

Article

Challenges in Public-Private Partnership (PPP) Projects in Malaysia

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Abstract: The Public-Private Partnership (PPP) implementation approach in Malaysia aims to enhance the delivery of public sector infrastructure and services. However, the Auditor General's Report 2012 highlighted several deficiencies in PPP project management, including delays, poor quality, and inefficient resource use. This study seeks to identify the issues in the management of PPP projects in Malaysia that contribute to these ongoing problems and to propose improvements for enhancing PPP practices. Adopting a qualitative approach with an inductive single case study, the research involved semi-structured interviews with 14 participants conducted over one month in May 2024. The data were analyzed using NVivo Version 14 software through thematic analysis, which generated relevant codes, categories, themes, and domains. The findings reveal seven key strategic issues in PPP project management, such as accountability; incentives and assistance; values, norms, and prevalence; standards and procedures; good and moral governance; duties and roles; and laws and regulations. To improve PPP practices in Malaysia, it is essential for both the government and private sector key players in PPP project management to focus on enhancing capacity building and process optimization. This study provides valuable insights for future PPP project management in Malaysia and serves as a guide for strengthening PPP practices.

Keywords: Public-Private Partnership (PPP); accountability; good governance; key performance index; government sector

Introduction

Public-Private Partnerships (PPP) are an important approach in government project management. The implementation of PPPs in Malaysia has proven to provide many benefits to both the government and the public overall. However, from a practical perspective, Lou et al. (2013) state that the implementation of PPPs in Malaysia is still at an early stage compared to its global counterparts. PPPs are also seen as not being managed and implemented according to the ideal management practices expected when the principles of the approach were first introduced (Bult-Spiering et al., 2006), and there are still constraints hindering the success of PPP project management and implementation in Malaysia. Weaknesses in governance in PPP project management in Malaysia reported by the Auditor General's Department are also evidenced by studies conducted by Ismail et al. (2021) and Yuan et al. (2018), which emphasize the absence of performance indicators (KPIs) for managing and monitoring PPP projects in Malaysia, indicating the need for guidelines to establish KPIs for monitoring PPP implementation in Malaysia. Additionally, there are issues related to stakeholder management in PPP projects, including stakeholder analysis, stakeholder engagement, stakeholder action plans, and stakeholder monitoring (Kaharuddin et al., 2021).

Alfan (2010) and Sharma (2022, 2012) found a lack of comprehensive government support, either financial or otherwise, to the private sector for PPP projects (Ismail & Asuhaimi, 2013; Izebhor, 2022). Issues of uniformity and clarity in managing PPP projects, whether they are solicited proposals (projects listed in the Malaysia Plan) or unsolicited proposals (new projects from the private sector not in the Malaysia Plan), were also emphasized by Anuar (2012), Asenova et al. (2010), Casady et al. (2021), and Osie-Kyei & Chan (2015), leading to the need for clear and uniform standards for both types of projects (Casady et al., 2021). Izebhor (2022) also highlighted issues regarding knowledge transfer or collaboration between the government and the private sector concerning information and data exchange that need improvement.

Attention is also given to the lack of government guidelines and procedures regarding PPPs (Beh, 2010; Ismail et al., 2014), lengthy PPP project negotiation processes (Ismail et al., 2014; Karim, 2011), and the absence of risk allocation and mitigation management between the government and the private sector in managing PPP projects in Malaysia (Yamaguchi et al., 2001). Additionally, it is seen as important for the private sector to voluntarily disclose their internal information to the government if required for transparency and accountability, as stated in studies by Musawa et al. (2017) and Shaoul et al. (2010). The management of PPP procurement through Request for Proposal (RfP) is also a major issue and requires improvement (Khaderi et al., 2019; Paech et al., 2012).

The role, skills, and competencies of senior leadership and government officials in PPP project management are also seen as still weak (Anantatmula, 2010). Khadaroo et al. (2013) state that PPP contract contents are not clear, and there is a need to explicitly state important terms in the project construction phase to reduce the risk of PPP project failures in Malaysia. There are also issues concerning risk assessment, including risk identification and proper risk analysis, which should be carried out at the early stages of project implementation (Ahmad et al., 2018; Mohd-Rahim et al., 2017). The quality of facility management services for PPP projects is also an issue, as it is crucial that these services are performed well throughout the concession period to avoid affecting project implementation (Samsudin et al., 2022). While Public-Private Partnerships (PPPs) in Malaysia have evolved significantly over the years, several critical issues persist that hinder their effectiveness. Key challenges include inefficiencies in project execution, a lack of transparency in procurement processes, and inadequate stakeholder engagement. These gaps not only delay project timelines but also undermine public trust and limit the potential benefits of PPP initiatives. For instance, recent PPP projects have faced criticisms regarding their cost overruns and accountability, raising questions about their management frameworks.

Therefore, this study aims to explore the challenges in managing PPP projects in Malaysia that may be contributing to these persistent issues. Specifically, this study aims to fill the gap by: identifying practical constraints, establishing performance indicators, enhancing stakeholder management, improving knowledge transfer and clarifying government guidelines. This research contributes to the body of knowledge on PPPs by providing a comprehensive analysis of the unique challenges faced in Malaysia, proposing practical frameworks and strategies for improvement that are directly applicable to enhancing the effectiveness and sustainability of PPP projects in the region.

