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The role of the facility manager in new procurement routes

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Abstract *The private finance initiative (PFI) is a means of using private finance and skills to deliver capital investment projects traditionally provided by the public sector. Traditionally, public sector bodies have been responsible for the procurement, operation and regulation of capital assets. In PFI, the private sector has the primary role in the operation of constructed facilities, whereas the public sector has a larger role in regulation. There are two parties to a PFI contract: the public sector body or authority, and the private consortium responsible for the delivery of the facility or project. Part of the contract specifies that the private consortium takes on a considerable degree of risk associated with that facility. This paper reassesses the role of the facilities manager as the party responsible for the co-ordination of planning, design and management of facilities within the PFI regime. The development of strategic long-term partnerships between client organisations and FM service providers requires the fundamental reassessment of appropriate risk management strategies informed by an integrated information management system that ensures the timely capture and exchange of life cycle data throughout the key stages of the PFI contract.*

Introduction

Traditionally, government has had to deliver public sector construction projects funded by HM Treasury. In 1992, the UK government introduced a new way of procuring facilities and providing services known as the private finance initiative (PFI). PFI is a mechanism which was introduced with the objective of improving performance and providing greater value for the UK taxpayer, by using private capital investment in public sector provision. By December 1999, agreements for over 250 PFI projects had been signed by central and local government for procurement of services across a wide range of sectors, including:

- schools;
- hospitals;
- prisons;
- roads;
- rail;
- office accommodation; and
- IT systems.



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These projects range in value from less than a million pounds to several billions of pounds, and have an aggregate value of approximately £16 billion. The procurement of PFI projects is a complex process. The primary objective is service delivery over an agreed time span, which is designed to meet a policy objective. This requires a shift in the mindset of construction contractors, as their own financial success and hence future is locked up in the long-term future of the constructed facilities they create (Sommerville, 1999). This cultural change will transform the structure of project teams, redefine roles and responsibilities, and the risk management strategies adopted. Figure 1 illustrates the organisational dimensions of the PFI process. The fundamental differences that distinguish the PFI regime from the traditional procurement of public sector construction projects (HM Treasury, 1997) are:

- the opportunity for construction companies to take an equity share in the facility as part of a concessionaire agreement with other stake holders;
- the transfer of risk to the private sector; and
- different criteria for evaluating project risk defined by the consortium providing the capital.

