Investigating The Level Of Public-Private Partnership (PPP) Monitoring Skills Among Civil Servants In Malaysia

by

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Dissertation submitted in partial fulfillment of
the requirements for the
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CERTIFICATION OF APPROVAL

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TRONOH, PERAK

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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgement, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

ABDULLAH KHAFIF BIN SAPARI

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ABSTRACT

The purpose of this paper is to investigate the availability of public sector officials with skills in monitoring Public-Private Partnership (PPP) projects and also to investigate the level of competency of the officials mentioned above. It is also to report on the progress of this research in detail. A questionnaire was designed and was checked by several people before it was finalized and was allowed to be used in the real survey later in this research. The questionnaire was distributed to three different government offices namely Public Work Department (PWD), Public Private Partnership Unit (3PU) and Bank Pembangunan Malaysia Berhad (BPMB). Interview sessions were also done with the high ranking individuals in these offices. The interview questions were mainly the same with the questionnaire and additional questions consisted of more open ended questions to the individuals. From the Pilot Survey done, it is found that the questionnaires were well designed and it provides the data needed in this research after it was sent to the targeted offices. However, slight changes to the questionnaires were needed and the distribution was also planned well to prevent any bias in our research. This research is only focuses on the public servants in three different departments within the public sector which are Public Work Department (PWD), Public Private Partnership Unit (3PU) and Bank Pembangunan Malaysia Berhad (BPMB). As a result, a total of 54 respondents have given their cooperation in completing the questionnaire and 4 interview sessions were conducted within the three organizations. From the questionnaires and interview sessions, it was found that there are an adequate number of people who can handle or monitor PPP/PFI projects. However, the competency level are still lacking as it is still average among the public servants in Malaysia. Therefore, the objectives of this research have been fulfilled and it is strongly suggested that further research in PPP/PFI topic be continued as this is fresh topic in Malaysia.

TABLE OF CONTENT

LIST OF TABLES

CHAPTER 1

PROJECT BACKGROUND

1.1 INTRODUCTION

Nowadays, many governments are looking for ways to reduce their spending on infrastructure and services due to demand for attention from other sectors of the economy. Improved healthcare and developments in science and technology have given birth to new challenges requiring government attention, and these improvements in technology have resulted in lower death rates and longer life expectancy giving rise to unexpected population increases. Social security benefits and pensions payments need to be paid to the jobless and senior citizens respectively. These developments have strained government finances to the extent that other sources of revenues are required if the government is to meet up these demands and also execute its duties of providing public infrastructure and services to keep the national economy going. "Contemporary public administration is amazingly complex and is becoming more complicated all the time" (Rosenbloom & Kravchuk, 2005, p. 550), requiring changing attitudes and processes to cope with the changes evolving. The New Public Management (NPM) and National Public Review (NPR) in the U.S have evolved to tackle the problems being encountered in the public sector to aid in solving the myriad of problems, however, the effects of these are still being felt with the public commending or condemning the resultant effects of these new public management tools. "Whatever the roles played by public, private and civil society sectors, every developing nation faces a fundamental problem of providing the vital infrastructure needed to achieve and sustain a modern economy" (Todaro & Smith, 2009), to this end the Public Private Partnerships has evolved to handle the public infrastructure and services problems of the government allowing the government to focus on other sectors of the economy requiring their attention. The development of this procurement strategy is the direct result of a number of problems which has threatened to cripple service provision by the government, ranging from poor services to inability to provide good services in some instances. The impetus that has given rise to PPP are "private sector management expertise, innovative technologies and operational efficiencies in addition to mobilising private funds" (Zhang &

Kumaraswamy, 2001), "reduction in government borrowing, managing the risks of cost and time overruns" (Fewings, 2005), "pressure on state finances" (Toms, Beck, & Asenova, 2011) and the quest for "Value for Money" (Sobhiyah, Bemanian, & Kashtiban, 2009) on constructed assets.

"Public Procurement Partnerships appear to be the next evolutionary step in what might be called '21st Century governance'. The new paradigm can be thought of as a synthesis of the direct government approach and the market" (Lawther & Martin, 2005), writing about Hong Kong, (Tam, 1999) observed that "traditionally in the region, the public sector has financed the construction of the infrastructure. However, governments in these countries experienced strain on their financial spending; a large portion of which has been spent on social welfare for fulfilling the rising quality of life in the region". Public private partnerships are a procurement strategy that seeks to take advantage of huge 'idle' private funds, their entrepreneurial knowledge and technical expertise for the provision of efficient public infrastructure and services. "Public Private Partnerships (PPP) is a partnership that leverages private funding and the strengths of private entrepreneurship and management, for the maximum provision of public services in a climate of scarce resources. PFI is a PPP special case where all the finance needed for the capital funding and its basic operation is supplied by the private sector in return for a service charge" (Fewings, 2005) , differences have been attributed to PPP and PFI however "Such differences in definition and understanding can make accessing the international experience difficult: in the UK, the PFI is simply one type of PPP, while in some countries and regions, the PFI is the only model and therefore the terms PPP and the PFI are synonymous" (CBI, 2007)

Different countries have adopted PPP/PFI for different reasons, however for whatever reason every country might put forward, it is pertinent that they have public sector staff that are knowledgeable in PPP/PFI procurement strategy and all its intricacies to be able to interact with the private sector partner on equitable terms. It is the practice currently of most countries to seek independent consultants and independent bodies to regulate the actions of these private entrepreneur, however the occurrences at Enron, WorldCom, Nortel and other public services that have failed in the not too distant past

have reminded us, if nothing else that public sector staff need to acquire skills in this new strategy to manage PFI procurement successfully "There must be a chance that a private sector partner in a project will fail, leaving the private client to pick up the pieces and maintain essential services delivery." (Li, Akintoye, Edwards, & Hardcastle, 2005).

Investments in PPP/PFIs are very huge globally, citing some numbers, in total some $A17 billion in commitments to investment in PFP projects has been made by different Australian states (AusCID, 2002) cited in (English & Guthrie, 2003) . in the UK, "the total investment in Public Private Partnerships (PPP) and Private Finance Initiative (PFI) in 2005-06 was approximately £6 billion representing 12 percent of the total private involvement in public services" (HM Treasury, 2006) cited in (NAO, 2008). And in Asia, "a joint Asian Development Bank, Japan Bank for International Co-operation and World Bank estimate is that East Asia alone has infrastructure needs totalling US$200 billion a year over the next five years. Around two-thirds of this expenditure needs to be new investment, with the balance on upkeep of existing assets" (Siang, 2008). In nearby Taiwan after the enactment of the PPP Act, "many public agencies have encouraged private sector entities to invest in public projects. As of the end of 2008, private investment totalled nearly 382 billion NT dollars (about US$ 11.5 billion)" (PCC, 2009), In neighbouring Indonesia, "the World Bank also found that between 1994 and 1999 the total private investment in Indonesian infrastructure was more than US$20 billion in which the transport sector led in terms of number of projects with 20 infrastructure projects (13 toll road projects and 7 seaport projects) with private participation" (Abednego & Ogunlana, 2006). In Malaysia under the Ninth Malaysian Plan (MP), the government identified 425 projects worth RM 20 billion to be procured through PFI (Abdul Rashid, 2007), while in the present 10th MP, "52 high-impact projects worth 63 billion ringgit have been identified for implementation" (10th Malaysian Plan).