Literature Review

1. Leadership and Management

Leadership and management play a crucial role in determining the performance of an organization or institution, including within the PPP environment (Ee et al. 2013). Effective leadership in PPP approaches directly impacts project outcomes, and project leaders must be able to lead according to the different situations, types, and phases of projects, which require their expertise and competence (Laureni & Anthony 2016; Zhang et al. 2018; Zulch 2014). Since PPPs involve a partnership, both public and private sector leaders are responsible for integrating human, financial, and technical resources, organizing their teams, maintaining positive relationships among partners, and allocating risks according to their respective sectors. Achieving this is challenging because leaders from both sectors must manage differences in work culture and objectives,

which may conflict with the private sector aiming to maximize profits and the public sector aiming to maximize value for money (Yuan et al. 2011).

2. Financial Incentives

According to Zhang (2005), a factor in the success of a PPP project is having a supportive investment environment, including a strong financial support package from the public sector to ensure the project's economic viability. The PPP project lifecycle consists of three phases: pre-construction, construction, and post-construction. The pre-construction phase involves negotiations between government representatives and the private company awarded the PPP project. The construction phase is the period during which the project is built, while the post-construction phase refers to the maintenance period involving a specific concession period based on the finalized concession agreement (UKAS 2009). The lengthy concession period, which involves multiple stakeholders, makes PPPs more complex than conventional project approaches. Consequently, one of the critical aspects of PPP implementation, performance monitoring and measurement, is often not effectively carried out (Ismail et al. 2021). Palcic et al. (2019) also support this finding, recognizing that performance monitoring and measurement are essential for managing PPP projects due to their long-term nature.

3. Inaccessible information

The World Bank Group (WBG, 2015) clearly states that effective information disclosure practices in PPP governance are essential for accountability of both the government and the private sector. They also highlight that information disclosure can help PPP projects achieve value for money. Using a case study approach, Shaoul et al. (2010) examined a road project in the United Kingdom implemented via PPP, focusing on financial cost scrutiny, and found that available information was vague, insufficient, and not transparent. In Australia, various reports of insufficient information regarding PPP projects have been documented, including in Sands (2004), which highlighted that the shift from conventional approaches to PPPs in government project management led to the erosion of the social contract (the right to know and the obligation to provide) between the public and the government.

4. Project Risk

Bing Li et al. (2005) categorize PPP project risks into three levels: Macro, Meso, and Micro. Macro risks come from external sources, Meso risks from internal sources, and Micro risks from specific stakeholder relationships during the project lifecycle. Examples of risks include political risks (such as changes in public policy), closure risks (e.g., a private partner's inability to continue due to unforeseen factors), land risks (such as expropriation or objections during acquisition), construction risks (such as design changes and maintenance issues), and financial risks (such as unexpected currency fluctuations affecting payment abilities) (Mohd-Rahim et al., 2017). While risks in PPP and construction projects cannot be entirely eliminated, they must be managed effectively. The Public-Private Partnership Guidelines (2009) emphasize the importance of optimal risk sharing, where risks are assigned to the party best equipped to handle them. Often, risks are placed on parties less capable of managing them rather than those more capable. Poor risk management between government and private entities can lead to increased project costs.

5. Stakeholder Management

PPP projects involve complex management due to the engagement of multiple stakeholders. Proper management of these stakeholders is essential to achieving project goals, minimizing risks, and addressing their needs. Ineffective stakeholder management can lead to project failures (Kaharuddin et al., 2021). Schepper et al. (2014) link stakeholder issues directly to PPP project delivery, while Jergeas et al. (2000) highlight two key aspects of stakeholder management: communication needs and establishing common objectives. Olander and Landin (2008) identify five factors important for managing PPP stakeholders: stakeholder analysis, beneficial communication, addressing negative impacts, problem-solving assessment, and project organization. Effective management of stakeholders is critical for project success. Factors

contributing to successful stakeholder management should be examined at four levels: stakeholder analysis, stakeholder engagement, stakeholder management in preparing the project management plan, and stakeholder monitoring, as proposed by Kaharuddin et al. (2021). This process requires careful attention during PPP project implementation, ensuring stakeholders understand success factors to improve management and ensure smooth project execution.

5. Non-transparent RfP Procurement Management

Proper management of PPP procurement is crucial for national development and should be executed systematically with a focus on good governance practices. The RfP procurement method for PPP projects is generally consistent across countries. In places like Korea, the UK, Australia, and South Africa, the process starts with a pre-tender phase to select projects that offer the best value, considering national needs and available funding. This is followed by the RfP tender process, which includes inviting bids, evaluating tenders, negotiating, and selecting the winning bidder (OECD, 2010). The extensive project lifecycle involving multiple stakeholders makes RfP procurement more complex than traditional methods (Mohamad et al., 2016) and is a critical success factor for PPP projects (Khalifa et al., 2021). Thus, achieving good governance in RfP procurement is crucial for improving traditional procurement practices, aiming for more efficient government project execution, and providing value for money with economic and social impacts. Past studies indicate that RfP documents often have a broad scope and limited time for bidders to resubmit documents (Paech et al., 2012).

