

REVIEW ARTICLE

Review of key challenges in public-private partnership implementation

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ABSTRACT

Although public-private partnership (PPP) is regarded as one of the key effective tools in the development of many countries, various challenges surrounding PPPs are not well understood. This paper explores nine key challenges in PPP implementation: (1) different organizational cultures and goals between the partners, (2) poor institutional environment and support, (3) weak political and legal frameworks, (4) unreliable mechanisms for sharing risk and responsibility, (5) inadequate procedures for the selection of PPP partners, (6) inconsistency between resource inputs and quality, (7) inadequate monitoring and evaluation of PPP processes, (8) lack of transparency, and (9) the inherent nature of PPPs. This paper aims to provide the perceptions in the existing literature on many of these challenges, as well as provide solutions to each challenge.

Keywords: *public-private partnership; PPP; key challenges; PPP implementation*

1. Introduction

Public-private partnerships (PPPs) are regarded as the new perspective for the development of the public sector. The popularity of PPPs has grown over the past few decades, as governments have increasingly welcomed private financiers and investors to take care of public provisions. To get more quality infrastructure services to more people, public-private partnerships are commonly used. Current examples of public-private partnerships commonly used are in transportation, construction, information technology (IT), education, finance, etc.

This study aims to primarily focus on key challenges of the public-private partnership (PPP) model. The study will investigate what public-private partnership is and the key challenges of public-private partnership implementation. Besides that, the solution for each challenge will be explored.

2. Problem statement

The main problem in PPP implementation involves the lack of preplanning of risk management. All challenges in PPPs are rooted in the lack of preplanning of risk management. Understanding risks' origin

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is problematic and requires lots of effort from all partners in the PPP. Due to the lack of planning of risk management, PPPs confront risks in the areas of contracting, resources, differing goals, structure, partner commitment, and the external environment. The success of a PPP project depends on the preplanning of risk management, which is associated with the identification of major risks and their allocation between the public and private partners. Additionally, the adoption of suitable strategies to reduce risks when they occur in PPPs is critical in the preplanning of risk management. The consequences of the lack of preplanning of risk management cause the increase in project implementation costs, risks of shortfall (unexpected economic condition), and all other major risks. Therefore, having a clear plan to manage risks in PPP implementation is especially important to achieve the goals of a PPP.

Partners may fail to identify risks in political, economic, and technical environments, and so this results in project failure by negatively affecting time, budget, and scope (Walwyn and Nkolele, 2018).

The specific research questions in this study are as follows:

- How should partners successfully design a risk management plan?
- What is the impact of the preplanning of risk management on the success of PPP implementation?
- How does the lack of preplanning of risk management negatively affect all areas in PPP projects?

3. Key challenges in PPP implementation

3.1. Different organizational cultures and goals between partners

Reich (2018) stated that PPPs often bring together organizations with strikingly different cultures, including different interests, values, and views, and these cross-sector collaborations between the public and private sectors are complex and time-consuming.

Paanakker and Reynaers (2020) highlighted that PPPs form an unusual context, in which public and private values or moral standards meet and clash. The values and moral standards of the private sector differ from the values and morals of the public sector's standards. Consequently, the cooperation between the public and private sectors can be problematic and inefficient. An example of cultural clash is the partnership between a private firm called Quad Learning (QL) and six community colleges in the USA. The partners developed honors programs with the objective of facilitating students' transfer to highly selective institutions (Farakish et al., 2020). From the beginning, faculty members who preferred a more deliberative approach to decision making and program building did not like the "start-up" culture of QL. Most advisors, instructional designers, and college liaisons whom QL hired and trained lacked experience in the community college sector because of time constraints. To make everything move quickly, QL adopted a "faster than anyone else" approach. To many stakeholders, this approach appeared to be very disruptive and disorganized. A high turnover rate among QL staff at the beginning of the process increased anxiety among the stakeholders. The profit-making nature of QL had an enormous impact on the cultural clash in the PPP.

According to Suebvises (2014), it is clear that public organizations are very different from those in the private sector in terms of organizational structures, missions, processes, cultures, and communication styles. For instance, public sector organizations are likely to have bureaucratic structures, whereas private sector organizations have more flexible structures. Therefore, the differences in organizational features make partnership particularly challenging.

According to a research study, the greatest risks in PPPs exist in the areas of contracting (59%), resources (58%), differing goals (45%), structure (40%), partner commitment (39%), and the external environment (36%) (Gobikas and Čingienė, 2021).

According to Strausser et al. (2021), a clear discussion on common goals and priorities among the partners early in the process is necessary. Then, the partners should continue to discuss and reevaluate the agreed goals and priorities. In other words, the quality of PPP collaboration will be improved through the establishment of more consistent communication practices.