The difference between the PPP/PFI procurement method and traditional procurement method is shown in the table below.

Table 1: Difference of PPP/PFI Procurement Method And Traditional Method

Features	PPP/PFI Procurement	Traditional Procurement
Design	Public sector client specifies output required and private consortium provides design to satisfy requirement	Public sector client specifies design & inputs in conjunction with external professional advisor
Finance	Capital provided by private sector consortium in return for unitary payment from public sector client	Capital provided by public sector (exchequer)
Construction	Construction undertaken by private sector consortium	Construction put out to competitive tender to private sector contractor
Operation and Maintenance	Infrastructure operated and maintained by private sector consortium	Operation and maintenance by public sector client or put out to competitive tender to private sector contractor
Services	Services provided by public sector client and/or private sector consortium	Services provided by public sector client or put out to competitive tender to private sector contractor
Ownership	Ownership reverts to public sector client or is retained by private sector consortium	Infrastructure owned by public sector client

Source: **(Dixon, Jordan, Marston, Pinder, & Pottinger, 2003)**

1.2 PROBLEM STATEMENT

PPP/PFI are usually large and complex, "these Mega-projects clearly bring together, under various contractual arrangement, differing and competing partners, interests, values and modes of rationality (ways of doing and thinking) (Marrewijk, Clegg, Pitsis, & Veenswijk, 2008) which creates conflicts", though these conflicts are not alien to the construction industry. In the past, the construction industry has tried to introduce contractual safeguards to protect both parties in a contract, but "while these contractual arrangements therefore seek to address the many interests which are at stake in complex megaprojects, they do not fully capture the complexity of the multiple, fragmented subcultures at work in a project culture" (Kendra & Taplin, 2004). Further compounding the problem on this path is the long-term nature of PPP/PFI projects, a lot of changes would have taken place over this long period, most of the data upon which the contract was based would all have changed, while the investors need confidence that they would recoup their cost, the end-users need protection from being exploited by the private sector partner. In the past regulatory bodies have been formed to oversee service provision but, as was observed by (Miliband, 1969) and cited in (Toms, Beck, & Asenova, 2011) "business regulation tends to serve business", hence there is a need for congruence such that business regulation may serve the State, the Business and the End-Users. None can do this better than the permanent machinery of the state-the bureaucracy. But the knowledge of PPP/PFI is relatively new and the Public sector officials have not gotten over the move from the traditional procurement method to this new method occasioned by NPM and resource shortages.

Transaction costs arise in organizing a competition and in writing , policing and enforcing contracts" (Parker & Hartley, 2003), The public sector may decide to outsource the contract administration aspects but they risk losing a long-term decline in internal capabilities which is not good for tax payers monies and the economy in general. In china for instance, (Lou, Gale, & He, 2001), "it is foreign firms and international financial institutions rather than domestic institutions that have been involved in PPP projects" this further creates its own monitoring challenges due to differing modes of operations, technical standards, cultures and work attitudes. It is known that there is no set formula or an absolute foolproof technique in crafting a

successful PPP/PFI, "PFI is not and should not be the solution to all the issues we face in procuring public facilities. It is only as good as the value for money assessment, the capabilities of the concession company and the structuring, management and enforcement of the PFI contract." (Siang, 2008).

A research by the RICS amongst surveyors indicated that "managers are often not adequately skilled at driving PFI projects forward and that in the best PFI projects a partnership of skills between the public and private sectors is required" (RICS Project Management Forum, 2003), but did not go further to help identify these skills and how they can be acquired . This lack of public sector expertise was also underscored by (Li, Akintoye, Edwards, & Hardcastle, 2005) who observed that "the concept of PPP is comparatively less well understood in countries with a strong public welfare policy; and even more so in terms of operational service delivery. Regulatory policy in this area may be very strict concerning public finance and expenditure. In such countries, governments have less experience in alternative ways to finance their projects", this and other knowledge related to proper management of PPP/PFI projects by public sector officials was also pointed out as a major issue in their success by (Morledge & Owen, 1998) who observed that "the lack of understanding and the need for better training by public officials involved in PPP/PFI projects is a major issue", hence there is a need to investigate the level of PPP knowledge within the public sector and suggest ways to improve their knowledge in those areas which they may lack specific competence.

1.3 OBJECTIVES

a) To investigate the availability of officials with skills in monitoring PPP/PFI projects
b) To investigate the competency level of the people with PPP/PFI monitoring skills in the public sector.

1.4 RESEARCH QUESTIONS

a) What is the degree of availability of officials with skills in monitoring PPP/PFI projects?
b) What is the competency level of the people with PPP/PFI monitoring skills in the public sector?

1.5 SCOPE OF WORK

The study shall involve an investigation into the availability of officials who have the skill in monitoring PPP/PFI projects. Also the reasons why there is a shortage in the identified skills within the public sector and in addition to that, the study shall also measure the competency level of the people with PPP/PFI monitoring skills in the public sector. The respondents for this study shall be limited to public sector official working in Bank Pembangunan Malaysia Berhad (BPMB), Public Works Department (PWD), and the Public Private Partnership Unit (3PU).

1.6 BENEFITS OF STUDY

a) The study will help the government understand and measure the availability of official with skills in monitoring PPP/PFI projects.
b) The study will also help the government to measure the competency level of the people with PPP/PFI monitoring skills in the public sector and take corrective actions if any competency shortage is observed.

CHAPTER 2

LITERATURE REVIEW

2.1 PRIVATE FINANCE INITIATIVE (PFI)

"PFI in Malaysia is defined as "involving the transfer of responsibility of financing and managing capital investment and services of public sector assets to the private sector including the construction, management, maintenance, refurbishment and replacements of public sector assets, in return for lease charges that are commensurate with the level, quality and timeline of service provision as well as an amount sufficient to ensure returns on investment where the assets and facilities will be transferred to the public sector at the expiry of the concession period" (The Economic Planning Unit (EPU), 2006). According to (Khairuddin, 2007), he stated that "PFI is an alternative public procurement strategy. It relates to the delivery of public services that in the past were the realm of the public sector, using private sector financing and expertise. In PFI the government does not own the capital assets instead buy services from the private sector who owns and operate the capital assets under concession agreement it entered with the government. At the end of the concession period, typically 30 years or more, the private sector transfer ownership of the capital assets to the government in good operating condition". From the quoted text above, we can see that PFI is actually a vehicle used by the government to transfer their workload to the private sector. By doing this, they are actually giving the financial and management responsibility to the private sector that will be responsible for the services provision.

"PFI, in its purest form, is a design build finance and operate (DBFO) system" (Broadbent & Laughlin, 2003). "The central characteristics of a DBFO system are that the private sector supplier is deemed to be the provider of a "service package" involving the design of any building and the accompanying operational management of the building and its aligned services (following an output specification from the public sector purchaser)." (Broadbent & Laughlin, 2003). PFI is also a form of PPP, it has its own characteristics that differs it from others. The characteristic in this system,

the building that will be built is the property of the public sector. The government does not own the building or asset until the end of the concession period. After that, they will also be obliged to do maintenance of the building until the end of the concessions period. Lastly, both public and private sector are bonded into a long period of relationship/contract. This might be in the range of 20-60 years. Although the way it is run differs from the traditional procurement method, the goal remains the same which is to deliver quality services to the public.