Numerous studies have been conducted on the challenges encountered in Public-Private Partnership (PPP) projects in Malaysia. However, researchers have identified a gap in the existing literature, particularly the lack of comprehensive research focusing on the officers directly involved in the management of PPP projects. This study aims to address this gap by exploring the challenges faced by PPPs through the perspectives of informants engaged in these projects.

Methodology

A qualitative method was employed to address the research questions. Utilizing a single-case study approach, interviews were conducted with 14 participants from three institutions: three representatives from UKAS, the central agency overseeing PPPs in Malaysia; six from various ministries or agencies; and five from the private sector. The data collected from 14 study informants is adequate because the information provided is relatively consistent regarding the issues being studied. This single-case study method focuses on in-depth analysis of a specific case, which can encompass an individual, group, organization, event, or phenomenon. It allows researchers to explore complex issues in detail, yielding rich qualitative insights (Yin, 2018). Participants were selected based on their relevant experience and expertise, contributing significantly to the research findings (see Table 1).

The interviews effectively addressed the research questions and provided comprehensive results. Data collection involved verbatim transcripts, which served as the primary source for the findings. These transcripts were processed using NVivo Version 14 software and analyzed thematically to develop codes, categories, themes, and related domains. Thematic analysis followed six main steps: First, reviewing the data thoroughly to understand its context. Second, creating initial codes based on significant features within the data. Third, identifying themes that emerged from the generated codes. Fourth, evaluating the suitability and validity of the identified themes. Fifth, defining and naming the themes. Finally, producing a report that integrates narrative and analysis.

Table 1. Informan background

Informan	Number	Experience	Date of Interview
UKAS Officers	3	9 to 15 years	14 Mei 2024 (1 participant) 16 Mei 2024 (2 participant)
Ministry/Agency/Statutory Body Official	6	7 to 27 years	10 Mei 2024 (3 participant) 13 Mei 2024 (1 participant) 14 Mei 2024 (2 participant)
Privates Sector Reprisentatives	5	7 to 35 years	10 Mei 2024 (1 participant) 13 Mei 2024 (1 participant) 15 Mei 2024 (3 participant)
Jumlah	14		

Findings and Discussion

Based on the findings of the study, Table 2 below summarizes the overarching themes, categories, number of codes, and number of statements relevant to understanding the strategic issues in PPP project management in Malaysia. The analysis indicates that the issue of roles and responsibilities is the most critical, with 26 statements articulated by the interview participants. Conversely, the issue of incentives and support is considered less strategic, with only 3 statements; however, it still warrants attention for enhancement to improve PPP practices in Malaysia.

Table 2. Summary of themes, categories, number of codes, and number of statements for strategic issues in Malaysia

Theme	Category	Number of codes	Number of statements
Theme-1: Accountability	Category-1: Political Interference and Pressure Category-2: Integrity of PPP Project Management	3	23
Theme-2: Incentives and Assistance	Category-3: Government Interventions and Assistance Efforts	1	3
Theme-3: Values, Norms, and Customs	Category-4: Awareness and Focus on PPP Category-5: Conflicts and Alignment of Institutional Culture	5	21
Theme-4: Standards and Procedures	Category-6: Compliance in PPP Project Management Phases	3	14
Theme-5: Good and Ethical Governance	Category-7: Stakeholder Management Category-8: Governance and Standards in PPP Project Management	5	22
Theme-6: Roles and Responsibilities	Category-9: Skills and Competencies of PPP Project Managers	3	26
Theme-7: Laws and Regulations	Category-10: Obligations and Compliance with Concession Agreements	3	9

Discussion

1. Accountability

Accountability involves efforts to enhance transparency and openness in PPP governance and decision-making. This encompasses initiatives aimed at improving access to information, enhancing the integrity of PPP management, and promoting greater participation in PPP decision-making processes. Political intervention and pressure are among the categories under accountability. In this category, participants expressed the view that the involvement of politicians in decision-making can impact the overall management of PPP projects. According to the information provided by participants, changes in government have led to the freezing of planned PPP projects and a directive for them to be reviewed. Decisions regarding the implementation of PPP projects are under the authority of the cabinet, which is composed of politicians.

However, when there is a change in the national leadership, policy changes occur, causing existing projects that were previously vetted and viable to be postponed due to the directives of the new cabinet. PPP projects in Malaysia tend to focus more on direct negotiations rather than open tenders, leading to issues of transparency and inequality in the selection of companies for project execution. This is supported by a statement from participant S1 in the study, who compared this approach with countries like India and the United Kingdom, which use open tenders for selecting companies to implement PPP projects. In PPP project management, from planning through to project completion, negotiations are conducted between both parties before the Concession Agreement is finalized. Once finalized, it becomes the responsibility of both the private company and the government to adhere to and fulfill the obligations outlined in the signed Concession Agreement. However, issues arise regarding unexpected changes that were not negotiated during the project planning stage. These changes can include increases in land premium fees, the introduction of new regulations and laws, and alterations to existing standards or guidelines. Such changes, which affect the obligations of both parties, not only disrupt the planning of PPP projects but also impact the company's cash flow, sometimes leading to projects being unable to be completed. These findings support the view of Paech et al. (2012), which emphasizes that achieving good governance in RfP procurement is vital for improving traditional procurement practices, facilitating more efficient execution of government projects, and providing value for money with both economic and social advantages.

