

# **PFI Implementation and Evaluation Model for Developing Economies: Example of Nigeria**

**Kassim Gidado<sup>1</sup>**

## **Abstract**

Developing economies are challenged by greater demands for modern public services and the need to make the economy investor-friendly by lesser taxation. Initiatives to bring private sector skills and finance into provision of public services are on the increase. This paper focuses on Nigeria as an example of a developing economy, where hospitals, schools, roads, power plants and other infrastructures are today being fully funded by the private sector. This is exacerbated by relative declining earnings from oil and lack of requisite expertise in the public sector. Although the government has established that carefully structured partnerships between the two sectors should be central to its aim of establishing first-class public services and infrastructure and promoting economic growth and regeneration, it is established that the process is still conducted in an unregulated and unstructured manner. Four interdependent enablers for implementation of Private Finance Initiative (PFI) in Nigeria have been identified, namely: appraisal, evaluation, knowledge management and project duration. Based on these, the paper has developed an adaptable generic PFI project implementation and evaluation model. The paper used literature review, questionnaires and structured interviews to identify the key issues, risks, constraints and problems within the Nigeria's socio-economic and political environment. Intensive descriptive empirical studies were carried out on a selection of government departments and on existing (PFI) type projects.

**Keywords:** project appraisal, project evaluation, private finance initiative, PPP.

## **Introduction**

With increase in democratisation and awareness in sub-Saharan Africa comes a spiral increase in demand for public services. However, poverty, lack of basic infrastructure, and poor industrial development are continuously hindering the ability of the nations to meet this demand. This is exacerbated by declining funds in real terms and spiral corruption in government projects due to lack of transparency, lack of legal and financial frameworks, and poor capacity in managerial and technical expertise. Even the continuous funding in form of aid by the World Bank and other institutions for services seems inadequate and ineffective. Such funds are normally provided directly to the government for projects that are often incomplete and abandoned or not even started; where loans are given, it has only resulted in majority of the poorer countries left with a vicious circle of increasing huge debts that they become incapable of paying back.

Nigeria is one of the key economies in the region, having one of the fastest growing populations. The greater demand for public services and the lack of expertise in the public sector makes it difficult for the government to cope. As a result, it has no option but to partner

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<sup>1</sup> Principal Lecturer, School of Environment & Technology, Faculty of Science & Engineering, University of Brighton, Brighton, BN2 4GJ, UK. Tel. +44-1273-642394 Email. k.i.gidado@brighton.ac.uk

with the private sector to provide first-class public services and infrastructure. The aim of these partnerships is to make the best use of what each partner has to offer to deliver higher quality and more cost-effective public services. Bennett (1999) indicated that the World Bank recognised PFI to fund public projects as the favoured option for solving the increasing demand for services globally. This is particularly urgent in sub-Saharan Africa that require new infrastructure in their bid to alleviate poverty, maternal and infant mortality. In the region, Du Plessis (2005) suggests that only 12.9% of roads are paved and only 58.1% of the population has access to an improved water source. The World Bank estimates Africa alone would need at least \$90 billion annually over the next 10 years to service its infrastructure needs. Apart from the lack of adequate infrastructure, there is an additional burden of deteriorating infrastructure due to poor maintenance culture, conflicts and lack of functioning institutional and value systems enablers.

### **Provision of Infrastructure using PFI**

The Organisation for Economic Cooperation and Development (OECD) report in 1993 stated that health spending in France grew by an annual average of 5.1% in the 1980s, while GDP grew by an average of just 2.9%. Since there is a limit to government taxation levels, it became evident to the developed countries of the world that they were facing a major fiscal conflict between taxation and demand for social protection and the need to replace decaying infrastructure, therefore a way to defuse this conflict must be found. To address this problem, the UK Government launched the concept of PFI in 1992 as a financial mechanism to obtain private finance. This satisfies the political need to increase investment in the infrastructure without affecting public borrowing, whilst guaranteeing large contracts for construction companies and new investment opportunities for finance capital. Black Stuart (2001) described the globalisation of PFI as 'one of UK's most controversial inventions is fast becoming its most successful export'. European countries led the way, encouraged by the fact that it is a way of rebuilding the crumbling infrastructure without having to raise taxes. It was seen by many experts as the ultimate marketisation and privatisation of highways, health authorities, education and social services. However, PFI differs from privatisation in that the public sector retains a substantial role in PFI projects, either as the main purchaser of the services provided or as an essential enabler of the project.