2.2 FINANCING PPP/PFI IN MALAYSIA

According to (Syuhaida & Aminah, 2009), PFI in Malaysia emerges in two different schemes. The two different schemes is provided in their earlier research- "Thus, having conferred the PFI 1 scheme which is financed by the government e.g. via the Employees Provident Fund (EPF), Pension Trust Fund (PTF) etc" (Syuhaida & Aminah, 2009) and "Yet, it should be highlighted that those mega projects fall under the PFI 2 scheme which are funded by private concessionaire or shared by both the government and private" (Syuhaida & Aminah, 2008) We now clear about the two schemes used in this country where the projects is either financed by the government via the EPF, PTF etc or financed by the private sector themselves. Some examples for the projects are as shown below:

Table 2: Projects Under PFI 1 Scheme.

Types of Infrastructure	Projects	Cost
Social infrastructure	Education	RM 9,472 billion
	Housing	RM 1,565 billion
	Healthcare	RM 878 million
	Defense	RM 1,582 million
	Internal Security	RM 2,694 million
	General Services	RM 2,515 million
Economic infrastructure	Transport	RM 634 million
	Agriculture	RM 350 million
	Commerce	RM 310 million
	Total	**RM 20 billion**

Source: **(Jayaseelan R. , 2007)**

Table 3: Projects Under PFI 2 Scheme.

Projects	Cost
Ipoh – Padang Besar double-track railway	RM 10 billion
Penang monorail	RM 1.2 billion
Extension of existing LRT line	RM 10 billion
High-speed train to Singapore	RM 8 billion
River cleaning project	RM 1 billion
Interstate water transfer	RM 4 billion
Hulu Langat water treatment plant	RM 5 billion
Bakun undersea cable	RM 9 billion
Trans-peninsular oil pipeline	RM 25 billion
West-Coast Highway	RM 3.05 billion
Total	**RM 76.25 billion**

Source: **(The Economic Planning Unit (EPU), 2006), (Jayaseelan & Tan, 2006)**

2.3 PPPS IN EDUCATION AND E-GOVERNMENT SERVICES

Public Private Partnership (PPP) can be used in any kind of project. It covers a wide range of project such as building schools, colleges and universities, housing, healthcare center, hospitals, transportation, roads and highways. These projects can be done by implementing the PPP system. One popular example of PPP project is the North-South Expressway. The agreement is between the government and the private sector which is Perbadanan Lebuhraya Utara Selatan (PLUS).

"Although contracting for education services is uncommon, the PPP model has been adopted in a number of jurisdictions for the purpose of constructing and managing school faculties." (Connoly, Reeves, & Wall, 2009). PPP in education is not as popular as it is in infrastructure works. However, there have been cases involving education especially in the United Kingdom (UK). From earlier studies by researchers around the world, many of them found that the satisfaction level toward the completed projects is high. This might be caused by the nature of the PPP system itself where the project is privately funded by the private sector. This type of financing has the ability

to ensure the smoothness of the project as the contractor will be using their own money to do all the works. Besides that, researchers also found that some people who are involved in this type of procurement have some concerns related to the initiative's expense and complexity of the system. "The PFI contract studied, for eight secondary schools and one primary school, was between a PFI consortium and a local authority in England. The contact covered nine schools and had a value of £50 million... Two schools had a full new build, one of which was the art college which will be examined below. The local education authority (LEA) set up a PFI team to deal with contract negotiations and output specifications. None of the schools was completed in time." (Keenan & McCabe, 2010).

This statement was made after a thorough research has been done and what they found is that none of the studied schools were completed in time. This can be explained theoretically by saying that the delay in this project might be caused by lack of co-operation and trust between the two sectors involved. As stated by (Keenan & McCabe, 2010), some evidence had showed that the problems faced by the providers took more time to be solved in large contracts compared to smaller contracts. Moreover, there were also claimed that this was also a result of bureaucracy. Not everything about PPP in education is bad, as reviewed by (Connoly, Reeves, & Wall, 2009), "Overall, while the evidence on PPP performance in the education sector is less than positive and there are grounds for skepticism about its reliability to deliver VFM, the model continues to be heavily advocated. Governments, including those of the Rol and UK, are promoting PPPs as the most efficient way of providing public sector services, with government organizations adopting the model to gain social legitimacy".

E-government is a tool which can be used to enhance the service given to either the public or the government itself. "The benefits could be more transparency, greater convenience, less corruption, revenue growth and cost reduction." (Kaliannan, Awang, & Raman, 2010). The benefits that can be potentially gained are very attractive to any government. However, there are problems occurring and thus preventing the government from receiving the benefits. These problems as stated by

(Kaliannan, Awang, & Raman, 2010) are due to the lack of financial resources, limited government capacity and also the low level of skill among the employees. These are some of the main reasons that are preventing the government from getting the full benefit of the E-government services under PPP/PFI.

Malaysian government has already started this service through the introduction of the Multimedia Super Corridor (MSC) in the year of 1996. In addition, the government also introduced several other services namely: Project Management System, Human Resource Management Information System, E-procurement and General Office Environment. All these were done with one common goal which is to integrate all the un-integrated island of government agencies and departments into networked government (Kaliannan, Awang, & Raman, 2010).

"The public sector in Malaysia is going through a period of rapid change. The government's leading role in spearheading the surge forward onto the information-rich digital age has compelled the public sector to lead the way." (Government of Malaysia, 1997). The implementation of such services changed the way the government operated itself. Now, the information flow is better and easier as every government's offices in the country are now linked by using the network provided by the e-services. Now, PPP system is being introduced for the private sector to develop the e-government services. According to (Kaliannan, Awang, & Raman, 2010) some of the reasons why it is being introduced are stated below:

1) Possibility of cost-sharing projects, with a possible return on investment for the private sector.
2) Tapping the invaluable expertise of the private sector by the government in the areas of customer satisfaction, work productivity gains and personnel efficiency.
3) Possibility of technology transfer from the private sector to the public sector.
4) Possibility of risk reduction using other business model such as build, operate, transfer (BOT) and Build own, operate (BOO). Government personnel may not have the chance to learn about the technology or work processes and as such, the project remains with the private entity.