2. Incentives and Assistance

The PPP approach generally emphasizes private sector participation in enhancing the delivery of infrastructure and public services by transferring responsibility for financing and managing a package of capital investment and services to the private sector (UKAS 2009). However, throughout the project management process, there is a need for government intervention to assist the private sector due to unforeseen issues such as land-related problems. Based on the interviews conducted, it was found that in Malaysia, government intervention and assistance remain weak, with the government still holding the mindset that PPPs involve a complete transfer of project risk to the private sector. According to study participants, although some assistance is provided by the government, it is still insufficient to help companies address cash flow issues and other problems during PPP project management.

The second category under values, norms, and practices concerns discrepancies and alignment in institutional culture. Discrepancies here refer to differences in goals between the parties involved in the collaboration, which diverge from the spirit of PPP itself. Alignment of culture, on the other hand, emphasizes issues related to the PPP culture practiced in the government and private sector that are not in line with the true objectives of PPP. The study found that issues related to differing cultures and goals of PPP between the government and private sector were specifically highlighted by participants from both sectors. There is a perception that close cooperation between the government and the private sector remains weak, and the spirit of PPP has diminished compared to when PPPs were first introduced. Additionally, the government is seen as being too rigid in implementing PPPs in Malaysia. Participants also noted issues related to compromise between both parties in finalizing the Concession Agreement in line with the concept of PPP collaboration. Supporting statements from the interviews are as follows:

“In addition, PPPs require close cooperation between the Federal Government, State Government, and the private sector. The spirit of partnership must be present. If one is missing, it is indeed impossible.” (G3)

In conclusion, the differing cultures and goals of PPP between the government and private sector, particularly regarding the spirit of cooperation and partnership, represent a strategic issue in PPP project management in Malaysia. Khadaroo et al. (2013) argue that the lack of a sharing culture in PPP implementation has led to the ineffective execution of existing policies and that cooperation with different stakeholders complicates overall PPP project management. In line with Zhang's (2005) view, the investment environment, which includes strong financial support from the public sector, is essential for ensuring the project's economic viability.

3. Values, Norms, and Practices

The thematic analysis identified four codes under this category: insufficient promotion of PPPs to the public, weak risk management mechanisms, understanding and flexibility of PPP Concession Agreements, and inadequate understanding and attention towards PPP initiatives. Based on interviews, a participant (U3) expressed the view that there is a lack of promotion about PPPs to the public, leading to dissatisfaction among the populace. For example:

“We need to increase public awareness for PPP projects. Take tolls as an example. The public complains about why tolls are not demolished, but not everyone understands that these tolls are bound by concession agreements. So, if we want to demolish them quickly, the government needs to provide compensation.” (U3)

Regarding risk management, government awareness in risk allocation remains weak, often placing the full burden of risk on the private sector, which in turn leads to increased costs for the public through user-pay projects. This issue was acknowledged by participant G4:

“In terms of government assistance, we used to provide land, but now the government has withdrawn the reimbursable land cost (RLC) assistance. So, when this happens, the government should share some risk with the companies so that the public isn't burdened with high user fees.” (G4)

Interviews with private sector participants (S1) revealed that risks in PPPs are entirely borne by the private sector, leading to increased existing costs. However, participant S5 from the private sector stated that the current risk allocation between the government and private sector aligns with the concept of fully private-financed PPPs. Concession Agreements are legal contracts signed between the government and the private sector, which both parties must adhere to throughout the concession period. These agreements include clauses related to project management and implementation. Furthermore, interviews revealed that project managers in the government, in particular, often do not pay adequate attention to the terms or clauses of the Concession Agreement, which could lead to potential exploitation by the private sector. The concept of PPP is still poorly understood and attended to in Malaysia. This is consistent with findings from interviews with participants from both the government and private sectors, who confirmed that this issue is strategic in PPP project management in Malaysia. Public understanding of PPP initiatives, especially among the general populace, is very weak, and there is a lack of clarity on how PPPs are implemented. Social behavior regarding PPPs also needs attention and improvement.

The second category under values, norms, and practices concerns institutional cultural contradictions and alignments. Here, contradictions refer to differences in the goals of the parties involved in the collaboration, particularly concerning the spirit of PPP itself. Alignments refer to issues with PPP culture practiced in the government and private sectors that do not align with the true goals of PPP. The study found that differences in the culture and goals of PPP between the government and the private sector were emphasized by participants from both sectors. There is a view that close collaboration between the government and private sector is still weak, and the spirit of PPP has diminished compared to when it was first introduced. Additionally, the government remains rigid in implementing PPPs in Malaysia. Participants also noted issues

with compromise between both parties in finalizing Concession Agreements according to the PPP cooperation concept. This view aligns with Khadaroo et al. (2013), who state that the lack of a sharing culture in the implementation of PPP has led to existing policies being poorly and ineffectively executed, while collaboration with various stakeholders complicates the management of PPP projects.