Since the inventions of PFI, various combinations of partnerships that are private sector management driven to deliver services on behalf of the public sector have emerged, this includes: management contract; lease; service contract; and concession-type agreements. However, the PFI is unique in the sense that the private-sector provides the government with a complete scheme or project that the government would be interested in. The private party fully funds the development and operates it for an agreed period, during which the services produced are to be purchased by the government and/or other stakeholders. Painting et al (2004) identified basically 3 types of PFI:

- a) Financially free-standing projects – fully funded by the private sector where cash is recovered entirely through charges for services to the final (private sector) user.
- b) Services sold to the public sector – fully funded by the private sector where the cost of the project is recovered mainly by charges to public sector such as privately financed prisons.
- c) Joint Ventures - projects met partly from public and partly from other sources but with private sector control.

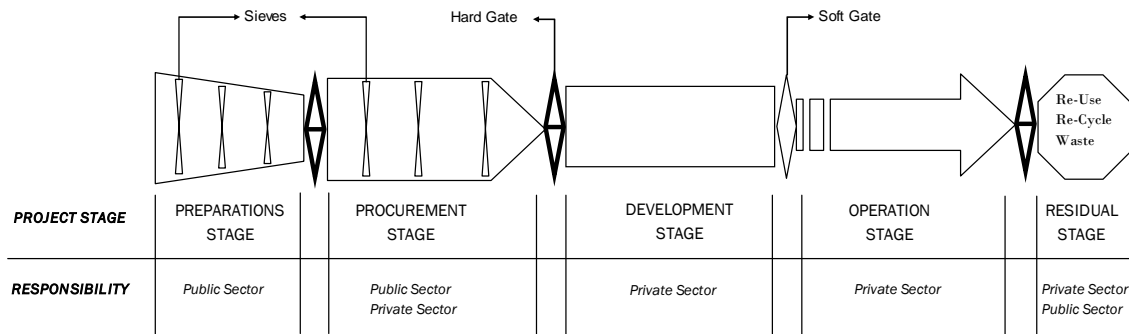


Figure 1. Generic PFI Model (Hardgate = all activities in preceding stage must be completed before the succeeding stage; Softgate = stages may overlap or even iterative or cyclic)

A generic process model of PFI project is depicted in Figure 1. PFI transfers the appropriate risks away from the public sector onto the private sector, whilst harnessing what the Government view as superior management skills from the private sector. Consequently the Government gains huge benefits compared with traditional procurement routes, by increasing value for money, better innovation and sufficient savings. Hickman, D (2000) states that in the PFI form of procurement, the private organisations are directly involved in delivering public services using private finance through a consortium, Special Purpose Vehicle (SPV), which is made up of different entities with different knowledge and expertise pooled together to achieve the project objectives. As a result, the public sector utilises the innovation, skill and knowledge of the private sector. One key benefit is that the PFI enables capital-intensive projects to be provided without increasing the public sector’s borrowing requirements. CCTA (1996) argued that the purpose of PFI is not ‘simply to substitute public capital with more expensive private capital’ but to ‘provide incentives to both the public and private sectors’. PFI seems to open up a wide range of new investment and business opportunities at the same time securing a return on investment.

There have been contradictions in literature in the definitions or differences between PFI and PPP (public private partnership). Hickman (2000) considers PFI as the same to PPP. The UK Government sees “PFI as a form of PPP that has become a key element of the Government’s strategy for improving and modernising public services, after an extended period of falling investment” (Audit Commission, 2003). Akintoye et al, (2003) agrees that PFI is a type of PPP where project financing rests mainly with the private sector. This paper adapts the definition that PPP is a mechanism of PFI procurement. It defines PFI as a scheme submitted to the public sector for consideration in which the public sector may, or may not, previously had thought about, and the full financial initiative is raised by the private sector, which designs, builds, finances and operates the project. In some circumstances, the public sector may not have a partnership with the private sector, but may provide guarantees, incentives and grants or act as the facilitator. In such a project the private sector rents the soft facility to the public sector or charges a specific amount to the general public.

