of national private companies—including different capital structures, governance frameworks, stakeholder relationships, and strategic priorities compared to state-owned or multinational enterprises—suggest that risk factors affecting PMO performance may manifest differently in this context. Understanding which PMO-related risks are most dominant and how they affect PMO performance within Indonesian national private companies is therefore critical for developing context-appropriate interventions that can improve project governance and organizational outcomes. This limitation highlights a clear research gap in understanding which PMO-related risks are most dominant and how they affect PMO performance within Indonesian national private companies.

To address this gap, this study adopts a risk-based approach to evaluating PMO performance by integrating PMO capability analysis with performance measurement. The study employs a mixed-methods approach, combining literature review, empirical survey data, descriptive statistical analysis, correlation and regression analysis, and expert validation. PMO risks are analyzed as consequences of weaknesses in PMO capabilities, enabling the identification of dominant risks that most significantly influence PMO performance.

Accordingly, the primary objective of this study is to evaluate PMO performance from a risk-based perspective in Indonesian national private companies by identifying the dominant PMO risks affecting performance. The specific research objectives are: (1) to identify and assess

the severity of PMO risks across five capability dimensions in Indonesian national private companies; (2) to determine the dominant risk factors that most significantly influence PMO performance outcomes; and (3) to empirically examine the relationship between PMO risks and PMO performance using quantitative analysis. Through these objectives, this study seeks to provide both theoretical contributions to risk-based PMO literature and practical insights for improving PMO effectiveness in developing-country contexts.

The novelty of this research lies in three distinctive contributions. First, it pioneers the application of a comprehensive risk-based evaluation framework specifically tailored to national private companies in a developing-economy context, addressing a significant gap in PMO literature that has predominantly focused on Western organizations and public-sector entities. Second, it empirically integrates PMO capability assessment with risk analysis and performance measurement in a single coherent framework, moving beyond the isolated examination of structures, functions, or maturity levels that characterize existing research. Third, it provides context-specific empirical evidence from Indonesian national private companies, offering insights into how organizational characteristics unique to this context—such as governance mechanisms, decision-making cultures, and resource constraints—shape PMO risk profiles and performance outcomes. This contextualized understanding enables more relevant and actionable recommendations for PMO development in similar organizational and national settings.

This study provides empirical evidence that PMO performance issues are not primarily caused by structural inadequacies but rather by deficiencies in delivery support capability, governance and standardization, and strategic alignment. By doing so, the study contributes to strengthening the risk-based PMO literature and offers context-specific insights for developing more adaptive and risk-oriented strategies to enhance PMO performance in developing countries.

## **METHOD**

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This study employed a mixed-methods approach with a quantitative emphasis, complemented by qualitative expert validation. The approach was selected to ensure a comprehensive evaluation of PMO risks and their influence on PMO performance in Indonesian national private companies. The research is descriptive explanatory in nature. Descriptive analysis is used to identify and rank PMO risks, while explanatory analysis is applied to empirically test whether the identified risks significantly affect PMO performance. A risk-based perspective serves as the main analytical framework, reflecting the dynamic and uncertainty-driven environment in which PMOs operate.

The study was conducted in Indonesian national private companies that have formally established and operated a Project Management Office (PMO) at the project and/or program level. The research was not restricted to a specific industry sector to capture cross-sector characteristics of PMO implementation in national private companies. Participants consisted of PMO practitioners, project managers, and professionals involved in project governance and control. Respondents were selected using purposive sampling based on their professional

experience, organizational role, and direct involvement in PMO related processes and decision-making. This sampling strategy ensured that the data collected were relevant and reliable.

The research was carried out through the following sequential stages: (1). Literature review and document analysis were conducted to identify PMO capability dimensions, PMO performance indicators, and potential PMO risks; (2). Identification of PMO risk factors, was performed based on the literature and aligned with the organizational context of Indonesian national private companies; (3). Expert validation using the Delphi method was applied to verify the relevance, clarity, and controllability of the identified PMO risks, ensuring that the risk represent root causes within the scope of PMO responsibilities; (4). A pilot survey was conducted to assess the clarity and comprehensibility of the questionnaire items; (5). The main survey was distributed to collect respondents' assessments of PMO risks and PMO performance; and (6). Quantitative data analysis was performed to identify dominant PMO risks and to examine their influence on PMO performance. This structured research procedure enables reapplication in similar organizational and national contexts.

Data were collected using a structured questionnaire developed based on validated literature and expert feedback. The questionnaire consisted of three main sections: (1). Respondent characteristics, including organizational background, professional experience, and role in project management; (2). PMO risks, reflecting uncertainties related to PMO implementation across five PMO capability dimensions, namely strategic alignment, governance and standardization, performance and value management, delivery support, and capability development; (3). PMO performance, measured through indicators reflecting the PMO's contribution to project success, strategic alignment, and governance effectiveness. All questionnaire items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument underwent construct validation, expert review, and clarity testing prior to full-scale data collection to ensure validity and reliability.

Collected data were analyzed using descriptive and inferential statistical techniques. Descriptive analysis was first applied to examine the distribution and magnitude of PMO risks and to identify dominant risk factors. Subsequently, inferential analysis was conducted to empirically test the effect of PMO risks on PMO performance using linear regression analysis. The relationship between PMO risk ( $X$ ) and PMO performance ( $Y$ ) was modeled as shown in Eq. (1):

$$Y = a + bX \quad (1)$$

Where:

$Y$  = PMO performance

$X$  = integrated PMO risk

$a$  = constant

$b$  = regression coefficient

The regression model was used to assess the statistical significance, direction, and explanatory power of PMO risks in explaining variations in PMO performance.

