

# A FRAMEWORK STRUCTURE TO ENHANCE THE IMPLEMENTATION OF PRIVATE FINANCE INITIATIVE (PFI) PROJECTS IN MALAYSIA AT PRE-CONSTRUCTION STAGE: A METHODOLOGICAL DEVELOPMENT

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## ABSTRACT

*Private finance initiative (PFI) in Malaysia has been inundated by various controversies and criticisms from the very beginning. Yet, in-depth researches relating to them have been lacking. Based on the circumstances, the paper proposes a framework structure to enhance the implementation of PFI projects in Malaysia with focus on the pre-construction stage with the following objectives: to determine the issues and constraint which have arisen, to determine the success factors and lastly to develop a framework for performance improvement. Semi-structure interviews with 35 experts and nine case studies (each three representing Modes 1, 2 and 3) were used to collect data. The study found ten success factors which is: fair risk distribution, public-private cooperation, comprehensive output specification, value for money, maintenance culture, innovation, performance-based payment, cost linked to life span, transparency and financing. A workable implementation framework for the pre-construction stage was developed after industry practitioners tested it. This framework can help industry players including contractors in making sound decisions when undertaking PFI projects.*

**Keywords:** *Private Finance Initiative (PFI), Implementation, and Framework.*

## INTRODUCTION

Private Finance Initiative (PFI) is a privatization scheme develops initially by the UK government, to provide financial support for the partnership between the public and private sector. PFI has become an integral part of the national government policy of the UK in the delivery of public facilities and services (HM Treasury, 2003:2006). The PFI scheme has been implemented in many countries around the world and this form of procurement system has been increasingly important over the past decade (Kato, 2001; Endicott, 2001; Beeston, 2002; Imamura, 2002; JETRO, 2003). However, in terms of the implementation process, the PFI arrangements are not similar from country to country (NAO, 2003).

In the Malaysia context, the Ninth Malaysia Plan (9MP) defines PFI as involving the transfer of the responsibility of financing and managing capital investment and services in relation to public sector assets to the private sector (Economic Planning Unit, 2006). The private sector will be responsible for financing, constructing, managing, maintaining and operating the facility to deliver the service to the public sector throughout the concession period. In return, the public sector will pay the private sector in the form of lease rental charges, which commensurate with the quality of the services provided.

The purpose of PFI is to level the close relationship between the government and the private sector, including for the federal government and local authorities. According to Khairuddin (2009), PFI is an alternative to public procurement strategy. PFI refers to the delivery of public services assets that are

previously undertaken by the government and now will use the funding and expertise from the private sector jurisdictions. In Malaysia, the government has adopted the PFI with the aims to ensure the projects that are carried out by the private sector can complete quickly. At the same time, the government implements the concept of capacity to pay first, and also to ensure that social projects such as schools, roads, and hospitals can be conducted and completed by the private sector. It is necessary to achieve value for money and project risk should be borne by both parties. Before the Ninth Malaysia Plan 2005-2010 (9MP), Tun Abdullah had established Pembinaan BLT Sdn. Bhd. in 2005, with the aim to control the development and implementation of construction of quarters and facilities for the Royal Malaysia Police across the country (Khairuddin, 2009). This idea was to see a practical application of this project using PFI approach, which is called build, lease and transfer (BLT). The success of this project will also serve as benchmarks for the implementation of PFI projects under 9MP. In line with the policy to strengthen public-private partnership, the government is actively implementing PFI to stimulate private investment.

The government has identified projects worth RM20 billion, undertaken on BLT approach. Funding obtained from the Employees Provident Fund (EPF) and the Pension Trust Fund (PTF), which will have assets built for rent back to the government. Among the projects that have identified includes schools, quarters, and office buildings. Besides, the PFI Facilitation Fund worth RM5 billion has been injected to support projects identified by the private sector with extensive branching effects on economic growth (UKAS, 2009). Under this method, the private sector will bear the full risk of the project while the government only provides financial support to enhance project viability. Among the supports provided include sponsoring students to private institutions and provision of land and necessary infrastructure. The government also could purchase or lease a new building built by the private sector in the city to ensure the viability of the project (EPU, 2006). There may be confusion in the setting of PFI Sdn Bhd in which Employee Provident Fund (EPF) has injected RM260 billion investments at RM12 billion per annum in the said SPV (Special Purpose Vehicle). According to Tay and Partner (2006), seemingly, PFI is not different from previous privatization models. Both involve the public sector tapping the expertise and efficiency of the private sector. But under PFI, the private sector's revenue must commensurate with the quality of services it provides. Hence, the clear elucidation of accountability as an essential principle in PFI represents a paradigm shift in Malaysia's privatization landscape. Evolution of the PFI in Malaysia is a learning point for a variety of factors to ensure successful PFI in the construction industry (Khairuddin, 2009). Integration between the government and the private sector in carrying out a project has enabled the country to make a profit, typically to improve the construction industry and the economy.