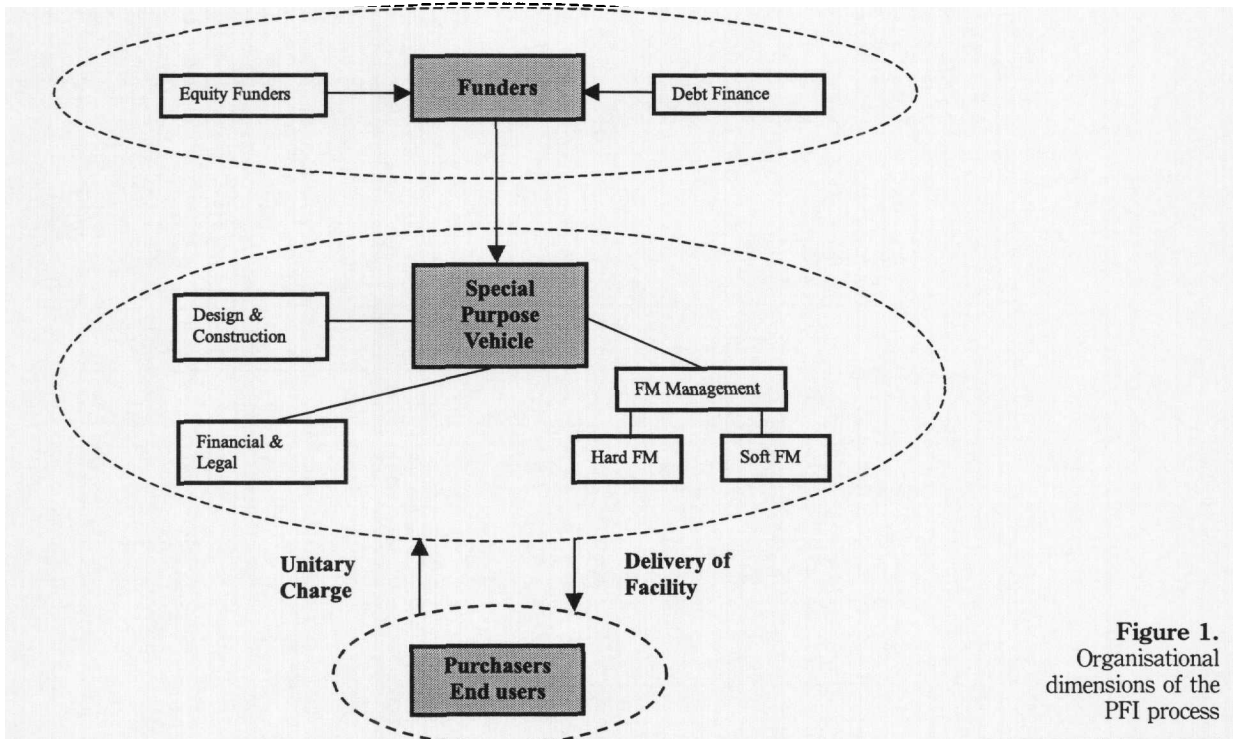


Figure 1. Organisational dimensions of the PFI process

PFI projects must also demonstrate value for money when compared with the public sector comparator (PSC) as well as being affordable to the client. Constructed facilities must be fit for purpose, and robust, to programmes and life cycle costs identified including construction, asset renewal, facilities management (FM), contingencies and margin (often large to include contingency for risks). Uncertainty can deter success so there must be risk mitigation and payment procedures. The performance of the service provider needs to be measured against agreed criteria with a risk of penalties. All these elements require inherent skills within the FM role: FM can thus enhance its profile, and take the initiative in this competitive marketplace.

This paper assesses the role of the facilities manager in privately-financed public sector construction projects. The first part of this paper presents an overview of the PFI process, and the procedure for the formation of client and provider teams involved in the design, delivery, operation and maintenance of constructed facilities. The second part of the paper highlights the role of the facilities manager within the PFI regime, and focuses on the risk management strategies and information system needs required to deliver best value FM services to public sector clients of UK construction.

PFI process

The PFI process is a very complex and lengthy process. There are two parties involved in the PFI procurement process: the client and the service provider. The procurement process for the client is split into three broad phases (HM Treasury Taskforce, 1999b), and is as shown in Figure 2:

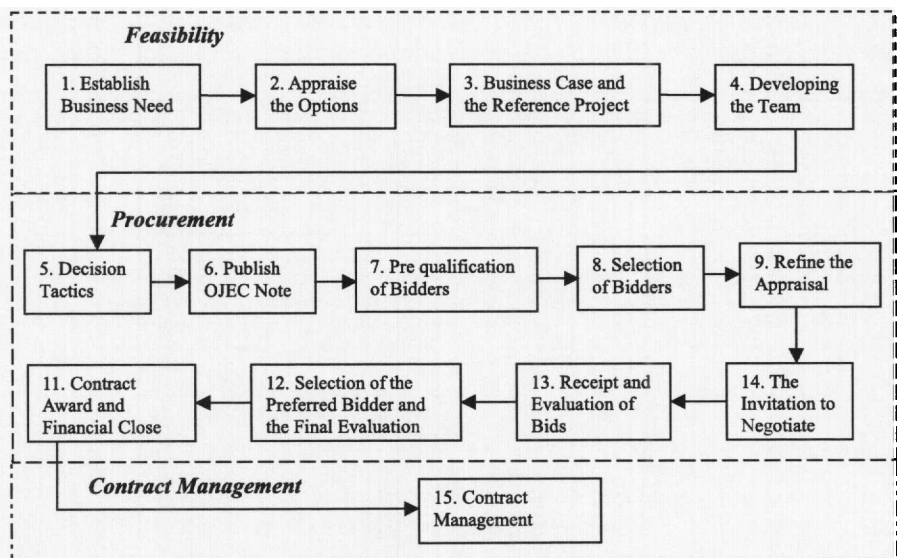


Figure 2.
The PFI process for client (public sector)

- (1) feasibility;
- (2) procurement; and
- (3) contract management.