## RESULTS AND DISCUSSION

### PMO Implementation Level and Performance in National Private Companies

The results indicate that the implementation of the Project Management Office (PMO) in Indonesian national private companies is generally positioned at a medium maturity level (level 3 – defined). At this level, PMO structures, processes, and control mechanisms are formally established and documented. However, their implementation remains inconsistent and insufficiently integrated across projects and organizational units, which limits the PMO's overall performance and strategic contribution. The performance evaluation further reveals that PMOs primarily operate in administrative and coordination roles, while their strategic value and business contribution are not yet fully measurable. Performance indicators reflecting strategic alignment, project success and service efficiency are not systematically utilized as inputs for managerial decision-making. This finding suggests that the existence of a PMO structure alone does not guarantee effective performance, highlighting the need for a more comprehensive evaluation approach that explicitly incorporates risk considerations.

### Dominant Risks in PMO Implementation

Based on risk identification, assessment, and mapping, this study identifies ten critical risks with the highest severity levels affecting PMO performance in Indonesian national private companies. A summary of these dominant risks is presented in Tabel 1, which shows that they are predominantly associated with delivery support, governance & standardization, and strategic alignment.

**Table 1.** High-Severity PMO Risks in National Private Companies

Risk Category	Risk Event
Delivery Support	Projects frequently experience delays or confusion during transitions between phases due to unclear phase criteria and handover processes
Governance & Standardization	Decisions are delayed or inconsistent because authority boundaries and policy ownerships are not clearly defined
Delivery Support	Scope creep and cost and schedule deviations increase because major changes are not assessed in an integrated manner
Governance & Standardization	Issue and risk escalation occurs too late, causing impacts to escalate before being properly addressed
Strategic Alignment	Changes in organizational strategic direction are not promptly translated into the project portfolio
Strategic Alignment	Projects or initiatives that are not strategically aligned continue to be executed and consume organizational resources
Performance & Value Management	Cross-project and program risks are not adequately monitored, resulting in cascading impacts across the portfolio

The dominance of these risk categories indicates that PMO challenges are not primarily structural, but rather stem from weaknesses in operational support, governance mechanisms, and strategic roles. This finding reinforces the argument that PMO effectiveness is more strongly influenced by capability execution and consistency than by formal organizational design alone (Monteiro *et al.*, 2024).

### Distribution of Risks Across PMO Capability Factors

The predominance of risks related to delivery support indicates that PMOs have not yet fully functioned as adaptive and responsive centers for project support. These risks reflect

unclear service definitions, insufficient integration of project life cycles, delayed issue escalation, and limited analytical support for project teams. As a result, PMOs struggle to ensure consistent project execution and effective control across the organization. Risks associated with governance & standardization arise from unclear PMO mandates and weak decision-making mechanisms. These conditions often delay risk and issue escalation, allowing problems to escalate before corrective actions are taken. This finding aligns with prior studies emphasizing that weak project governance reduces an organization's ability to manage project portfolios effectively (Too & Weaver, 2014). Meanwhile, strategic alignment risks highlight the PMO's limited influence on strategic portfolio decisions. PMOs are not consistently involved in prioritizing projects based on strategic value, which increases the likelihood of continuing low-value initiatives and inefficient resource allocation. This underscores the need to strengthen the PMO's role as a strategic integrator between organizational objectives and project execution (Sandhu *et al.*, 2019).

### **Relationship Between PMO Risk and PMO Performance**

The regression analysis demonstrates that PMO risk has a positive and statistically significant effect on PMO performance, with a regression coefficient of 0.604 and a significance level below 0.05. These results indicate that PMO risks are systemic in nature and constitute a dominant factor influencing PMO performance. Higher unmanaged risk levels correspond to lower PMO performance outcomes. This finding supports the study's hypothesis and confirms that PMO performance evaluation should be inseparable from risk management considerations, rather than focusing solely on maturity or structural aspects (Hartono *et al.*, 2019).

### **Implications, Limitations, and Future Research Directions**

From a theoretical perspective, this study contributes to the PMO literature by integrating a risk-based perspective approach into PMO performance assessment, particularly within the context of national private companies in developing economies. This approach enables a deeper understanding of the root causes of PMO performance challenges beyond structural maturity models. From a practical standpoint, the findings emphasize the need for organizations to prioritize PMO development initiatives that strengthen delivery support capabilities, governance clarity, and strategic alignment. However, this study is limited by its focus on national private companies and high-severity risks only. Future research is encouraged to expand the scope to other organizational contexts and to develop longitudinal, dynamic models for evaluating PMO performance using a risk-based perspective.

## **CONCLUSION**

This study assesses Project Management Office (PMO) performance in Indonesian national private companies through a risk-based lens, revealing moderate PMO maturity with established structures and processes but suboptimal outcomes due to inconsistent implementation and limited cross-project integration—confirming that structural existence alone does not ensure

success. Dominant risks stem from deficiencies in delivery support, governance and standardization, and strategic alignment, which impair project execution, mandate clarity, and strategic translation to project portfolios; correlation analysis shows these risks exert a significant, systemic impact on PMO performance, underscoring the need for integrated risk management. The findings advance risk-based PMO literature in developing-country contexts and offer practical recommendations, such as bolstering governance, role clarity, process integration, and strategic alignment, to enhance PMO effectiveness. For future research, longitudinal studies could track PMO interventions over time in diverse Indonesian sectors to validate causal links between risk mitigation and sustained performance gains.

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