Ezulike et al (1997) have identified 5 barriers to entry into a PFI by contractors in the UK, namely: High participation costs (mainly from employing external advisors); High project values (many small contractors can not realistically aspire to bid); High Risk (risks associated with design and construction, commissioning and operating, technology and obsolescence, regulation and project financing, are transferred to the private sector); Demands on management’s time; and Life cycle cost (LCC) estimates may be unreliable leaving the

consortium facing financial losses at the operation stage. However, a research conducted by PriceWaterhouseCoopers (Middleton and Davis (2001)) on 27 PFI projects based in UK revealed that PFI offer the following advantages:

1. high quality facilities and infrastructure;
2. better quality in design and construction;
3. provide better innovation and competition;
4. flexibility;
5. opportunity for public sector to develop a more disciplined and commercial approach;
6. realistic estimates of whole-life cycle (WLC) approaches because it passes responsibility for long term risks of maintenance and asset replacement to the private sector which ensures carefully consideration of the WLC cost consequences of their design and construction proposals; and
7. the opportunity of refinancing of a project from the consortium's point of view, although it is likely to be shared with the public sector.

It is not only the developed economies that have been exploiting PFI. Cobb (2002) reveals private financing is playing an increasingly important role in the mix of capital for major infrastructure in China. Its long-term economic growth requires substantial investment in infrastructure in order to compete in the globalised economy. China has spent a great portion of its GDP on infrastructure, but it is still far from being adequate. To augment its effort, private sector participation in infrastructure (PPI) seems to have become a strategic necessity rather than just a policy option. The government seems to realise that inadequate funding and inefficient provision, operation and maintenance of infrastructure are the major problems that it faces. Bellier and Zhou (2003) suggests that the central, provincial and local governments in China have given up their monopoly in the highway sector and are continuously encouraging private involvement including foreign direct investment. The various levels of government have tried various forms of PFIs in a unique model using equity in form of non-concession type projects (e.g. subcontracting, licensing and leasing) and concession types (e.g. BOT, BOOT). These are carried out by joint ventures between a foreign equity investor and a 'domestic company' directly or indirectly owned by the central or local government. In these projects government is not a direct party to the contract and does not directly undertake the domestic company's obligations under the contract (other than providing a "support letter" which is not legally binding). The non-concession projects have a disadvantage of conflict of interest between government's role as regulator and as (indirect) part owner of the SPV. In concession projects though, the rights and responsibilities of operating a public service are granted to private company, with the government acting as the granting authority, which provides a direct undertaking (or primary obligation) to the SPV, usually through a legally binding, project-specific concession measure. BOT is the most commonly used concession type schemes which are all procured through public competitive bidding. The government have also pursued an alternative to BOT using foreign capital especially on highway segments with mature traffic volumes. This was done through issuance of equity shares in what is called Provincial/Municipal Expressway Development Companies (P/MEDC) set up using existing assets pledged or sold to these companies, with a dedicated toll revenue stream already in place for the purpose of generating new income. These revenues can then be leveraged or securitised to support share issuance through initial public offerings in the equity markets. In this technique, private investors are encouraged to establish joint ventures to develop the highways, which they would finance, in conjunction with a local partner, based on projected revenue. In a number of instances, private investors have been able to access long-term debt

financing for new highway projects. The equity markets and the domestic financial markets have supplied capital for new construction. In China, the term of debt financing for private firms is limited to 3-5 years, although provincial agencies are able to secure Bank debt for projects with a term of 10-12 years. The more common approach is to issue equity shares through P/MEDCs, whose balance sheets are backed by revenue-producing toll facilities. Another form of PFI is to buy parts of operation right of the completed toll highways and to operate, manage and maintain the highway and share the revenue and profits by rates. In this form, the private investors can hold up to 50% of the shares and the transfer period is limited to 20-30 years.