Each of these phases consists of many stages. The feasibility phase is concerned with the preparation of the business case (stages 1-4). The procurement phase extends from pre-qualification through to financial close (stages 5-13). Contract management (stage 14) runs from award of the contract through to the delivery of the required services during the life of the contract, which may be 25 years or longer. A full account of each stage of the PFI process is described in HM Treasury Taskforce (1999b).

The procurement process for the service provider consists of three phases, and is as shown in Figure 3:

- (1) bid development and design;
- (2) construction; and
- (3) facility management.

The bid development design phase is concerned with preparing and negotiating the contract (stages 1-7). The second phase of the procurement process from the service provider perspective is to build the facility according to budgetary and time constraints (stage 8). The final phase involves the operation and maintenance of the facility and provision of the required services (stage 9). Details of the process for the service provider are described in Construction Industry Council (1998).

The formation of the PFI team

The first step in the planning of the procurement of a PFI contract is to assemble in good time a properly qualified project team for both the client and

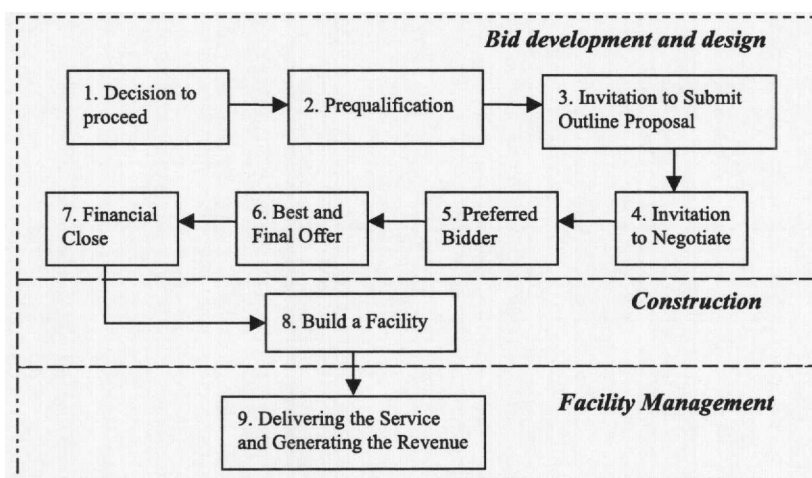


Figure 3.
The PFI process for
service provider
(private sector)

the service provider. A guide published by Office of Government Commerce (2000) identifies the characteristics of PFI project teams responsible for delivering the agreed service. It provides a generic benchmark against which staff can be selected and some of their personal objectives can be established. Different projects may also require additional technical skills, and more in-depth professional knowledge. In terms of specific goals, the factors that determine the choice of the team include (Office of Government Commerce, 2000):

- the type of project;
- the size of project;
- the department or authority; and
- whether the procurement is by central or local government.

The nature of the project may also require sector competence (e.g. NHS, schools, roads, prisons) or project type competence (e.g. IT procurement). An effective PFI team consists of individuals with the necessary range of competencies and depth of knowledge and who fully understand the user's needs for the agreed services. An effective client team must be able to plan the procurement process and manage successfully the delivery of services via a PFI contract. The potential service provider team must be able to respond with tenders that represent best value because of the clear statement of intent that such a team are seeking to purchase on behalf of the public sector body or authority, that is party to the PFI contract.

Most generic teams are needed at all stages, although some skills are in particularly high demand at specific stages in the process. Figure 4 illustrates the range of technical expertise required by the client and the service provider.