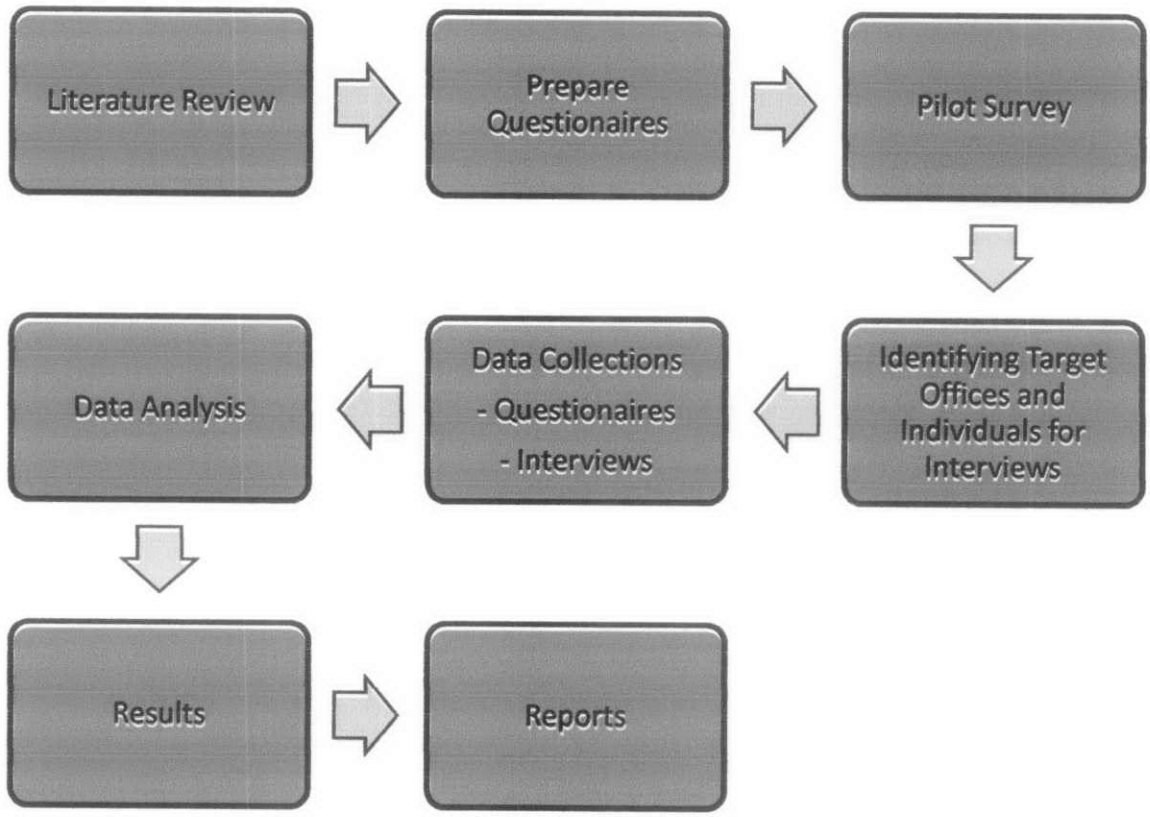
5) Risk transfer to private sector in terms of commercial know-how and managerial skills, best-practice technologies and innovation.
6) Enhancing government accountability and performance.
7) Promoting entrepreneurship and local enterprise promotion.
8) Reducing need for public sector borrowing.
9) Giving incentives for replication in other contexts.

By looking at the reasons above, we can say that it is the same reasons why PPP is implemented in other fields such as education and infrastructure. It is all about transferring the risk to the private sector, reducing the costs of building or developing, enhancing performance, and also to ensure that the people will still be getting a quality services. With the existence of the relationship between the government and private sector, they can work side by side to achieve the common goal by putting all their efforts, resources, skills and technology together. This kind of co-operation is important so that they can steer the country to compete against other counties in the international economy.

CHAPTER 3

METHODOLOGY

3.1 PROCESS FLOW



Literature review helps us appraise past works. The study will involve an in-depth literature review to identify challenges from literature and also build on the works of past researchers, after which a quantitative study using a postal questionnaire shall be carried out to collect data from the identified sample population consisting mainly of public sector officials. Questionnaires will be prepared as it is one of the most important milestones in this particular study. The questionnaires will be designed carefully to ensure that data collected are relevant and useful for analysis. After that,

pilot study will be conducted to get a preliminary feedback from selected persons. It is important as our questions will probably be new questions which has never been used or asked before. Next, we will identify respondents. Other than that, we will also identify several persons to be interviewed as our study will comprise of two main data collection technique which comprise questionnaires and also interview sessions. Once the data has been collected, we will begin to process the feedbacks from the respondent by analyzing the data carefully and critically. . The data collected shall be analyzed using SPSS Version 17.0 to generate descriptive statistics from which inferences can be drawn to identify the most important skills according to the respondents, the reasons for the skill shortages and how best to overcome these skills shortages in order to enhance the Value for Money proposition of the government. The results will then be used in the reports to be submitted.

3.2 PROJECT ACTIVITIES

3.2.1 Literature Review

At this stage, we will use a lot of reading materials that are relevant and significant to the research topic. The materials will be reviewed, any important and critical points in each material will be discussed thoroughly. According to (Study & Learning Centre, 2005) the purpose of doing the literature review is as follow:

3.2.1.1. Establishes a theoretical framework for your topic / subject area.

3.2.1.2. Define key terms, definitions and terminology.

3.2.1.3. Identify studies, models, case studies etc supporting your topic.

3.2.1.4. Define / establish your area of study, i.e. your research topic.

3.2.2 Questionnaires and Interview

For this research, the main data collection activities were divided into two important elements which are questionnaires and interview.

3.2.2.1 Questionnaires

It can be considered as an equipment or tool which can be used to obtain useful data. Looking back at the objective of this research, we wanted to measure the knowledge level of PPP procurement system among the civil servants. That means we will have to get a lot of data from a lot of government offices such as the Public Work Department (PWD) of Malaysia. Questionnaires are a data collection method which is simple, inexpensive and easy to be done. It is also suitable for gathering data from a large number of respondent which in our case, the respondent is expected to be that way. The questionnaires will be designed carefully and directed to answer our research objective.

Before the questionnaires can be sent to target offices, we will conduct a pilot testing. It is important to do this test as the questions that will be asked will probably be newly formed questions which have not been asked by anybody before. (Punch, 2003) stated in his book "Unless your survey questionnaire, in its entirely, is the same as one already been used and field tested, there is pilot testing to be done." This statement showed that pilot testing is very important to assess how the questionnaires will affect the respondent later on in the real survey. From the test, we will make changes if necessary so that the objective of the research can be met perfectly.

3.2.2.2 Interviews

"Interviews are among the most challenging and rewarding forms of measurement. They require a personal sensitivity and adaptability as well as the ability to stay within the bounds of the designed protocol." (William & Trochim, 2006). Interview sessions are the second part of the data collection stage. It is important for us to do interview sessions as this type of survey might give us information that cannot be

obtained by the questionnaires. Here, we expect to interviews several people in the public sector. Before the sessions can be conducted we will identify the personnel who can help us in our research. This will take some time as the persons we intended to meet must be clearly notified about the interview. After everything has been set (i.e. appointment, questions), only then we will conduct the survey interview with the several selected persons.

3.2.3. Data Analysis

Once the data have been collected, we will begin the data analysis process by first proofread the responses for the questionnaires. "Before undertaking the analysis itself, the survey data need preparation- data cleaning and data entry. Data cleaning refers to the tidying up of the data set before the analysis itself begins." (Punch, 2003). The data will be processed carefully and only the relevant data will be used in the analysis. It is important for us to just use the relevant data as it will help us to achieve the goal for this study.