4. Standards and Procedures

Among the themes with the highest frequency in the thematic analysis is the issue of standards and procedures, with a focus on compliance with the phases of PPP project management. This theme specifically addresses the stages or phases in the lifecycle of PPP project management. In this context, these phases include setting project objectives, assessing feasibility, evaluating, outlining project scope, and others. The PPP lifecycle encompasses three phases: pre-construction, construction, and post-construction. Pre-construction is the phase of negotiation between government representatives and the private company awarded the PPP project. The construction phase is when the project is built, while the post-construction phase refers to the maintenance period, which involves a specific concession period based on the finalized concession agreement (UKAS 2009). The study found that compliance with the phases of PPP project management is a key concern among participants, who noted issues with incomplete and sometimes excessive information submitted during the project application phase (pre-construction). Additionally, other strategic issues raised include the management of PPP project procurement through RfP (Request for Proposal), which is an open tender method introduced by UKAS in the procurement policy for PPPs in Malaysia. Issues related to the lengthy evaluation process for PPP projects were also highlighted by participants.

5. Good and Ethical Governance

This theme focuses on the framework and workflow, guidelines, and standards used to manage PPP projects. It encompasses the adequacy and effectiveness of existing guidelines and procedures in addressing the complexities, risks, and challenges inherent in PPP projects. The theme also includes strategic management of relationships and interactions with stakeholders involved in PPP projects. This involves identifying stakeholders, understanding their needs, and actively engaging with them throughout the lifecycle of the PPP project. The study identified two main categories of issues under good and ethical governance: stakeholder management and governance and standards of PPP project management. Stakeholders for PPP projects differ slightly between the government and the private sector. According to participants from the government sector, stakeholders involved are ministries or agencies and the public.

On the other hand, for the private sector, the stakeholders involved are the government, financiers, and users. The issue raised primarily concerns private sector participants, specifically regarding the management of stakeholders with specific demands that are challenging for them to meet. In terms of governance and management standards for PPP projects, a strategic issue emphasized is the inadequacy of project management guidelines for PPPs. This is supported by Zawawi et al. (2016), who state that more guidelines are needed to effectively guide the implementation of PPP projects in Malaysia. Additionally, study participants highlighted issues with the lengthy project management processes and extended negotiation periods. Regarding dealings with State Governments, participants believe that State Governments impose certain conditions that lead to delays in project implementation.

6. Roles and Responsibilities

This theme focuses on issues related to the knowledge, skills, experience, expertise, and competencies of PPP project managers, as well as the roles of institutions in effectively managing PPP projects. PPP project managers play a crucial role in ensuring that the project runs smoothly from the pre-construction phase through to the end of the concession period, until the project is handed over to the government. The thematic analysis shows that this theme emerged from the category of skills and competencies of PPP project managers. The issue of skills and competencies of PPP project managers was frequently raised by participants during the interviews. They expressed concerns that both government and private sector project managers often lack the experience and knowledge necessary for effective PPP project management (Osei-Kyei & Chan, 2017).

Additionally, issues related to the placement of managers and the high turnover rate of PPP project managers were highlighted, leading to a lack of continuity and proper handover in monitoring the implementation of PPP projects. The study also found that the roles of different government agencies and the lack of coordination among them contribute to the problem and were categorized accordingly by the researchers.

7. Laws and Regulations

Based on the thematic analysis, the theme of laws and regulations specifically focuses on the systems, processes, and requirements that both private companies and the government must adhere to. This includes aspects such as regulatory reporting, documentation, monitoring, and enforcement mechanisms. The strategic issue of PPP project management in Malaysia under this theme pertains to the obligations and compliance with the Concession Agreement. Once the clauses or terms in a Concession Agreement are finalized, agreed upon, and signed by both the government and the private sector, they become obligations that both parties must adhere to throughout the concession period. Strategic issues concerning the obligations and compliance with the Concession Agreement, as identified in the study, include:

- i. **Burden of Government Instructions:** There are concerns about additional government instructions imposed on the private sector, which are included in supplemental agreements not negotiated at the time the original agreement was signed.
- ii. **Control Over Concession Companies:** Another issue involves the control over concession companies in fulfilling their obligations according to the terms of the Concession Agreement.

These issues reflect challenges in ensuring that both parties meet their responsibilities and maintain compliance throughout the life of the concession.

Conclusion

This study contributes to the understanding of good governance in the management of Public-Private Partnership (PPP) projects in Malaysia by focusing on strategic issues and proposing improvements to enhance practices. It identifies seven key strategic issues in the management of PPP projects in Malaysia: accountability, incentives and assistance, values, norms and practices, standards and procedures, good and ethical governance, roles and responsibilities, and laws and regulations. These strategic issues serve as a guide for both the government and private sectors to address current concerns highlighted by the study participants.

Regarding the improvement suggestions, both government and private entities can review and implement the recommendations based on their institutional capacities. All the issues listed are viewed as short-term challenges that should be addressed by both the government and private sector. Meanwhile, the issues related to standards and procedures, as well as laws and regulations, represent long-term concerns that should be initiated promptly to find solutions to the challenges faced. The strategic challenges identified in this study are both unique to Malaysia and reflective of broader trends seen in global PPP frameworks. While accountability, ethical governance, and the need for clear roles are common concerns, the specific dynamics and cultural contexts in Malaysia create distinctive challenges that necessitate tailored solutions. In addressing these issues, both short-term and long-term strategies will be essential to enhance the effectiveness of PPP projects in Malaysia and ensure their alignment with international best practices. The recommendations put forth in this study can serve as a practical guide for stakeholders, adapting them to their institutional capacities for effective implementation.