Purbo, Smith, and Bianchi (2019) suggested that a stronger coordination mechanism is required at the main level to effectively address the challenges of implementing PPPs due to actors with differing perceptions being involved in PPPs. With the help of this mechanism, partners will be able to improve the decision-making process and resolve problems faster. To align values and behavior, and to avoid opportunism from either side, partners in PPPs should pay attention to informal and relational aspects of long-term cooperation too (Paanakker and Reynaers, 2020).

Nevertheless, distinct cultures and goals of organizations are inevitable because each organization has its own unique mission, vision, value, and culture. Therefore, PPP partners should develop agreed standards or norms on how partners should effectively work together to achieve their goals. They should strictly follow their established standards and norms during PPP project implementation so that fewer conflicts will occur between the partners, which can improve the efficiency level of the PPP project.

3.2. Poor institutional environment and support

Nuhu, Mpambije, and Ngussa (2020) emphasized that the PPP setting is highly affected by weak governance mechanisms, including poor enforcement mechanisms, inadequate policies, lack of transparency, and unequal participation in decision-making processes.

Most scholars agreed that a strong institutional environment is a fundamental factor for the success of PPP programs. The absence of a strong institutional environment leads to the failure of PPP programs (Gobikas and Čingienė, 2021). According to the questionnaire survey by Ismail and Harris (2014), the lack of government guidelines and procedures on PPP was perceived as the most crucial factor that slows down the implementation of PPP projects in Malaysia. The first official Malaysian PPP guidelines were published in 2009 although the PPP program was officially launched in 2006. There are only six government guidelines on PPP implementation in Malaysia so far, and those guidelines are too short and brief. Non-effective supervisory frameworks and weak regulatory policies reduce project quality and increase PPP costs.

According to Casady et al. (2020), the institutional maturity of PPPs is determined by the maturity level of three capabilities, which are legitimacy, trust, and capacity. The maturity of these three capabilities is especially important in the success of PPP projects. However, within the United

States of America's broader institutional environment, the current maturity level of PPPs is low due to the lack of cohesive project prioritization frameworks, standardized contracts, consistent procurement standards, uniform PPP-enabling legislation, PPP units, and a robust PPP project pipeline.

Casady et al. (2020) suggested that the public agencies in governments must establish clear, foreseeable, and legitimate institutional frameworks by promoting legitimacy, trust, and capacity in the PPP model and developing a robust PPP market.

Narbaev, Marco, and Orazalin (2019) suggested that strong governmental institutions are required to enhance PPP performance and investment growth. These have a transparent and clear regulatory system that serves a PPP consortium. Forming an effective and supportive institutional environment is especially important for the implementation of PPP projects and their sustainability.

3.3. Weak political and legal frameworks

Huque (2021) highlighted that political instability and political barriers have a negative impact on the implementation of PPP projects. Due to the uncertainty that follows such circumstances, agencies and officials prefer to postpone and watch out for their and the agency's interests. In this condition, investors tend to avoid such venues. The extreme politicization of the bureaucracy contributes to the challenge, which stops the implementation of PPP projects.

Poor legal and political frameworks are regarded as one of the most critical challenges to the implementation of the PPP model (Sadeghi et al., 2020). For instance, Bulgaria did not have special laws on PPPs for a long time and Hungary still does not have a law on PPPs (Delić et al., 2021). Private initiatives are discouraged by poor-quality legislation and the lack of administrative capacities in these countries. Countries of Central and Eastern Europe developed a complex legal framework of PPPs during the 1990s. However, it was not sufficient for establishing a supportive legal-administrative environment.

PPP programs should have a master plan to continue their operation in any form of political changes and instability to prevent potential challenges. Delić, Šašić, and Tanović (2021) suggested that the reform in PPPs should focus on the legal framework. It needs to offer substantial flexibility concerning the nature and content of PPPs.

Verhoest et al. (2015) highlighted that long-term political and policy commitment is considered as a major variable with which to maneuver successful PPP projects. In addition, it is crucial that major political parties with some stability over time should express clear political support for PPPs.

3.4. Unreliable mechanisms for sharing risk and responsibility

The opportunity to share risk is one of the major reasons for implementing PPPs. According to Huque (2021), technical and organizational challenges occur for some PPP partners, including unclear agreements on risk and responsibility sharing, insufficient procedures for dealing with disputes and disagreements between partners, and the lack of agreements on ways to deal with large profits and risks of failure.

The absence of reliable tools for risk assessment results in incorrect evaluation and inequitable distribution between partners (Dechev, 2015). Moreover, some possible risks may appear, which the agreed term does not cover. The risk of the occurrence of an economic and financial crisis is a major

example.

Walwyn and Nkolele (2018) emphasized that effective risk allocation is the main success factor for PPPs. With effective risk allocation, parties identify project risk factors in advance and allocate these risk factors to the party which can manage them the best (W. Xiong et al., 2018).