## **PFI AND THE CHALLENGES**

PFI has been a part of the construction industry since early 2005's. However, the building project by using PFI cannot avoid having problems especially when it newly introduced in the industry. By implementing new procurement method, there will be serve consequences when the projects begin due to lack of knowledge vague understanding of the procurements perceptions (Shamsida & Abdul Rashid, 2009, Izatul Laili Jabar et. al, 2015). To make it worst, the PFI implemented in Malaysia is diverse from PFI implemented in the UK. Roshana et. al., (2009) and Shamsida & Abdul Rashid (2009) mentioned that PFI concept adopted in Malaysia doesn't follow the basic criteria of the International PFI framework that had tested in many developed countries such as Australia, UK, and Europe. As a result, local government and private sector will be having a huge problem whenever setbacks arise during the construction due to lack of information regarding how to solve the issues. According to Yong (2004), more than 140 countries around the world are using PFI as a catalyst for the construction industry projects that have not implemented due to lack of financial sourcing and capacity. However, PFI implementation is not same between one country and another (NAO, 2003). Also, according to Kok (2006), the differences regarding politics, economy, social, and law between the countries have also resulted in the lack of a blueprint or plan on how to ensure the successful implementation of PFI projects. Thus, each government should plan their implementation programmed based on their respective suitability and available capacity.

## **A REVIEW ON PRIVATE FINANCE INITIATIVE (PFI) FRAMEWORK**

According to Jean and Gibson (1992), a framework structure needs to possess a variety of equipment or a part of the source of information to ensure that the important things are given due attention. A framework structure is developed based on a set of concepts that connects each of the plans or methods of implementation process, main characteristics, and success factors.

The development of the framework has referred to some previous scholar's framework such as the framework for improving the tendering process (NAO, 2006), accountability and value-for-money evaluation (Demirag et al., 2004), critical success factors (Jefferies et al., 2002, Qiao et al., 2001, Morledge and Owen, 1998, Li et al., 2005), and PFI/PPP projects implementation (Cheung et al., 2007). All the studies do not demonstrate any relation in the issues and constraints along the course of PFI projects implementation, especially at the planning and tendering stage, and the relation between the main criteria to be integrated into the implementation of PFI projects to avoid such issues and constraints.

In the case of Malaysia, the implementation and policy of PFI has been the subject of considerable debate and critiques (Syuhaida, 2009). Some of the reasons as mentioned by Abdul Rashid (2009) and Saidan Khaderi (2011) are leading to the issues of cronyism, unfair monopolistic advantages, lack of transparency in competitive bidding and, lack of PFI experiences and knowledge in PFI. Besides, there are many aspects of this approach that require fine-tuning and improvements to make it more cost effective. Areas related to the improvement of key functional skills in technical aspects, finance, personnel management, and value for money, risk allocation and, public knowledge are important to be highlighted. As such, the need for a comprehensive regulatory framework is a matter of some urgency for PFI in Malaysia (Saidan Khaderi, 2010; Shamsida & Ani Saifuza, 2016). A significant reason for this matter is to further encourage participation from the private sector and to make them feel less restrained to exploit their market power.

The framework structure is developed after undergoing a process of discussion on the results of research findings identified based on the scope and main issues relating to framework structure development to enhance the implementation of PFI projects at the pre-construction stage. The solutions provided by this framework structure include the processes at the planning stage, tendering stage, the main characteristics, success factors and gateway review, all of which must be made available during implementing the PFI projects. These solutions aim to facilitate all industry players especially the contractors in implementing effective PFI projects. The components in the framework structure are as follows:

- The most critical stage of implementation is the pre-construction stage i.e., planning and tendering stages;
- Issues and constraints in planning and tendering stages; and
- The main characteristics and success factors required enhancing the PFI project implementation.