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References

Ahmad, U., Ibrahim, Y. & Bakar, A. A. (2018). Risk management in the Malaysian public private partnership projects. *Jurnal Pengurusan*, 54,(2018), 101-114.

- Alfan, E. (2010). The Malaysian Public-Private Partnership (PPP): Financing the Tolled Highway Projects. *Asian Journal of Business and Accounting*, 3(2),121-143.
- Alireza, V., Mohammadreza, Y., Zin, R. M., Yahaya, N. & Noor, N. M. (2014). An enhanced multi-objective optimization approach for risk allocation in Public–Private Partnership projects: a case study of Malaysia. *Journal of Construction Engineering and Management*, 41,164-177.
- Anantatmula, V. S. (2010). Project manager leadership role in improving project performance. *Engineering Management Journal*, 22(1), 13-22.
- Anuar, R. K. (2012). Malaysia’s BOT method implementation for highway development projects. Tesis Sarjana, Ritsumeikan Asia Pacific University.
- Asenova, D., Beck, M., Hardcastle, C. & Chinyio, E. (2010). partnership, value for money and best value in PFI projects: obstacles and opportunities. *Public Policy and Administration*, 17(5), 5-19.
- Asian Development Bank (ADB). (2019). *Realizing The Potential Of Public–Private Partnerships to Advance Asia’s Infrastructure Development*. Asian Development Bank.
- Beh, L.S. (2010). Development and distortion of Malaysian Public-Private Partnerships Patronage, privatised profits and pitfalls. *The Australian Journal of Public Administration*, 69(S1), 74-84.
- Bing Li, Akintoye, A., Edwards, P. & Hardcastle, C. (2005). The allocation of risk in PPP/PFI construction projects in the UK. *International Journal of Project Management*, 23(1), 25-35.
- Casady, C. B. & Baxter, D. (2021). Procuring healthcare public-private partnerships (PPPs) through unsolicited proposals during the COVID-19 pandemic. *Journal of Public Procurement*, 22(1), 6-16.
- Cheung, E., Chan, A. P. C. & Kajewski, S. (2012). Factors contributing to successful public private partnership projects: Comparing Hong Kong with Australia and the United Kingdom. *Journal of Facilities Management of Accounting Research*, 10(1), 45-58.
- Chu Leon Yang, Ying Rong & Huan Zheng. (2020). The strategic benefit of request for proposal/quotation. *Journal on Operations Research*, 70(3), 1293-1952.
- Dhesi, D. (2009). Is Malaysia facing a credit crunch? *The Star*, 7 Mac: 1.
- Ee, O., Halim, H. A. & Ramayah, T. (2013). The effects of partnership quality on business process outsourcing success in Malaysia: key users perspective. *Service Business*, 7, 227-253.
- Fria, R. T. (2005). *Successful RFPs in Construction : Managing the Request for Proposal Process*. McGraw-Hill.
- Greve, C. & Hodge, G. (2011). Transparency in Public-Private Partnerships: Some Lessons from Scandinavia and Australia. Kertas Kerja Persidangan The 1st Global Conference on Transparency Research. Anjuran Copenhagen Business School. Amerika Syarikat, 19-20 Mei.
- Hashim, H., Ismail, K. & Che-Ani, A. I. (2017). A polemic on defects liability in Public Private Partnership (PPP) Project. *Journal of Engineering Science and Technology*, 4 (Special Issue), 219-227.
- Hodge, G. (2006). Public private partnerships and legitimacy. *UNSW Law Journal*, 29(3), 318-327.
- Hyun, S., Park, D. & Tian, S. (2019). *Determinants of public–private partnerships in infrastructure in emerging economies : Realizing the Potential of Public–Private Partnerships to Advance Asia’s Infrastructure Development*. Asian Development Bank.
- Ismail, S. & Asuhaimi, F. (2013). *Private sector involvement and Public Private Partnership (PPP) in Malaysia*. IIUM Press.
- Ismail, S. & Harris, F. a.-Z. (2014). Challenges in implementing public private partnership (PPP) in Malaysia. Kertas Kerja Persidangan International Conference on Accounting Studies (ICAS) (2014). Anjuran ICAS. Kuala Lumpur, 18-19 Ogos.
- Ismail, S., Mohamad, R. & Said, J. M. (2021). Performance indicators for lifecycle process of Public Private Partnership (PPP) projects in Malaysia. *Built Environment Project and Asset Management*, 12(5), 704-718.
- Izebhor, V. (2022). Should value for money be the sole criteria in opting for ppp option for infrastructure projects?. *European Procurement & Public Private Partnership Law Review*, 17(1), 23-32.
- Jabatan Audit Negara. (2012). *Laporan Ketua Audit Negara (2012) Siri 2: Pengurusan Aktiviti Badan Berkanun Persekutuan Dan Pengurusan Syarikat Subsidiari*. Jabatan Audit Negara.