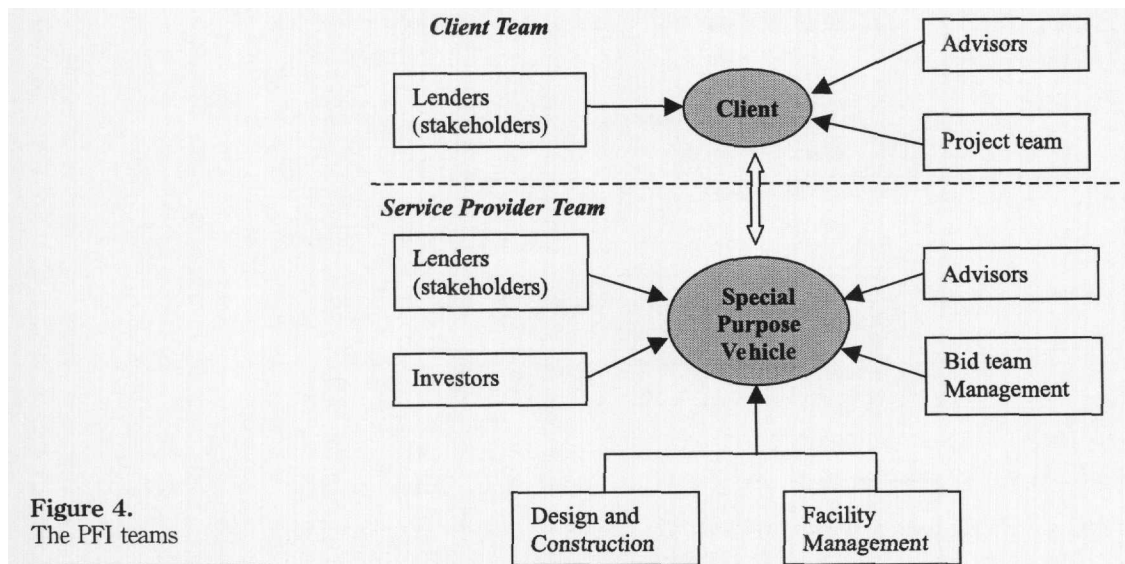


Figure 4.
The PFI teams

The facility manager's role and responsibilities

Facility management can be defined as:

A management process which includes analytical and systematic approaches that are used to determine and deliver the agreed levels of service activities which are required to manage, operate, maintain and support a facility in a quality environment at appropriate cost to meet the business requirements (Bernard Williams Associates, 1999).

The role of the
facility manager

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The growing awareness of the need to operate and manage facilities for long periods (in the case of PFI it is 25 to 30 years) requires the involvement of facilities managers in the design process (Bernard Williams Associates, 1999). This can make a fundamental difference to the way buildings are designed, built, commissioned, maintained and refurbished. Thus, the facilities manager will become increasingly involved in whole life cost analysis, projecting facility plans, and reviewing project proposals in the context of the operation and core business requirements.

In PFI, facilities managers have two roles. The first role is during the bid development and design process, and second is concerned with the utilisation of the facility and provision of the agreed service. The responsibility of the facility manager during bid development and design process may include:

- development of FM cost breakdown structure which may include operating and occupancy, maintenance and replacement, etc.;
- estimation of FM costs;
- reviewing and assessing the design from maintainability, maintenance, operability and serviceability point of view;
- identification and selection of the optimum maintenance and replacement strategies for the facility;
- identification and selection of the optimum operating scenario;
- liaison with the design and construction team to select the cost-effective design option which will optimise whole life costing; and
- liaison with the bid management team.

The facility manager's responsibilities during the service phase may include:

- management and control of maintenance strategies and maintenance costs;
- management and control of operating activities and operating costs;
- collection and analysis of FM data for improvement;
- ensuring that the required level of service is met;
- ensuring the availability of the facility; and
- involvement in the design process.

Facility managers are therefore assigned a wide range of tasks in the planning, design and management of facilities within the PFI regime. The specific tasks

assigned to facility managers can vary significantly depending on the organisation, type of contract and type of procurement. They include aspects related to:

- operations and maintenance;
- project planning and management;
- communication;
- finance;
- quality assessment;
- facility function; and
- human and environmental factors (Spedding, 1994).

Tasks within these broad categories may include:

- space and workplace planning;
- budgeting; and
- renovations or architectural planning and design.

Facility managers' tasks also range from performance monitoring and improvement in the delivery of the required level of service, and monitoring government regulations on environmental, health and security standards (Bernard Williams Associates, 1999).

A failure to meet performance requirements, the availability of the facility and the required level of service can expose the FM contractor to all types of risk. These include financial, technical, and commercial risk exposure.