## **THE METHODOLOGICAL DEVELOPMENT**

### **The Unit of Analysis**

The target respondents involved in this study were based on the criteria that they should have the expertise, experience, and knowledge on PFI project and the majority of respondents are those at the top management of an organization. Expertise in this research is referring to people who are exposed to the PFI process and have direct experience in the implementation stage, policy, financing and monitoring as well as experienced in privatization projects before.

Selection of individual as respondents based on the importance of the activities carried out in determining the successful of PFI projects implementation. It is equivalent to Birrell (2002), which

stresses that the characteristics of the respondents also needs to consist of those who have qualifications in decisions and have the experience and expertise in running projects. This is also consistent with Schmidt et. al., (1986), that the importance of experience in controlling the quality gave a high impact and the efficiency of works.

## **The Process**

The literature review indicates key features, concepts, structure, procurement, success factor and criticisms raised in the pre-construction projects of PFI implementation. Among the features of PFI identified from the literature review is a partnership between the government and the private sector, the determination of output specifications, innovation, value for money, risk sharing and optimal focus to service assets on an ongoing basis. Researchers also reviewed the literature regarding the PFI procurement process and structure of PFI for the countries selected because the model of PFI is used is different for each country based on political, economic, social, and legal and the culture of each country.

The development of the framework involved two research methods, namely the Preliminary Survey (Semi-structured interviews) and Main Survey (Case Study and semi-structured interviews). Hence, the components of the framework focused on the outcome of these research methods.

## **THE METHODOLOGICAL**

### **The Preliminary Survey – Semi-structured interviews**

A semi-structured interview was conducted to get the data and information about the implementation of PFI projects in Malaysia in more details. The interview was conducted with respondents who were selected based on expertise, experience, and knowledge in the implementation of PFI projects. The respondents were a senior manager in government agencies, bankers, consultants and contractors in private sector who had been involved in the exercise of PFI projects. The interviews aim is to verify whether the data obtained from the literature review and semi-structured have in common or different.

Semi-structure interviews involving 35 experts from diverse backgrounds based on the criteria that have been set before were used to collect the data. The study found the divergence between Malaysia's PFI implementation and other countries in terms of purpose, financing, management, risk distribution, and maintenance. Seven issues and constraints were identified: unclear output specification and need statement, not transparent, political interference, guideline ambiguity, direct contract award, lack of maintenance application and obscure PFI concept. Ten success factors were identified: fair risk distribution, public-private cooperation, comprehensive output specification, value for money, maintenance culture, innovation, performance-based payment, cost linked to life span, transparency and financing.

### **The Main Survey – Case Studies**

Case studies were conducted to gain more detailed and identify the effective implementation of PFI project at the pre-construction stage. Nine case studies (each three representing Modes 1, 2 and 3) were used to collect the data (refer figure 1).

Semi-structured interviews were conducted and this time takes longer than the first interview because it is based on the accumulation in identifying suitable projects and industry players involved in it. The term of interview period become longer because most respondents too busy and often postpone the interview. A total of 36 respondents were interviewed in the survey information with respect to a project. For each project, four respondents were interviewed and they consist of the client, contractor, and consultant of Architects and Quantity Surveyors. It is intended to get the real scenario of the exercise of a PFI project undertaken.

In reviewing each case for selected project, researchers have determined the character and the major criteria in the implementation of the PFI obtained from the literature review conducted earlier. Next, the questionnaire has been developed based on the most critical stage in the implementation of PFI and the issues and constraints that arise which involves the process of planning and tendering stage.