- Jawatankuasa Siasatan Tadbir Urus Perolehan Dan Kewangan Kerajaan (JKSTUPKK). (2021). *Laporan Akhir JKSTUPKK Mengenai Projek Land Swap di bawah Kementerian Pertahanan*. Jawatankuasa Siasatan Tadbir Urus Perolehan dan Kewangan Kerajaan.
- Jergeas, G., Skulmoski, G. J., Williamson, E. & Thomas, J. L. (2000). Stakeholder management on construction projects. Kertas Kerja Seminar 44th Annual Meeting of American Association of Clinical Endocrinology (AAACE) International. Anjuran AAACE International. Amerika Syarikat, 27-28 April.
- Kaharuddin, S. K., Adnan, H. & Baharuddin, H. E. A. (2021). Identification of successful delivery factors for stakeholder management in Public-Private Partnerships Projects in Malaysia. *International Journal of Sustainable Construction Engineering and Technology*, 12, 248-257.
- Karim, N. A. (2011). Risk Allocation in Public Private Partnership (PPP) project: a review on risk factors. *International Journal of Sustainable Construction Engineering & Technology*, 2(2), 8-16.
- Kementerian Ekonomi (MOE). (2023). *Kajian Separuh Penggal Rancangan Malaysia Kedua Belas 2021-2025*. Kementerian Ekonomi.
- Khadaroo, I. (2005). An institutional theory perspective on the UK's Private Finance Initiative (PFI) accounting standard setting process. *Public Management Review*, 7(1), 69-94.
- Khadaroo, I., Wong, M. S. & Abdullah, A. (2013). Barriers in local e-government partnership: Evidence from Malaysia. *Electronic Government an International Journal*, 10(1), 19-33.
- Khaderi, S. S., Shukor, A. S. A., Bakri, A. S. & Mahbub, R. (2019). Public Infrastructure Project Tendering Through Public Private Partnerships (PPP) – A Literature Review. Kertas Kerja Persidangan MATEC Web of Conferences, IConBEE2018. Anjuran MATEC Web of Conference. Kuala Lumpur, 20 Februari.
- Khalifa, N. A., Hmeda, A. a. A., Abidin, R. Z. & Milad, A. (2021). Measuring the characteristics among critical success factors of PPP infrastructure projects *Jurnal Kejuruteraan*, 33,559-577.
- Laureni, A. & Antony, J. (2016). Leadership – a critical success factor for the effective implementation of Lean Six Sigma. *Total Quality Management & Business Excellence*, 29(5-6), 502-523.
- Lee, M., Quising, P., Han, X. & Villaruel, M. L. (2020). Hazard analysis on public-private partnership projects in developing Asia. *Journal of Infrastructure Policy and Development*, 4(1), 50.
- Lou, E., Danuri, M. S. M., Zainon, N. & Rahim, F. M. (2013). Analysis of practices for Private Finance Initiative (PFI) procurement process: Malaysia vs United Kingdom. *The Malaysia Surveyor*, 48(1),13-20.
- Michalski-Karl, R., Pernsteiner, S. & Schaffhauser-Linzatti, M. M. (2009). Signaling Public Private Partnership activities: reporting behavior within annual reports. *International Advances in Economic Research*, 15(2), 178-185.
- Mladenovic, G., Wundsch, B., Vajdic, N. & Salaj, A. T. (2013). Use of key performance indicators for PPP transport projects to meet stakeholders' performance objectives. *Built Environment Project and Asset Management*, 3(2), 228-249.
- Mohamad, R., Ismail, S. & Said, J. M. (2016). Performance objectives of public private partnership implementation in Malaysia: perception of key players. *Journal of Asia Business Studies*, 12(1), 17-30.
- Mohd-Rahim, F. A., Zainon, N. & Loo, S.C. (2017). Project Life Cycle Risk of Public-Private Partnership (PPP) Projects for Construction Sustainability. *Journal of Design and Built Environment, Special Issue* (1), 39-53.
- Musawa, M. S., Ismail, S. & Ahmad, H. (2017). Disclosure of public-private partnership (PPP) voluntary information : Case of Malaysian PPP projects. *Asia-Pacific Journal of Business Administration*, 9(2), 146-163.
- Neely, A., Mills, J., Platts, K., Richards, H., Grocery, M., Bourne, M. & Kennerly, M. (2000). Performance measurement system design: Developing and testing a process-based approach. *International Journal of Operations and Production Management*, 20(10), 1119-1145.