3.3 GANTT CHART AND KEY MILESTONES

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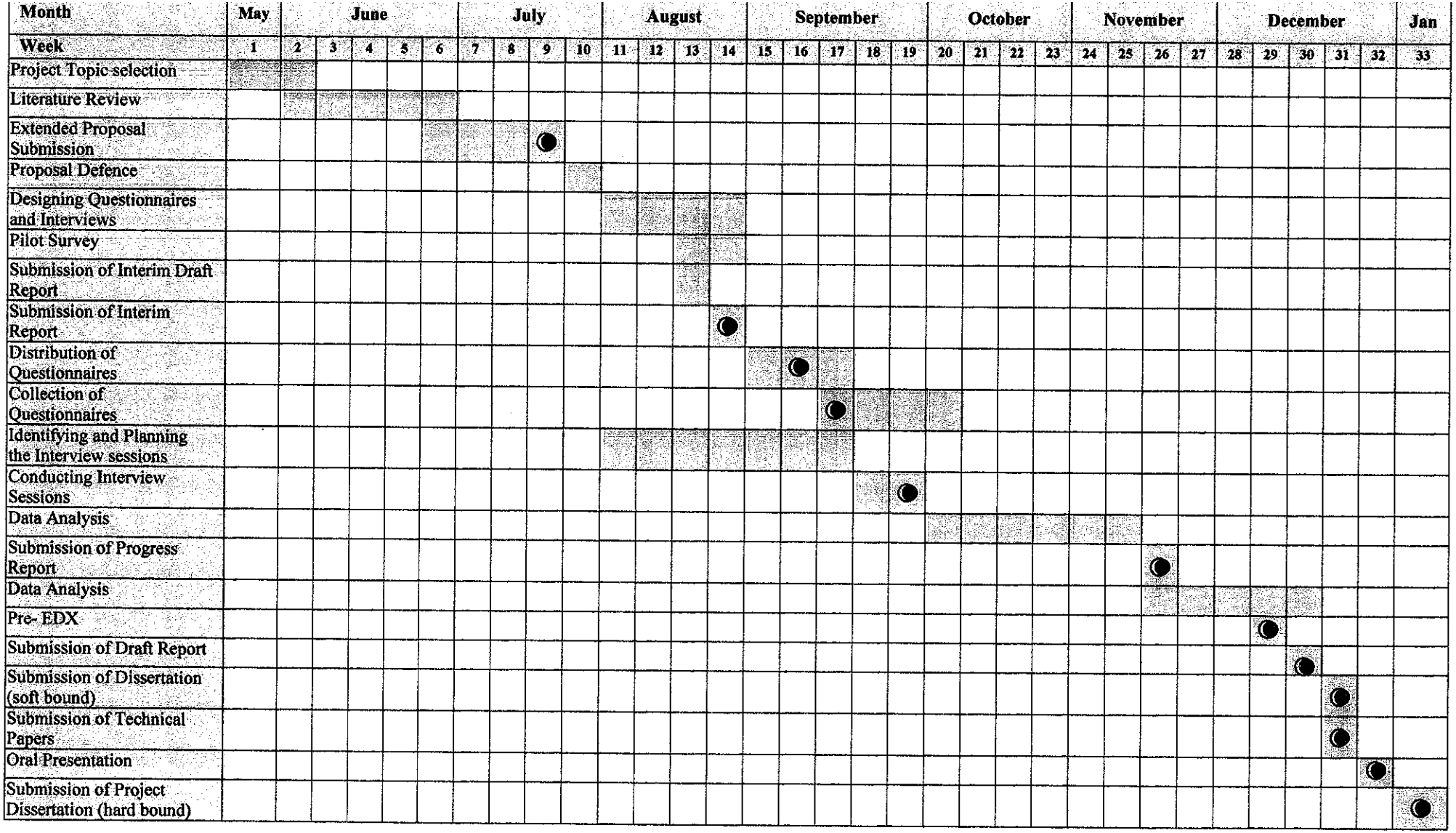

Legend:

● : Key Milestones

CHAPTER 4

RESULTS AND DATA ANALYSIS

4.1 DATA COLLECTIONS

Data collection was done at three different agencies namely Public Private Partnership Unit (3PU), Public Works Department (PWD) and Bank Permodalan Nasional Berhad (BPNB). The minimum questionnaire to be return is 30. Therefore, we sent out a total of 110 questionnaires where by 70 survey forms were dropped at Public Private Partnership Unit (3PU) and another 40 at the Public Works Department (PWD). For Bank Permodalan Nasional Berhad (BPNB), online questionnaire were used as it is easier for them to give their responds.

Agency	Total Questionnaires Dropped	Questionnaires Returned	Percentage Returned (%)
Public Private Partnership Unit (3PU)	70	39	55.71
Public Works Department (PWD).	40	14	35.00
Bank Permodalan Nasional Berhad (BPNB)	Online Questionnaire	1	N/A
TOTAL	110	54	49.09

Table 4: Data Collections

Total returned questionnaire was 54. It exceeds the minimum return rate by 24 questionnaires. From the data collection process, we got a return rate of 49.09%. Many respondents give their contribution in this research thus increasing the accuracy of our data obtained in this data collection process.

4.2 SURVEY RESULTS AND DATA ANALYSIS

4.2.1 Section A: General Information

Question 1: Profession

Profession	Frequency	Percent	Cumulative Percent
Accountant & Lawyer	1	1.9	1.9
Accountant	1	1.9	3.7
Architect	5	9.3	13.0
Engineer	15	27.8	40.7
Lawyer	4	7.4	48.1
Other	18	33.3	81.5
Planner	6	11.1	92.6
Project manager	2	3.7	96.3
Quantity Surveyor	2	3.7	100.0
Total	54	100.0	

Table 5: Profession of respondents

A total of 54 respondents have given their responds for the research. The highest number of respondents came from the Other group with 18 people making it the largest group of among all the respondents with 33.3%. The second largest group was Engineer with 15 respondents that make up 27.8%. The third largest group was Planner with only 6 peoples (11.1%). Next is the Architect group with 5 peoples making up 9.3% of the total respondents. The other respondents are Lawyer (7.4%), Project Manager (3.7%), Quantity Surveyor (3.7%) and Accountant (1.9%). There was one respondents who possesses two qualification which are both Accountant and Lawyer. That makes up only 1.9% of all the respondents.

Question 2: Years of Service in the public sector

Years	Frequency	Percent	Cumulative Percent
1-5 years	26	48.1	48.1
6-10 years	4	7.4	70.4
11-15 years	4	7.4	55.6
16-20 years	4	7.4	63.0
Above 21 years	16	29.6	100.0
Total	54	100.0	

Table 6: Years of service in the public sector among the respondents

From all the respondents, 26 peoples have only been in the service between one to five years. This is the biggest group with 48.1% of all the respondents. Next, for three other category that is respondents with 6-10 years, 11-15 years, and 16-20 years, the number of respondents are the same with only 4 people at each category. Then the last category is respondent with above 21 years of service, a total of 16 people have been in the service for that period. That makes up 29.6% of all the respondents.