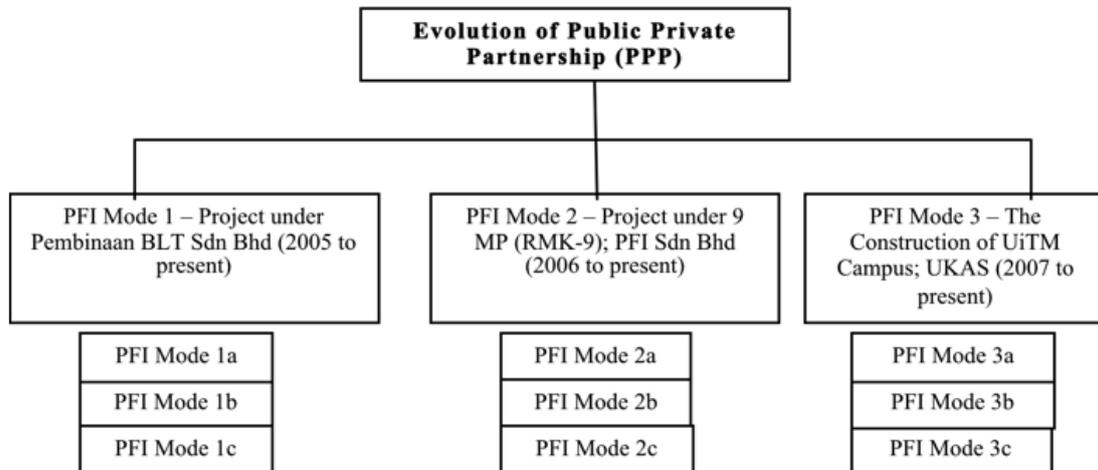


Figure 1: Case studies conducted by researchers

The first stage of the case study methodology suggested by Yin (1994) is to develop a case study protocol. She firmly stated that the rules and procedures contained in the protocol should be developed to improve the reliability of the quality of the case studies are made. While Yin (1994) also added that the preparation of the protocol is suitable for the study using the multiple cases.

## The Industry Validation

A workable implementation framework for the pre-construction stage was developed after industry practitioners tested it. This framework can help industry players including contractors in making sound decisions when undertaking PFI projects. Validation of the framework is to identify whether a framework providing the right solution to the problems of the study (Bock, 2001). In other words, it reflects the important aspects that need to be included in the process of implementation of the PFI. The goal of this validation was to obtain feedback from the panel selected that the proposed framework to enhance the implementation of PFI projects. It is intended to ensure that this framework is evaluated on whether they meet the industry player's acceptance.

McGraw-Hill Encyclopedia of Science & Technology (2002) proposed that the ratification of the framework would be achieved and accepted if it is done in an industry that literally has the expertise and engages with these fields based on the face-to-face validation. The developed framework to enhance implementation of PFI project at pre-construction stage was face validated by the panel representing the 3PU (Public, Private Partnership Unit), concessionaires, consultants, the implementing agency and the end-user. These panels are selected based on their experience and involvement in the implementation of PFI projects in Malaysia. The panels were selected from respondents who had previously been involved directly with the semi-structured interviews or case studies. Therefore, data validation framework is achieved when respondents can give a good view based on studies carried out.

## RESULTS AND DISCUSSIONS

The main component in the developed framework of PFI implementation is a pre-construction stage. It is due to the existence of various issues and constraints that arise during that period. Issues and constraints that occur during this period have led to the failure of a PFI project undertaken. Therefore, to avoid the continued widespread then all players in the industry are involved in the implementation of PFI projects, particularly in the pre-construction must understand and practice the key features of PFI implementation.

The results findings from the study and literature review show the process integrated into the planning stages, objectives, feasibility studies, outlines business case and project development. While there are processes in the tendering stage, tender invitation, tender prequalification, tender evaluation and contract negotiations until the tender was awarded and signed. According to Jean and Gibson (1992), the framework should have a diversity of equipment or a part of the resources to make sure the important things to note. The structure of the developed framework is based on a set of concepts that connect each design or method of the system of the implementation process, the main characteristics and success factors.

The structure of the framework is developed after undergoing the process of discussion on the findings that have been identified based on the scope and key issues related to the development of a framework to enhance the implementation of PFI projects in pre-construction stage. The structure of the framework developed is intended to highlight the solutions to the problems that occur in the planning and tendering stage. Thus, to understand the process, the framework to enhance the implementation of PFI project in pre-construction stage is illustrated in Figure 2. The phases involved the components of the implementation process, constraints, main characteristic and success factors in planning and tendering stage which was identified and established through the preliminary survey; the main survey and semi-structured interview. It is intended to help all industry players, especially the contractor in implementing effective PFI projects.

The developed framework is to facilitate all industry players involved in PFI projects. The structure of this framework is a continuation of the PFI/PPP guidelines, which has been issued by the Public-Private Partnership Unit (UKAS) in early 2006.