Risk in PFI projects

Risks are inherent in the delivery of construction projects. In PFI projects risk are inherent in the planning, design, construction operation and maintenance of a facility. As shown in Figure 5, not only clients but also contractors take some

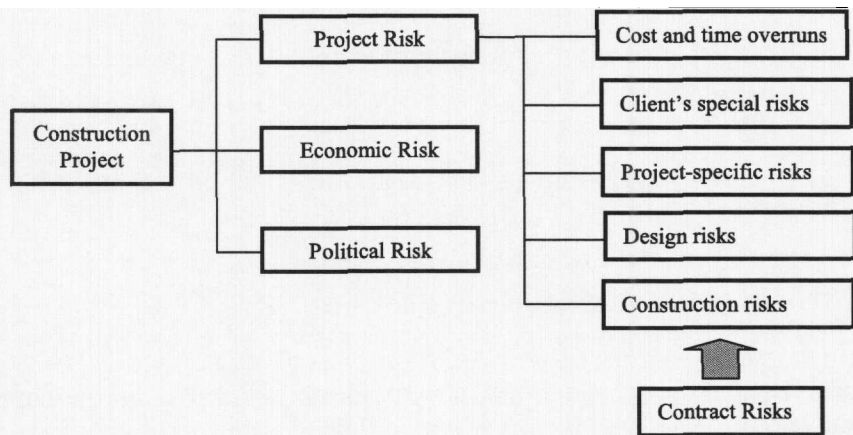


Figure 5.
Risks in the delivery of
construction projects

risks themselves in construction undertakings. Saito (1999) highlighted the risk management strategies for clients of UK construction, but this paper focuses on the issues for contractors (e.g. facilities managers) within the PFI regime.

A different approach

The public sector has had wide experience in procuring one-off construction facilities and services, and it may be tempting to adopt a detailed hands-on oversight role in a PFI project. Such an approach must be avoided (HM Treasury Taskforce, 1999a). The longevity of PFI contracts, the contractor's ownership of the facility and the complex risk allocation between the parties, require the public sector to adopt a different approach to management under a PFI contract as compared to traditional procurement (HM Treasury Taskforce, 1999a). The authority's management role is reduced when compared to that in a conventional project. Authorities need to recognise the importance of long-term "partnership" implicit in PFI contracts, but they must avoid action that could result in risk being transferred back to the public sector.

Strategic objectives

The PFI regime has the potential to create strategically significant partnerships between the client organisation and the providers which could influence facilities management and income generation. Inevitably, the users' requirements and internal and external factors affecting most operations will change over time. An important feature of any long-term service contract must, therefore, be its flexibility to accommodate change while ensuring mutual benefit and a reasonable balance of risk between parties.

The financial issues of investment and the legal aspects of forming a contract for the design, building, finance and operation of new facilities are relatively straightforward. Less so is the question of how best to add the operational dimensions into the demand-supply equation and it is this that can often determine the eventual success of a PFI contract.

The stated objectives of PFI are to relate policy to the ongoing desire to achieve the best value for public money. Added to this is the intention of transferring to the private sector the risks that would normally be taken by the public sector and for which the private sector is believed to be better equipped (and for which the public sector will have to pay). Research on potential links between market testing, outsourcing and PFI indicates that to achieve breakthroughs in service provision, PFI must achieve reasonable scores against three axes of quality improvement, cost reduction and strategic improvement (in the form of increased flexibility and/or lowering of risks).

The availability of information and information tools can assist facilities managers in developing appropriate risk management strategies. The section below describes a framework for the development of an integrated information management system to monitor and support FM processes over the life cycle of a facility.

The development of an information system

Building maintenance, operation and refurbishment accounts for a major part of work in the construction industry associated with high levels of expenditure for most companies with large portfolios of constructed or property assets. The Egan Report (Egan, 1998) identified reducing running costs and improving the standard of existing buildings as an important issue. It also highlighted the importance of technical development aiming at improving the existing poor level of information sharing. This is further emphasised in the DETR consultation paper on the UK strategy for sustainable construction which states "improving building maintenance is accepted as an important objective" and highlights the role of information tools in stimulating this process.