Question 3(Section A): Professional Qualification Attained

Qualification	Frequency	Percent	Cumulative Percent
APAM	2	3.7	3.7
MISM/PhD	1	1.9	5.6
MSc	9	16.7	22.2
Other	31	57.4	79.6
P.Eng	6	11.1	90.7
P.Eng/MSc	1	1.9	92.6
PMP	3	5.6	98.1
PMP/P.eng	1	1.9	100.0
Total	54	100.0	

Table 7: Professional Qualification Attained by respondents

From the list of qualifications in the questionnaire, 31 respondents are in the other category with 57.4% among all the respondents. There 9 respondents who work with MSc qualification making 16.7% in total. Then 6 respondents have obtained professional engineer (P.Eng) qualification making up only 6% of the total respondents. 3 respondents are qualified with Professional Project Management qualification. That is 5.6% in total. Only 2 respondents have APAM qualification which makes only 3.7%. There are 3 respondents who have more than 1 professional qualification which are MISM/PhD, P.Eng/MSc and P.Eng/PMP. Each category only makes up 1.9% of the total respondents.

Question 4: How many PFI projects have you been involved with?

No. of projects	Frequency	Percent	Cumulative Percent
1-10 projects	35	64.8	64.8
11-20 projects	6	11.1	75.9
21-30 projects	7	13.0	88.9
31-40 projects	1	1.9	90.7
41 and above projects	5	9.3	100.0
Total	54	100.0	

Table 8: Project involvement

Most of the respondents in this research have only been into less than 10 projects. This group was made up by 35 respondents with a total of 64.8%. Next, 6 respondents have been into 11-20 project while 7 respondents have been involved in 21-30 projects in their career. Only 1 respondent have experienced 31-40 project, which is only 1.9%. Lastly, only 5 respondents have experienced more than 41 projects in their career. That makes 9.3% of all the respondents.

4.2.2 Section B: Degree of Availability

Question 5: The following are the most important skills required by civil servants to effectively monitor PPP/PFI projects in Malaysia, what is your opinion?

Design/Technical Skills

Answer	Frequency	Percent	Cumulative Percent
3	6	11.1	11.1
4	26	48.1	59.3
5	22	40.7	100.0
Total	54	100.0	

Table 9: Design/technical skills

For the skill questioned, no respondents marked the answer 1 and 2. They only responded to the above three answer. 6 respondents are neutral toward this skill. A majority of respondents (26 peoples) agreed that design/ technical skills are important and the other 22 respondent strongly agree that this skill is very important for effective PPP/PFI projects monitoring.

Structural Design Skills

Answer	Frequency	Percent	Cumulative Percent
2	3	5.6	5.6
3	9	16.7	22.2
4	25	46.3	68.5
5	17	31.5	100.0
Total	54	100.0	

Table 10: Structural Design Skill

The second skill is structural design skills. No respondents have put 1 as their answer. Majority of the respondent agreed that this skill is important. 25 respondents agree while 17 respondents strongly agreed that this skill is very important. 9 respondents are neutral toward this skill and only 3 respondents disagree that this skill is important to effectively monitor PPP/PFI projects.

Stakeholder Management Skills

Answer	Frequency	Percent	Cumulative Percent
3	4	7.4	7.4
4	21	38.9	46.3
5	29	53.7	100.0
Total	54	100.0	

Table 11: Stakeholder management skills

For the next skill, stakeholder management skills, nobody disagree. Only 4 respondents took a neutral view. The rest is either agreeing or strongly agree. 21 respondents agree that this skill is important while the other 29 respondents strongly agree that this skill is very important.

Financial Engineering Skills

Answer	Frequency	Percent	Cumulative Percent
2	1	1.9	1.9
3	2	3.7	5.6
4	28	51.9	57.4
5	23	42.6	100.0
Total	54	100.0	

Table 12: Financial engineering skills

The next skill is the financial engineering skills. No respondents put 1 as their answer. Only 1 respondent disagree that this is important. Another 2 respondents were neutral towards this skill. A majority of 28 respondents agreed that this skill is important (51.9%) while 23 respondents strongly agree (42.6%) that this skill is crucial to ensure a quality PPP/PFI project monitoring.

Contract Design and Management Skills

Answer	Frequency	Percent	Cumulative Percent
3	1	1.9	1.9
4	27	50.0	51.9
5	26	48.1	100.0
Total	54	100.0	

Table 13: Contract design and management skills

For contract design and management skills, no respondents disagree. However, 1 respondents were neutral (1.9%), 27 respondents agree (50%) while 26 respondents strongly agree that this is an important skills (48.1)%). Therefore, we can say that this skill is very important.

Life Cycle Costing Skills

Answer	Frequency	Percent	Cumulative Percent
3	5	9.3	9.3
4	21	38.9	48.1
5	28	51.9	100.0
Total	54	100.0	

Table 14: Life cycle costing skills

In life cycle costing skill, 28 respondents strongly agreed (51.9%) that this is also an important skill needed to effectively monitor PPP/PFI projects. 21 respondents agree (38.9%). However, there are 5 respondent who are neutral towards this skill (9.3%). Meanwhile, no respondent disagree with this skills.

Risk Management Skills

Answer	Frequency	Percent	Cumulative Percent
3	3	5.6	5.6
4	23	42.6	48.1
5	28	51.9	100.0
Total	54	100.0	

Table 15: Risk management skills

In risk management skills, a majority of the respondent is either agree or strongly agree that this skills is important. Those who agree made up 42.6% (23 respondents) of the total respondents while 51.9% (28 respondents) strongly agree with us. there are no respondents who disagree in this skill. However, there are 3 respondents who are neutral (5.6%).

Environmental Sustainability Skills

Answer	Frequency	Percent	Cumulative Percent
2	1	1.9	1.9
3	6	11.1	13.0
4	32	59.3	72.2
5	15	27.8	100.0
Total	54	100.0	

Table 16: Environmental sustainability skills

This is the last skill in question 5, environmental sustainability skills. A majority of the respondent agree while only 1 respondent disagree. 6 people are neutral (11.1%). The highest number is 32 respondents agree that this is important (59.3%) while the other 15 respondents strongly agree that this skill is important (27.8%).

Question 6: How do you rate the degree of availability of the following PFI skills among the public servants in Malaysia?

Design Auditing Skills

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	4	7.4	9.3
3	30	55.6	64.8
4	16	29.6	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 17: Design auditing skills

In this question, the respondent were asked to rate the degree of availability of the public servants in these skills. In the first skill, only 1 respondent said that it is very low (1.9%), 4 respondents said that it is low (7.4%), 16 respondents said it is high (29.6%) and 3 respondent said that it is very high (5.6%). A majority of 30 respondents said that it is average (55.6%).

Structural Design Auditing Skills

Answer	Frequency	Percent	Cumulative Percent
1	2	3.7	3.7
2	6	11.1	14.8
3	25	46.3	61.1
4	18	33.3	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 18: Structural design auditing skills

This is the second skill, 3.7% of the respondents said that it is very low while 11.1% said that the degree of availability is low. However, the majority said that it is in average (46.3%). 33.3% of the respondents said that it is high where as only 5.6% of the respondents said that the availability is very high.

Environmental Sustainability Skills

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	5	9.3	11.1
3	29	53.7	64.8
4	16	29.6	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 19: Environmental sustainability skills

For the third skill, only 1 respondent said that the availability is very low while 5 respondents said that it is low. A majority of 29 respondents agreed that the availability of this skill is average. 16 respondents said that it is high while only 3 respondents said that the degree of availability is very high.