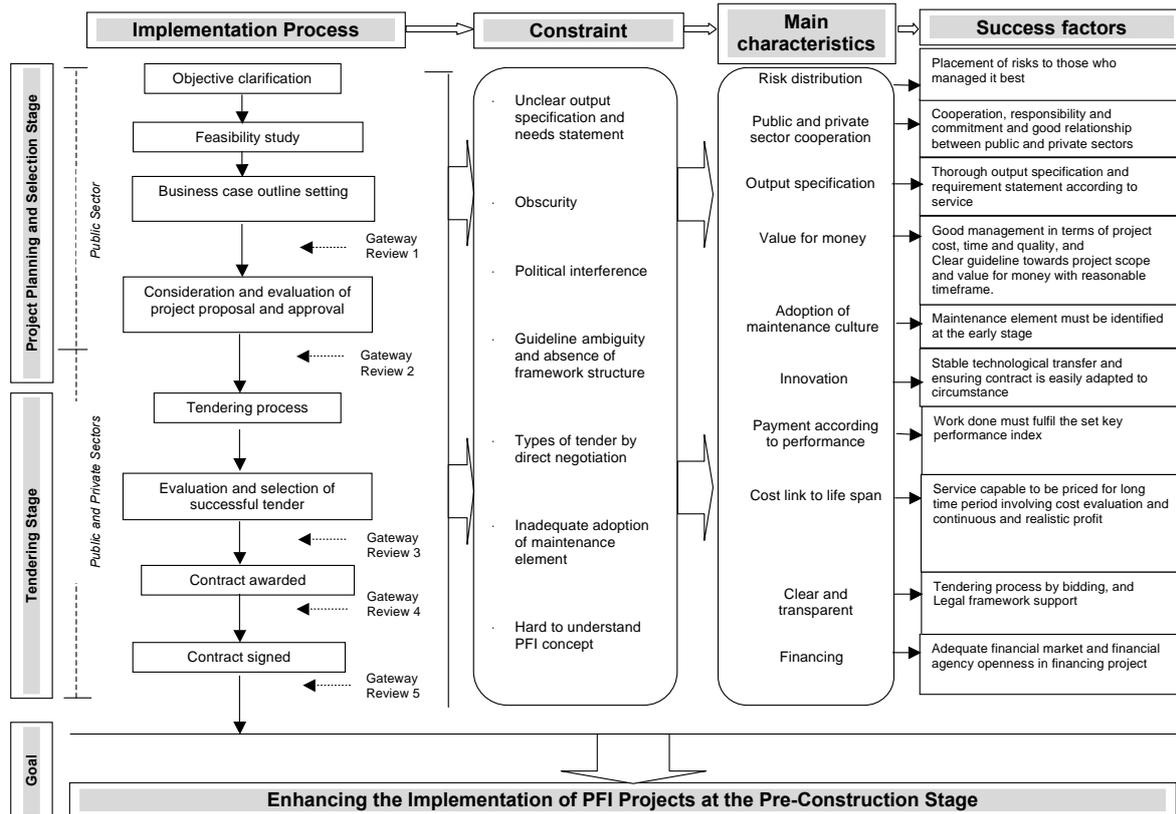


Figure 2: Framework for enhancing the implementation of PFI projects at the pre-construction stage

## CONCLUSIONS AND RECOMMENDATIONS

The objective of this paper is to discuss a workable implementation framework for the pre-construction stage and the key issues and challenges of PFI implementation in Malaysia compared to other countries have achieved. Results from the content analysis show that there are differences between Malaysia and other countries regarding PFI implementation. Maintenance is not in the concession agreement and will be under the obligation of liability of any ministry except PFI projects Mode 3, the output specifications, and the needs statement is not clear and tender process conducted by negotiation. However, there are also similarities in the purposes of implementation of PFI projects in Malaysia and other countries. The government does not want to carry a heavy burden in early stages; the government wishes to encourage private sector involvement and investment in public projects, and the government wishes to expand the economy. The advantages of PFI can be fully gained if there is a close collaboration between the government and the private sector. Even there are several issues of PFI are not finalized yet due to its newly introduced concept, the key issues and challenges are addressed through investigation of several aspects. It is believed that the PFI will be a panacea to the shortage of government funds and poor maintenance culture if the PFI executed in more efficient and transparent manner.

The process of framework structure development is a significant contribution to the research findings. Thus, this paper focuses on discussing main phases in a framework that cover rationality of developed framework, the process of framework development, verification from industrial parties, and application of the framework. The framework approach showed that pre-construction stage involving planning and tendering stages is the most critical stage in the implementation of PFI projects. This is because there are a lot of matters and limitations faced during this stage that result in the implementation of PFI projects becoming more complex. Thus, to avoid facing those matters and limitations, every industry player involved in the implementation of PFI projects should apply main features components and each feature explains about success factors. Researchers have identified Gateway Review elements

that should be practiced at planning and tendering stages to ensure the amplification of PFI projects. Qualified and expert panels in the implementation of PFI projects did verification on this framework.

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