Carbonara and Pellegrino (2018) suggested that managing the risks in PPPs needs an accurate formulation of the rules between two parties and the specification of mechanisms for their implementation. The optimization of operating costs by a private partner should be included in the service availability risk management. In turn, it would be of public interest.

According to the theory of risk transfer establishment, risks in PPPs need to be allocated to the partner who is most effective in monitoring the risk or managing the risk at minimum cost (Brogaard and Peterson, 2017). For example, public sector partners are good at handling risks associated with changes in political and regulatory environments; on the other hand, private sector partners could manage risks associated with project management and program implementation.

3.5. Inadequate procedures for selection of PPP partners

The selection of private partners when launching a PPP requires a competitive procedure and various interested private entities sending an offer to become the partner (Dechev, 2015). However, this practice is not used in large infrastructure projects quite often. For instance, the implementation of PPPs in Bulgaria often requires the improvement of the procedures for the selection of partners because some private entities are selected automatically without the selection process. This creates preconditions for the suspicion of corruption.

Furthermore, this malpractice restricts free competition in the selection process and attempts to generate private profits at the expense of public expenditure.

In 2007, the PPP in the universal secondary education (USE) delivery in Uganda was established by outsourcing the education service delivery to private secondary schools as partners (Twinomuhwezi and Herman, 2020). Most selected PPP schools experienced understaffing and resource shortcomings due to the selection of wrong partners. Hence, most stakeholders subsequently suggested the selection of private schools with adequate capacity for a suitable partnership. The responses in this PPP in Uganda indicated that the government was required to carefully choose private schools with sufficient skilled staff, a well-facilitated school environment, and effective management to achieve the goals of delivering the USE by applying effective PPP policies.

Creating conditions for effective competition will help in the improvement of procedures for the selection of a PPP partner (Dechev, 2015).

Zhang (2005) suggested that establishing suitable criteria and determining their relative significance is critical to selecting the right private sector partner. Selecting the right partner helps to achieve the goals of PPP projects.

3.6. Inconsistency between resource inputs and quality

The inconsistency between funds and the quality that the service provides appears to be another significant problem in the implementation of PPPs (Dechev, 2015). For instance, a concession

agreement was signed between Sofiyska Voda and the municipality of Sofia, Bulgaria, in 2000. The private entity received 31 million euros credit from the State Committee for Electricity and Water Supply Regulation for the improvement of the water supply network and water filtration. Water losses in the supply network amounted to 58 percent up to the time when the private partner was changed in 2010.

According to Maurya and Srivastava (2018), details of outcomes, outputs, and quality are incomplete in the agreement of some PPP projects, although the inputs and processes are extensively described. Thus, parties reduce the quality of deliverables, as the quality is inadequately monitored.

Strausser et al. (2021) suggested that efficient monitoring of data helps major stakeholders to understand the effectiveness of the PPP project. Improved commitment to standardizing monitoring and evaluation activities will enhance PPP accountability and transparency practices and this will lead to sustained project success. Besides that, creating adequate guidelines can result in increased quality and the reduction in the cost of PPP projects (Ismail and Harris, 2014).

3.7. Inadequate monitoring and evaluation of PPP processes

Due to the lack of monitoring mechanisms, PPP could foster unethical practices (Suebvises, 2014). For instance, there are different types of PPPs in Thailand, which increase the risk of corruption in government authorities. The PPPs are being used as a “tool” for corruption for both partners in some areas in Thailand, since there is a lack of enough monitoring mechanisms there.

Nuhu, Mpambije, and Ngussa (2020) highlighted that the monitoring and evaluation of PPP processes have been inadequately conducted in Tanzania because some private partners did not provide information and did not comply with the standards in the PPP. Most of the time, people assume that the government is not effective; however, some private sector partners are not effective too. For instance, sometimes private health facilities in Tanzania under PPPs do not submit periodic reports but require more financial support from the government. In this case, the government is challenged when there is no evidence to indicate how activities are conducted and how services are provided by the private sector partner.

According to Twinomuhwezi and Herman (2020), governments should offer a mechanism for monitoring and supervising the PPP implementation between partners. Besides that, governments must ensure the routine monitoring of PPP programs, including all areas of the PPP projects wherever they are, to prevent the diversion of resources.

According to Suebvises (2014), active participation of citizens will help the process of monitoring and evaluation and it will lead to the reduction in corruption. Besides that, if governments allow multiple partners into multi-party activities in service delivery, this practice can develop a check-and-balance system by increasing transparency.

3.8. Lack of transparency

Transparency is considered one of the major factors that contribute to the success of PPPs (Suebvises, 2014). The limitation of public access to documents for the development of PPPs is a very serious problem (Dechev, 2015). It negatively affects the transparency and sustainability of the investment. PPP agreements are not accessible and available to the public, since they encompass certain commercial confidentialities. Thus, it is almost impossible for the public to correct and

control the quality, conditions, and risks in services concerning public interest. The lack of transparency could result in the enhancement of corruption (Suebvises, 2014).