As described above, the concept of PFI can be universal, but its application depends upon the social, legal, cultural and political environmental envelopes. For government to partner with private entities to provide public sector services, it is paramount that the environmental constraints are carefully analysed.

### **Constraints for using PFI in Nigeria**

There are lessons to be learned from the China and the UK environments. There are also issues and problems that are unique to the Nigeria's environment. Nigeria's economy still depends highly on the oil and gas sector, which accounts for about 85 percent of the country's foreign earnings. The internal financial market is a free market but limited in its capacity. The lending regime may not be favourable or investor-friendly for longer term projects and the financial sector participants are slow in innovation of suitable financial frameworks for the Nigeria market. The empirical research conducted suggests that the public sector lacks the capacity to lead or to even understand the need to provide appropriate incentives for PFI activities to be generated accordingly. Just like China, with its large reserves of human and natural resources, Nigeria has the potential to build a highly wealthy economy, to reduce poverty significantly, and to provide the health, education and infrastructure services needed by its rapidly increasing population. Unfortunately, despite the country's relative oil wealth, poverty is still widespread and Nigeria is placed among the 20 poorest countries in the world. The energy sector produces less Megawatt electricity compared to war stricken Iraq.

The oil and gas sector seems to have reached an advanced stage in using PFI, through joint venture vehicles, with the Nigeria economy enjoying foreign direct investment (FDI) through multinational oil companies producing in excess of 2M bpd. In other sectors of the economy, funding for PFI projects may be obtained from a variety of public and private sources, such as: equity, bonds, loans, FDI, grants, aids and sell of operation rights. Until recently, except for the oil and gas sector, there was no robust guideline and/or legal framework that support all types of PPP. The Infrastructure Concession Regulatory Commission (ICRC) Act seems to provide a legal framework for concession-type PPPs specific to infrastructure agreements. Government is producing a PPP policy document, which is expected to provide further guidelines for government's ministries, departments and agencies (MDAs) to participate in such arrangements. This may have its limitation, suggesting the need for potential partners to appoint legal advisors as early as possible.

One of the biggest issues remains how to deal with unsolicited proposals, especially in a significantly corrupt free market environment. It is common around the world that in the initial stages of setting up a PFI system of public procurement, unsolicited proposals tend to emerge as private investors and the public sector seek to take advantage of the policy and institutional lack of experience and uncertainty to make hasty gains. It is therefore necessary that the

Nigeria Government should not be distracted by unsolicited proposals, or place unnecessary emphasis on them in framing policy, as in the longer term there will be a small number of such proposals other than basic suggestions regarding possible projects. It is sometimes sufficient to lay down just some simple guidelines for dealing with unsolicited proposals such as a simple policy statement saying MDAs may receive, evaluate and accept an unsolicited proposal for a public-private initiative if the proposal benefits the public and has sufficient detail and information for the MDA to evaluate it in an objective and timely manner.

It should also be made a requirement that the proposal is subjected to competitive tender. If a person submits a detailed unsolicited PFI proposal, and that person has some special advantage over others, e.g. ownership of a unique piece of land, compulsory purchase order of the land for public interest purposes might be considered to remove any unfair advantage.

Nigeria is not different to other developing nations with regard to inadequate support systems or enablers to novel or innovative ideas. By using structured interviews with private sector participants, constraints affecting implementation of PFI in Nigeria have been identified and categorised into financial, political, legal, administrative, knowledge and cultural groupings. Questionnaires have then been used to obtain data, which was analysed using importance index and severity index. The following are the most significant constraints:

1. Difficulties in securing credit
2. Problems of delays in receiving payments
3. Lack of effective maintenance culture
4. Gratifying officials and Contract Award Syndrome (itching to award new contracts)
5. Difficulty in specifying quality
6. Potential conflict of interest
7. Lack of requisite knowledge and experience of public sector participants
8. Problems of inadequate procedures and guidelines
9. Complex negotiation process
10. Clients representatives constantly changing
11. Difficulty in obtaining foreign exchange
12. Lack of effective value management system
13. Difficulty in importing spare parts
14. Problems of managerial & technical incompetence (local content)
15. Lack of transparency and accountability
16. Weak judiciary, weak contract enforceability, and weak implementation of rule of law
17. Poor appraisal systems
18. Poor use of feedback systems
19. Poor I.T. and communication systems
20. Poor evaluation systems
21. Lack of knowledge capture, management and dissemination.