- Nor Azlina Kamarudin. (2013). *Value creation in public private partnership: Factors contributing to sustainable performance*. [Tesis Dr. Fal, UKM-Graduate School of Business, Universiti Kebangsaan Malaysia].
- Ogunsanmi, O. (2013). Stakeholders' perception of key performance indicators (KPIs) of Public-Private Partnership (PPP) projects. *International Journal of Construction Supply Chain Management*, 3(2), 27-38.
- Olander, S. & Landin, A. (2008). A comparative study of factors affecting the external stakeholder management process. *Construction Management and Economics*, 26(6), 553-561.
- Osei-Kyei Robert & Albert P.C. Chan. (2015). Review of studies on the Critical Success Factors for Public-Private Partnership (PPP) projects from 1990 to 2013. *International Journal of Project Management*, 33(6), 1335-1346.
- Paech, B., Heinrich, R., Zorn-Pauli, G., Jung, A. & Tadjiky, S. (2012). Answering a Request for Proposal – challenges and proposed solutions. *B.Regnell and D.Damian Jorunal*, 1,16-29.
- Palcic, D., Reeves, E. & Siemiatycki, M. (2019). Performance: the missing 'P' in PPP research? *Annals of Public and Cooperative Economics*, 90(2), 221-226.
- Samsudin, N. A., Hashim, H. A., Hamzah, E. & Zainol, N. N. (2022). Evaluation Criteria of Facilities Management Through Public-Private Partnership (PPP) Scheme. *International Journal of Sustainable Construction Engineering and Technology*, 13(4), 1-7.
- Sands, V. (2004). Victoria's partly-privatised prison system: an accountability report card. *Asia Pacific Journal of Public Administration*, 26(2), 134-137.
- Schepper, S. D., Dooms, M. & Haezendonck, E. (2014). Stakeholder dynamics and responsibilities in Public-Private Partnerships: A mixed experience. *International Journal of Project Management*, 32(7), 1210-1222.
- Shaoul, J., Stafford, A. & Stapleton, P. (2010). Financial black holes. *Accounting, Auditing & Accountability Journal*, 23(2), 229-255.
- Sharma, C. (2012). Determinants of PPP in infrastructure in developing economies. *Transforming Government: People, Process and Policy*, 6,149-166.
- Sharma, C. (2022). Who does it better and why? Empirical analysis of public-private partnership in infrastructure in Asia-Pacific. *Property Management*, 41(3), 309-335.
- Shen, L., Platten, A. & Deng, X. (2006). Role of public private partnerships to manage risks in public sector projects in Hong Kong. *International Journal of Project Management*, 26(7), 587-594.
- Som, R. M., Ismail, I. A., Omar, Z., Alias, S. N. & Asimiran, S. (2023). An assessment of facilitative leadership, communication quality and trust on Public-Private Partnership success. *Journal of Asia Business Studies*, 17(5), 1042-1066.
- Tang, L. & Shen, Q. (2013). Factors affecting effectiveness and efficiency of analyzing stakeholders' needs at the briefing stage of Public Private Partnership projects. *International Journal of Project Management*, 31,513-521.
- Thomas, A. V., Kalidindi, S. & Ananthanarayanan, K. (2003). Risk perception analysis of BOT road project participants in India. *Construction Management and Economics*, 21(4), 393-407.
- Unit Kerjasama Awam Swasta (UKAS). (2009). *Garis Panduan Kerjasama Awam-Swasta*.
- Unit Perancang Ekonomi (UPE). (2015). *Buku Merah UPE, JPM : Langkah-langkah penambahbaikan projek pembangunan Rancangan Malaysia Lima Tahun (RMLT)*. Unit Perancang Ekonomi.
- Vecchi, V., Hellowell, M., Croce, R. D. & Gatti, S. (2017). Government policies to enhance access to credit for infrastructure-based PPPs: an approach to classification and appraisal. *Public Money and Management*, 37(2),133-140.
- Wood-Harper, A. T., Ibrahim, O. & Ithnin, N. (2004). An interconnected success factor approach for service functional in Malaysian electronic government. *Kertas Kerja Seminar 6th International Conference on Electronic Commerce (ICEC)*. Anjuran ICEC. The Netherlands, 25-27 Oktober.
- World Bank Group (WBG). (2015). *A Framework for Disclosure in Public-Private Partnership Projects*. World Bank Group.

- World Bank Group (WBG). (2018). *Procuring Infrastructure Public-Private Partnerships Report 2018 : Assessing Government Capability to Prepare, Procure and Manage PPPs*. World Bank Group.
- Yamaguchi, H., Uher, T. E. & Runeson, G. (2001). Risk Allocation in PFI Projects. Kertas Kerja Persidangan 17th Annual ARCOM Conference. Anjuran Association of Researchers in Construction Management. Australia, 2-4 September.
- Yuan, J., Wang, C., Skibnieski, M. J. & Li, Q. (2011). Developing Key Performance Indicators for Public-Private Partnership Projects: Questionnaire Survey and Analysis. *Journal of Management in Engineering*, 28(3), 252-264.
- Yuan, Y., Lai, F. & Chu, Z. (2018). Continuous usage intention of internet banking: a commitment-trust model. *Springer-Verlag GmbH Germany*, 17,1-25.
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods*. Sage Publications.
- Zawawi, M. I. Z., Kulatunga, U. & Thayaparan, M. (2016). Malaysian experience with public-private partnership (PPP) : Managing unsolicited proposal. *Built Environment Project and Asset Management*, 6(5), 508-520.
- Zhang, L., Cao, T. & Wang, Y. (2018). The mediation role of leadership styles in integrated project collaboration: An emotional intelligence perspective. *International Journal of Project Management*, 36(2), 317-330.
- Zhang, X. (2005). Critical Success Factors for Public-Private Partnerships in Infrastructure Development. *Journal of Construction Engineering and Management*, 131(1), 3-14.
- Zulch, B. (2014). Leadership Communication in Project Management. *Procedia - Social and Behavioral Sciences*, 119, 172-181.