The lack of information on products and components in terms of usage and cost can lead to difficulties in focusing the role of FM and establishing the supply chain within it. Difficulties in monitoring and tracking financial information can also prevent efficient budget control, accurate estimation of work, and contract and purchase management. Good planning in maintenance, operation and refurbishment can be hindered by the availability of life cycle information that is, for instance, crucial in the planning the replacement of components. Other problems associated with the lack of life cycle information include:

- difficulties in benchmarking of life cycle costs;
- implementation of "physics of failure" for building subsystems is only possible if data on maintenance activities is collected and stored during the building's life cycle;
- replacement trends and performance of certain types of equipment can be difficult to establish; and
- projected and future costs can only be determined if information on total lease vs upgrade costs of a facility and various subsystems is available.

Currently, there are no standards that support information exchange and sharing across the building life cycle. Given that there is potential for improvement in business process though the exchange of data on the FM process, there is a growing need to investigate the issues involved in developing a standard that can benefit this most important part of the business life cycle. This standard could then be used to assist in the development of an information management system to support the exchange of information and the assessment of facility requirements. Such an information system requires a large volume of data. Accurate assessment of a facility's needs requires knowledge of:

- building/equipment standards from a design and construction information systems;
- access to accurate maintenance records and repair and replacement costs etc.;

- access to operation and occupancy information;
- other operating costs;
- space management data;
- operation standards; and
- data from occupational and health and safety information systems and from a financial and commercial information system.

An integrated information management system as shown in Figure 6 could assist facility managers and other project team members to combine data and information on a facility's life cycle, and based on the integration of cost and commercial data, design and manufacturing and construction data together with facility operation and maintenance data.

Conclusions

There is mounting evidence that the UK government will continue to seek private capital investment in the procurement and delivery of public sector services through PFI and public-private partnership regimes. The development of new (non-traditional) roles and responsibilities for project teams is the key to optimum service delivery under PFI. The forming of long-term relationships, and the development of appropriate strategies to manage higher risk exposure are crucial elements for the service provider to consider. This paper has identified the principal roles and responsibilities of the facility management provider required to meet these new challenges. The PFI regime places a heavy emphasis on the allocation, assessment and management of risks at all stages in the delivery of construction projects and, in particular, in the provision of facility management services. The availability of information and information tools can assist the facilities management team provider in developing the appropriate risk management strategies within the PFI regime. The development of an integrated information management system to support the exchange and sharing of data along the FM supply chain is critical in stimulating this process.

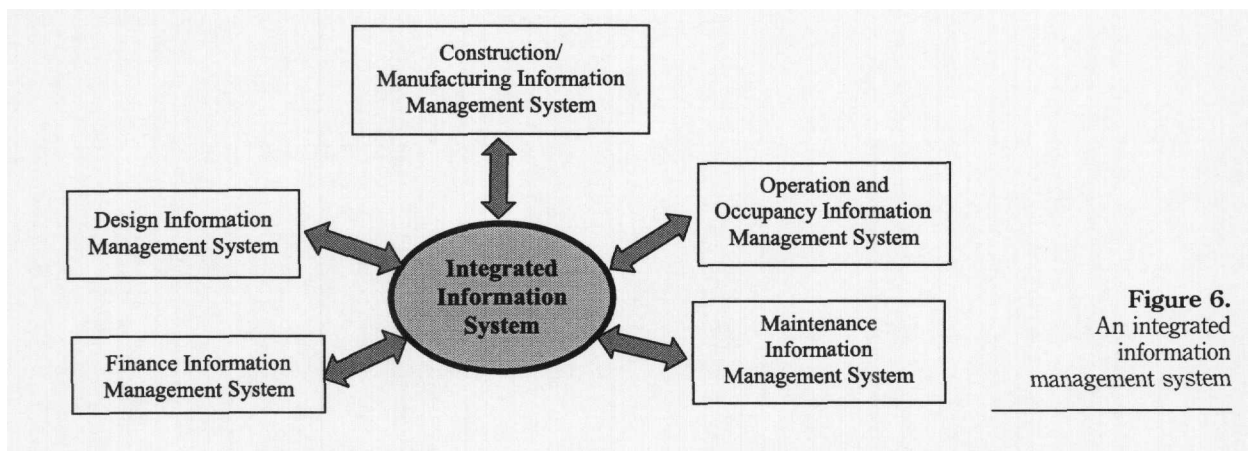


Figure 6.
An integrated
information
management system

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