## **PFI Project Implementation and Evaluation Model for Nigeria**

Researchers have defined a project as a scheme that creates change; have a mixed goals and objectives; is unique; is limited in time and cost; and involved the use of a variety of resources. Experience has shown that successful projects rely on robust project appraisals and project evaluations. Unfortunately, in the Nigeria environment, there is apparent disregard of the importance of project appraisals and evaluation especially in the delivery of public sector projects. This is evident in the list of the identified 21 significant constraints. By analysing the

identified 21 constraints collectively, it can be argued that one way that most of the constraints could be removed or significantly reduce their effect is by enforcing appropriate project appraisal and project evaluation systems in all public sector projects in Nigeria.

There is always some confusion regarding the use of the terms appraisal and evaluation. Some experts claimed that an appraisal is conducted before a project is actually executed, while an evaluation is carried out after the completion of a project. Because of the length of duration of PFI projects, and the distinctness of the parts that make up the overall project, it may be argued that a PFI project is always made up of small interdependent projects each needing at least appraisal and evaluation at its start and end nodes respectively. This suggests that there should be a continuum of project appraisal and project evaluation throughout the project life cycle of a PFI project. The relationship between the two is iterative, each continuously providing feedback to the other. Project evaluation uses historic data and takes place after the event. Its main purpose is to ensure that lessons are widely learned, communicated and applied when assessing new projects. Project appraisal uses forecast data and it is defined as a process of exploration, review and evaluation taken on by the decision-maker as the alternative options for development are defined within the project planning process. The aspects of the appraisal can purely be economic or can encompass technical, environmental and social concerns. The aim of appraisal therefore is to enable an informed and rational decision to be made in the most effective use of available resources. Butt and Palmer (1985) suggest that it simply aims at achieving value-for-money (VFM).

In each of the key stages through the project life cycle shown in Figure 1, the outputs of project appraisal and/or evaluation are critical. Following an in-depth review of the key stages, a typical PFI project is made up of the following 10 stages:

1. Initiation stage: is a process of formally recognising that a new project exists or that an existing project should continue into its next phase. It may start by an informal initiation so that the idea is explored and some initial work is done to secure approvals needed for a formal initiation to start. This may result from a market demand, a business need, a customer request, or a legal requirement.
2. Identification stage: its purpose is to clearly interpret the business need and transform it into a technical (construction or development) language, and to list options of achieving the project aim including the procurement option (i.e. solving the problem or satisfying the business need) and set out criteria for judging the options.
3. Feasibility stage: to objectively produce a Tentative Ranking Order of the options produced by Identification stage.
4. Project Type Selection stage: to decide on the most VFM option recognising soft systems such as political, social and cultural.
5. Global Engineering stage: to produce strategic overall technical solution and possibly breakdown the scheme into phases.
6. Detailed Engineering stage: transforms the scheme/outline designs into production mode
7. Construction & Development stage: detailed designed solutions into physical assets.
8. Commissioning stage: testing, training and commissioning
9. Operation & Maintenance stage: creation and maintenance of wealth
10. Decommissioning stage: dismantle, re-use, or re-cycle

Using the experiences of other countries together with the primary data collected, the above 10 stages provides a skeleton to form a generic model that can be used for PFI type projects in Nigeria. The developed model is shown in Figure 2.