Higher accountability and transparency in the conclusion of PPP agreements are essential. It will improve the supervision of the agreement execution by both the partners and the public (Dechev, 2015).

Both parties should adopt transparent mechanisms at every stage of the PPP, where both parties, as well as the general public, could monitor the ongoing performance of the PPP and the outcome of the collaboration. Specifically, information on the utilization of public resources, criteria of decision making, results of decisions, and financial statements should be accessible and available to the partners and the public (Suebvises, 2014). An example of the enhancement of transparency is the establishment of a public database by the Chinese government. In 2015, China's Ministry of Finance developed a public database to enhance transparency in China's PPP development (M. Xiong et al., 2021).

3.9. Inherent nature of PPPs

According to Wang et al. (2017), there is an inherent fragmentation in the PPP model and this inherent nature creates risks. The nature of PPPs is associated with key complexities and uncertainties, which contribute to the challenge (Van Den Hurk and Verhoest, 2016). For example, in PPP design, different stages of a project's lifecycle, including construction, financing, and maintenance, are integrated into an all-covering contract. The complexities inherent to PPP governance make PPPs' performance ambiguous. Multiple actors, goals, discourses, and disciplines are involved in the implications of PPP arrangements. The complexity of the involvement of multi-actors makes PPP projects a perplexing task. Apart from multi-actor complexity, PPP infrastructure projects face uncertainties and risks of financial-technical origin.

Another example refers to the long investment period and large capital expenditures linked with PPP projects in transportation infrastructure (Zhu et al., 2020). The inherent nature of the PPP model leads to participants confronting complex risky conditions that may obstruct the delivery of sustainable projects. Besides being complex, PPPs tend to be inflexible and costly for many small projects (Grimsey and Lewis, 2007).

The development of new hybrid PPPs is needed, such as developing different degrees of partnership, with the goal of lowering procurement expenses and improving flexibility for evolving infrastructure needs, while maintaining a clear line of responsibility and the proper motivation for the parties involved.

Van Den Hurk and Verhoest (2016) suggested using standard contracts. These provide opportunities for reducing certain risks (lowering transaction costs and fostering competition) that stem from the complexity of the PPP model.

4. Conclusion

The PPP model has been a significant way of accomplishing goals in terms of cost reduction, operational efficiency, quality assurance of products and services, shared risk management, stability, and enhancement of the welfare of the population. Most countries have implemented the PPP model,

as it provides flexible opportunities for quality enhancement and provision of different infrastructure projects and related services.

Catsi (2018) identified the following benefits of choosing public-private partnerships:

- On-time and on-budget delivery
- Cost certainty
- Accountability
- Greater innovation
- Lifecycle maintenance
- Accelerated delivery
- Public ownership and control
- Effective risk transfer
- Job creation and accelerated delivery
- Payment for performance

Across the discipline of developing studies, there is an increasing belief in PPPs as a way of aligning public, private, and civil society organizations with the potential to accelerate the socioeconomic development of low-income countries (Brogaard and Petersen, 2017).

Cross-sectoral collaborations are the hallmark of pro-growth urban politics, and the principal organizational arrangement for pursuing urban spatial development is public-private partnerships (Goldstein and Mele, 2016).

Around the world, large-scale public infrastructure projects have increasingly been designed, built, financed, and operated through public-private partnerships (PPPs). Governments' main rationale for delivering infrastructure projects through PPPs is the prospect of providing improved public services at a lower lifecycle cost, also known as value for money (Siemiatycki and Farooqi, 2012).

Strasser et al. (2021) interviewed stakeholders, who described PPPs as having value, with many outlining positive and, in some cases, profound system-level impacts within the host countries.

While public-private partnerships (PPPs) can be an effective way of delivering infrastructure, experience from OECD countries shows that achieving value for money can be difficult if government agencies are not equipped to manage PPPs effectively. Research demonstrates that improving the public governance of PPPs across countries is necessary (Ruiz Rivadeneira and Schuknecht, 2019).

Many scholars regard PPPs as an efficient instrument to boost productivity due to the ability of PPPs to manage demand-side risks. In contrast, other scholars see in PPPs a mechanism wherein the public sector shoulders the risk, while the private partner makes the profit (Eusepi et al., 2019).

On the other hand, several challenges occur during the implementation process of PPPs. Both partners are required to carefully plan and design the form of the PPP before its implementation. The efficient planning and designing of the PPP model are the most critical steps to achieve a

project's objectives. As we have seen, many PPP projects failed in various countries due to the lack of preplanning and preparation. This often leads to reduced sustainability of PPPs.

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