Stakeholder Management Skills

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	5	9.3	11.1
3	22	40.7	51.9
4	22	40.7	92.6
5	4	7.4	100.0
Total	54	100.0	

Table 20: Stakeholder management skills

For this skill, 1 respondent said that the availability is very low while 5 respondents said that it is low. Here, the same amount of respondents agreed that this skill is either neutrally or highly available within the public sector involved in PPP/PFI projects monitoring. Only 4 respondents said that the availability of this skill is very high.

Financial Engineering Skills

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	8	14.8	16.7
3	19	35.2	51.9
4	24	44.4	96.3
5	2	3.7	100.0
Total	54	100.0	

Table 21: Financial engineering skills

The next skill is the financial engineering skill. Only 1 respondent said that this skill has a very low degree of availability while 8 respondents said that it is low. 19 respondents said that the availability is average while 24 respondents have said that this skill is highly available among them. However, only a small portion of 2 respondents said that this skill is highly available among the public servants involved in PPP/PFI project monitoring.

Contract Design and Management Skills

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	5	9.3	11.1
3	23	42.6	53.7
4	21	38.9	92.6
5	4	7.4	100.0
Total	54	100.0	

Table 22: Contract design and management skills

For this skill, only 1 respondent said the availability is very low while 5 respondents said that it is low. Then, 23 respondents stated that the availability on this skill is somehow still average. 21 respondents said high while only 4

respondents said that the degree of availability of contract design and management skill is very high.

Life Cycle Costing Skills

Answer	Frequency	Percent	Cumulative Percent
1	2	3.7	3.7
2	8	14.8	18.5
3	27	50.0	68.5
4	15	27.8	96.3
5	2	3.7	100.0
Total	54	100.0	

Table 23: Life cycle costing skills

For the next skill, 2 respondents were saying that the availability of this skill is very low while it is complimented by another 8 respondents who were saying that the availability is low. However, 27 respondents agreed that the availability of this skill is still average among the public servants. 15 respondents said that it is high while only 2 respondents said that the availability of this skill is very high.

Risk Management Skills

Answer	Frequency	Percent	Cumulative Percent
1	2	3.7	3.7
2	8	14.8	18.5
3	24	44.4	63.0
4	17	31.5	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 24: Risk management skills

This is the last skill for question 6. On majority, 24 respondents said that the availability were still average. 17 respondents agreed that the availability is high and only 3 respondents said that it is very high. Only a small number of respondents said that the availability is very low (2 respondents) while 8 respondents said that the degree of availability is low.

4.2.3 Section C: Degree of Competency (Personal)

Question 7: What is your degree of competency in the following areas?

Technical/Design Audit

Answer	Frequency	Percent	Cumulative Percent
1	8	14.8	14.8
2	12	22.2	37.0
3	12	22.2	59.3
4	16	29.6	88.9
5	6	11.1	100.0
Total	54	100.0	

Table 25: Technical/design audit

Question 7 requires the respondents to evaluate themselves in 6 different areas. The first skill is the technical/design audit skill. 8 respondents were saying that they have a very low competency level while 12 respondents said that their competency level in the skill is low. 12 respondents are have average competency level while 16 respondent said that they are highly competent in the skill. However, only 6 respondents said that they have a very high competency level in the area of technical/design audit.

Sustainability-related Issues

Answer	Frequency	Percent	Cumulative Percent
1	5	9.3	9.3
2	8	14.8	24.1
3	20	37.0	61.1
4	20	37.0	98.1
5	1	1.9	100.0
Total	54	100.0	

Table 26: Sustainability-related issues

The second area of competency is the sustainability-related issues. 5 respondents said that their competency level are very low while another 8 respondents admit that their competency level are low. A total of 20 respondents said that their competency level in the skill is average. In addition,

another 20 respondents said that they are highly competent in the area while only 1 have a very high level of competency in this issue.

Stakeholder Management

Answer	Frequency	Percent	Cumulative Percent
1	4	7.4	7.4
2	4	7.4	14.8
3	22	40.7	55.6
4	16	29.6	85.2
5	8	14.8	100.0
Total	54	100.0	

Table 27: Stakeholder management

Stakeholder management is the third area that is in the questionnaire. For both very low and low competent level, both have 4 respondents. The majority of the respondents have average competency level in this area. 16 respondents are highly competent in the area of stakeholder management while 8 respondents stated that their competency level in this area is very high.

Traffic Forecasting

Answer	Frequency	Percent	Cumulative Percent
1	10	18.5	18.5
2	10	18.5	37.0
3	25	46.3	83.3
4	8	14.8	98.1
5	1	1.9	100.0
Total	54	100.0	

Table 28: Traffic forecasting

The fourth area of competency that was checked was traffic forecasting. The majority of the respondents have average competency level in this particular area with 25 people are in this category. 10 respondents are have very low competency level and another 10 respondent are also lowly competent in traffic forecasting. In this area, 8 respondents stated that they have high competency level while only 1 respondent have a very high competency level.

Financial Engineering

Answer	Frequency	Percent	Cumulative Percent
1	7	13.0	13.0
2	9	16.7	29.6
3	23	42.6	72.2
4	13	24.1	96.3
5	2	3.7	100.0
Total	54	100.0	

Table 29: Financial engineering

The next area is financial engineering. In this area, 7 respondents have a very low competency level while 9 respondents have low competency level. The biggest group is the respondent with average competency level in financial engineering where there are 23 respondents in it. Majority of the respondents lies here in this group. 13 respondents are highly competent in this area. However, there are only 2 respondents who have a very high competency level.

Contract Administration

Answer	Frequency	Percent	Cumulative Percent
1	2	3.7	3.7
2	4	7.4	11.1
3	17	31.5	42.6
4	23	42.6	85.2
5	8	14.8	100.0
Total	54	100.0	

Table 30: Contract administration

The last area for checking the personal competency level is the contract administration. The biggest group is the respondents with high level of competency where 23 respondents have this attribute. The second biggest group is the average group where there are 17 respondents in it. 8 respondents are very highly competent in contract administration. 4 respondents are lowly competent while only 2 respondents said that they are very lowly competent in this area.

4.2.4 Section D: Degree of Competency (General)

Question 8: In general, how do you rate the degree of competency of the following skills among the public servants in monitoring PPP/PFI projects?

Design Auditing and Reporting Skills

Answer	Frequency	Percent	Cumulative Percent
2	5	9.3	9.3
3	30	55.6	64.8
4	17	31.5	96.3
5	2	3.7	100.0
Total	54	100.0	

Table 31: Design auditing and reporting skills

In Section D, the respondents were required to rate the degree of competency of the public servant as a whole. Therefore, the difference is that in the previous section, they evaluated themselves where as in this section, they evaluated the whole system. There are 7 skills that were given to them for evaluation. The first skill is the design auditing and reporting skill. Here, no respondents said that the competency level is very low. However, 5 respondents stated that they public servants are low in terms of competency in this skill. The majority of the respondents said that the public sector are still average with 30 respondents stating the same reaction. 17 said that the system are highly competent and only 2 respondents believe that they public sector are highly competent in design auditing and reporting skills.