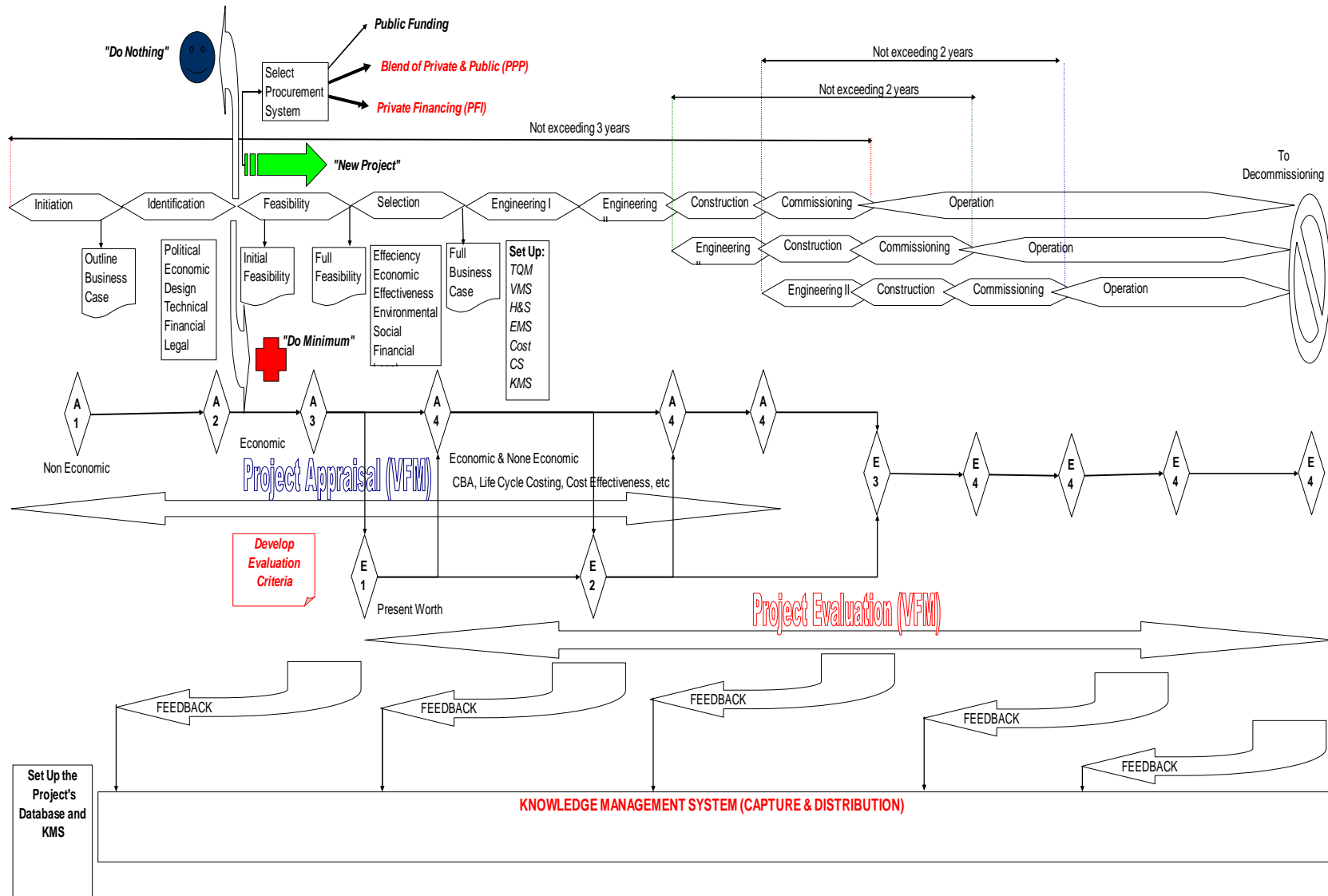


Figure 2. The PFI Project Implementation and Evaluation Model



The Initiation stage usually originates from a demand or need or requirement by the client. This is transformed into an Outline Business Case (OBC) by systematically identifying and considering all the relevant factors and carrying out an options appraisal directed towards achieving clearly defined strategies, aims and objectives. The nature of the appraisal at this stage is mainly none-economical except for indicative costing of possible options to ensure affordability.

Further appraisals are conducted during the Identification stage, using economic and non economic tools that analyses the impact of political, economic, financial, technical, design, and legal risks. Objective criteria that can be used for appraisal of the various project options are developed. Three possible decision outcomes may result from this appraisal: “do nothing”, “do minimum” or “need a new project”. If the decision is to carry out a new project, then the public client needs to evaluate the various procurement options and choose the most suitable. The choice can be categorised into three: fully fund the development from public funds; invite total private sector participation; or joint resources with the private sector to fund the development. The choice between the second and the third depends upon whether the development can be financially free-standing or services to be provided by the project is sold to the public sector with minimal cash flow sources elsewhere.

The Initial feasibility studies of shortlisted options (not exceeding six) are now carried out using economic appraisal tools and techniques that take into account both capital and running costs over the project life cycle. A further shortlisting is done to bring the number of possible options not to exceed three. Following on to this, full feasibility studies of the 3 options are carried out. A financial authority is achieved and the bidders are invited to submit proposals based upon the criteria of effectiveness, economic, efficiency, environmental, and social factors. 3 preferred bidders are selected and each invited to provide a detailed submission including appraisals and evaluations systems for quality, health & safety, value management, knowledge management (KMS), cost and environmental control systems. This effort by the bidders is often expensive experience (it is established that in the UK it may cost up to £1M to submit a PFI contractor’s detailed proposal). Therefore, to remedy the impact of the potential loss by the failed bidders, it is recommended that some parts of the costs are reimbursed by the bid winner to a limited extend agreed at the beginning of the bidding process. This process can draw from the lessons learned in the competitive dialogue procurement system practiced in the UK. This may encourage collaboration and purchase of innovative ideas (knowledge) between the bids for the benefit of the project. A Full Business Case (FBS) is now produced by the successful bidder as a requirement for signing the agreement.

Due to lack of capacity (knowledge, experience and expertise) in the public sector, the execution of the identification and feasibility phases should not be left to the public sector alone. It is therefore necessary that independent consultants are employed by the public client to provide the service within clearly defined guidelines. There is the need for a government agency to be set up, whose primary role is to produce guidelines, advice government clients and capture knowledge and experience for all PPP/PPI projects that can be used for continuous improvement and development of “good practices”. It is essential to replicate the office in each of the 36 States of the Federation.

A key component of the model is the need to limit project duration to a maximum of 3 years ensuring that it is completed within one political term of government. Where a project is anticipated to exceed 3 years, it should be carefully broken down into operation-able phases such that a completion of a phase within the stipulated period can be able to operate and

generate value for money. Within the first phase, overall schematic/concept engineering must be completed, outlining the subsequent phases. Normally phase two should be completed within the next two years and so on.

By using feedback system, catalogued into the KMS, the success of each subsequent phase relies on the evaluation outputs of the previous phases and other similar projects. There are 4 appraisal gateways and 4 evaluation gateways, each with the 4<sup>th</sup> repeating itself depending upon the number of phases in the global project. Each of these gateways can be a hardgate or a softgate depending upon the nature of the decision following it. This flexibility enables the use of concurrent engineering or simultaneous engineering in the project. From engineering II stage through to decommissioning (depending upon the nature of the guarantees and the concession period given) the project control is left entirely in the hands of the private sector, who are best equipped to handle risks associated with uncertainties and technological changes. Nigeria is an opportunistic public sector dominated economy; therefore, it is inevitable that unsolicited proposals would be in abundance. Any unsolicited proposal must first be evaluated to confirm whether the proposed project lies within the strategic plan of the MDA, whether it could fit into the public services priority list, whether the proposed solution could be best delivered by the private sector, and whether there is value for money. A PFI appraisal report should be produced and its conclusion should be decisive on whether any further effort to consider the proposal should be invested. The proposal is expected to undergo the normal competitive procurement process. Once the decision to go ahead is made, the MDA should evaluate the submission, to ensure VFM, using the following key criteria:

- Client's participation costs and other incentives/sweeteners requested
- Economic - minimising the cost of the inputs for a given activity having regard to the appropriate quality
- Efficiency - ratio of inputs to outputs (doing things the right way).
- Effectiveness - degree to which an objective is achieved. (doing the right thing)
- Environmental impact (natural impacts - pollution/recycle/reuse)
- Affordability
- SPV capability/capacity
- Long term nature of contract
- Quality of design (aesthetics, innovation, style, blend with environment, etc)
- Risks assessment, apportionment/transfer

At commencement of subsequent project phases, it is still possible to receive solicited or unsolicited alternative proposal in line with the content of the original OBC. The MDA should consider evaluating the proposal/submission, which can be done at a fee. The evaluation of such proposals shall be undertaken using the following:

1. Novel methods, approaches, or concepts demonstrated by the proposal;
2. scientific, technical, or socioeconomic merits of the proposal;
3. potential contribution of the proposal to the MDA's mission;
4. capabilities, related experience, facilities, or techniques of the private entity or unique combinations of these qualities that are integral factors for achieving the proposal objectives;
5. qualifications, capabilities, and experience of the proposed principal investigator, team leader, or key personnel, who are critical to achieving the proposal objectives;
6. how the proposal benefits the public, and any other factors appropriate.

## Conclusion

Nigeria is blessed with human and natural resource, which forms the bedrock of a successful economy, but has a relatively weaker private sector. The strengthening of the private sector may best be achieved through a combination of privatisation and PFI schemes. Nigeria badly needs investment in its infrastructure, but the identified constraints make it difficult to see how PFI could make a contribution knowing fully well that the services to be sold are expected to be wholly paid for by the public sector over a very long term. One feasible way is for the various levels of government to adopt the “unique Chinese PFI model” using equity, but integrating it together with grants or aids from the World Bank and other similar institutions. Joint venture arrangements can be set up between an equity investor and a ‘domestic company’ directly or indirectly owned by the federal or state or local government. Where such an arrangement is made, it may be desirable to set a target dateline for complete disposal of the domestic company’s equity to fully private entities. It may be wise for the government strategy to initially focus on financially free standing PFI projects, to build up confidence and knowledge base. With experience, the strategy pendulum may gradually swing towards “services sold to the public sector” PFI option over time.

For effective participation of the private sector in the provision of public sector services, there must be full public awareness and re-training of the public sector employees to fully understand risk management, project whole life costing, and the need for maintenance and continuous improvement. Training and guidance to MDAs, in terms of planning, options appraisals, financial modelling, procurement, contract and project management is essential. Basically more project managers are needed in the public sector employment to improve the knowledge capacity, decrease administrative bottle-necks, and help change the culture of poor maintenance, contract-award-syndrome and poor ability to specify quality. The recently ICRC Act, Public Procurement Act and Fiscal Responsibility Act will contribute to improving transparency and accountability, however, further legal review is needed in order to clearly spell out the roles and responsibilities of all stakeholders in all types of PPPs in Nigeria.

It is important to ensure that any PFI policy document or framework must be flexible to enable ease of adaptation by the various MDAs and the various tiers of government. In line with this requirement, the developed model is therefore made in a generic format such that each sector of the economy is able to adapt the model to suit its specific needs and conditions. Each core framework in such models would normally require standardised internal and external checks and balances. Project appraisal is one of such core items which is expected to be carried out by the Soliciting/Facilitating MDA, but should be regulated by the Bureau for Public Procurement. The other core item is the project evaluation which is to be executed by the SPV but must be regulated by the Bureau for Public Enterprise. Another essential component is the knowledge management system which forms the main fabric of the model which will require a special agency to be set up to manage the system. If all these are established and every data or information is made freely available and accessible to all stakeholders and the general public, it will address most of the key constraints identified.

Finally, the developed generic framework have revealed that there are four sets of interdependent enablers to the implementation of PFI in Nigeria, namely: project appraisal system, project evaluation system, knowledge management system, and the restriction of the project duration to 3 years. Each of the enablers would only be successful by an effective capacity building regime and improved codes of conduct especially for the public sector.

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