Structural Design Auditing and Reporting Skills

Answer	Frequency	Percent	Cumulative Percent
2	8	14.8	14.8
3	23	42.6	57.4
4	20	37.0	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 32: Structural design auditing and reporting skills

The second skill is the structural design auditing and reporting skills. Here, no respondents agree that they are very lowly competent. However, 8 respondents did agree that their competency level in this area is still low. 23 respondents

said that the competency level among the public servants is average. 20 respondents stated that they have high competency level ad only 3 respondents agreed that they are very highly competent in this skill.

Sustainability/Environmental Governance

Answer	Frequency	Percent	Cumulative Percent
2	6	11.1	11.1
3	31	57.4	68.5
4	14	25.9	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 33: Sustainability/environmental governance

The third skill in this section is the sustainability/environmental governance skill. Just like the previous skill, there are only 6 respondents who stated that their competency level is low. Most of the respondents (30 peoples) agreed that they are still average in terms of competency in this skill. 14 respondents stated that they are highly competent while the other 3 respondents are sure that their competency level is very high.

Traffic Forecasting and Reporting Skills

Answer	Frequency	Percent	Cumulative Percent
2	8	14.8	14.8
3	28	51.9	66.7
4	15	27.8	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 34: Traffic forecasting and reporting skills

Then fourth skill is traffic forecasting and reporting skills. 8 respondents said that the public servants have low competency in this skill. However, 15 respondents said otherwise as that they believe the public servant are highly competent in this skill while there are 3 respondent who think that the public servants are actually very competent in this skill. The majority of the respondents agreed that their level of competency in this particular skill is still average. There are no respondents gave feedback by answering very low in this skill.

Financial Engineering, Audit and Reporting Skills

Answer	Frequency	Percent	Cumulative Percent
2	7	13.0	13.0
3	26	48.1	61.1
4	18	33.3	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 35: Financial engineering, audit and reporting skills

The next skill is the financial engineering, audit and reporting skills. For this skill, no respondents stated that they have very low competency level. However, 7 respondents said that their competency level is low. 26 respondents agreed that their competency level is still average. 18 respondents are sure that they already have high level of competency in financial engineering, audit and reporting skills. There are only 3 respondents stated that their competency level in this particular skill are actually very high.

Contract Review and Reporting Skills

Answer	Frequency	Percent	Cumulative Percent
2	7	13.0	13.0
3	19	35.2	48.1
4	25	46.3	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 36: Contract review and reporting skills

In contract review and reporting skills, there are 25 respondents said that they have high competency level here. However, only 3 respondents stated that they have a very high competency level in this skill. 19 respondents are stating that it is still average throughout the whole public servants in Malaysia while only 7 respondents said that they are actually lacking the competency. Their competency level is still low.

Risk Identification and Management Skill

Answer	Frequency	Percent	Cumulative Percent
2	8	14.8	14.8
3	28	51.9	66.7
4	17	31.5	98.1
5	1	1.9	100.0
Total	54	100.0	

Table 37: Risk identification and management skill

The last skill being measured in this section is the risk identification and management skill. Just like the previous skills, there are no respondents saying that their competency level here is very low. There are only 8 respondents who thinks their level of competency to be low. The majority of the respondents agreed that the public servants still have an average competency level in this skill. 17 respondents responded that the public servants have high competency level. However, there are only one responded who stated that the public servants have a very high competency level.

4.2.5 Section E: Reasons of Low PFI Monitoring Skills Among Public Servants

Question 9: The following are responsible for the perceived low PFI monitoring skills among public servants in Malaysia, do you agree?

Inadequate Training In PFI

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	7	13.0	14.8
3	8	14.8	29.6
4	23	42.6	72.2
5	15	27.8	100.0
Total	54	100.0	

Table 38: Inadequate training in PFI

In section E, respondents were given 9 possibilities of the perceived low PFI monitoring skills among the civil servants in Malaysia. Here, the respondent rated each reason either they agree or disagree with the possible causes given. The first possible reason given to the respondents was inadequate training in

PFI. Majority of the respondents is either agree or strongly agree that this is the reason of the perceived low PFI skills. 15 respondents strongly agree while 23 respondents agree with the reason. 8 respondents are neutral toward this. 7 respondents disagree while only 1 respondent strongly disagree with this possible reason.

Staff Transfer to Private Sector

Answer	Frequency	Percent	Cumulative Percent
1	6	11.1	11.1
2	14	25.9	37.0
3	21	38.9	75.9
4	9	16.7	92.6
5	4	7.4	100.0
Total	54	100.0	

Table 39: Staff transfer to private sector

The second possible reason given is staff transfer to private sector. 21 respondents are neutral and this is the largest group for this reason. 14 respondents disagree and another 6 respondents strongly disagree that this is the cause of the perceived low PFI monitoring skills. 9 respondents agree with this possible reason and there are also 4 respondents who strongly agree that this is the reason of the perceived low PFI monitoring skills.

Retirement of Experienced Staff

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	10	18.5	20.4
3	19	35.2	55.6
4	16	29.6	85.2
5	8	14.8	100.0
Total	54	100.0	

Table 40: Retirement of experienced staff

The third possible reason is retirement of experienced staff. The distribution is almost equal to one another where only 1 respondent strongly disagree, 10 respondents disagree, 19 respondents are neutral, agree and strongly agree with 16 and 8 respondents each.

Promotion Of Experienced Staff to Top Management Levels

Answer	Frequency	Percent	Cumulative Percent
1	3	5.6	5.6
2	12	22.2	27.8
3	15	27.8	55.6
4	21	38.9	94.4
5	3	5.6	100.0
Total	54	100.0	

Table 41: Promotion of experienced staff to top management levels

Next is the promotion of experienced staff to top management levels. A total of 21 respondents agree that this is the reason. However, only 3 respondents strongly agree with this. 15 respondents stand neutral about this reason. 12 respondents disagree with it while only 3 respondents strongly disagree with this possible reason given in the questionnaire.

Inadequate Documentation of Lessons Learned

Answer	Frequency	Percent	Cumulative Percent
1	2	3.7	3.7
2	5	9.3	13.0
3	11	20.4	33.3
4	16	29.6	63.0
5	20	37.0	100.0
Total	54	100.0	

Table 42: Inadequate documentation of lessons learned

Here, a majority of the respondents strongly agree that inadequate documentation of lessons learned is one of the reason for the perceived low of PFI monitoring skills. 20 respondents strongly agree with it. 16 more respondents agree and 11 respondents stand neutral for this reason. Only a small number disagree (5 respondents) while there are only 2 respondents who strongly disagree with this reason.

Complexity Associated With PFI Contracts

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	7	13.0	14.8
3	14	25.9	40.7
4	21	38.9	79.6
5	11	20.4	100.0
Total	54	100.0	

Table 43: Complexity associated with PFI contracts

The sixth reason given is the complexity associated with PFI contracts itself. the responds is heavy towards the agree side. 11 respondents strongly agree on this. 21 respondents agree that this might be the reason of low PFI monitoring skills. 14 respondents are neutral. However, 7 respondent disagree with the given reason and only 1 respondent strongly disagree with this particular reason.

Lack Of Early Involvement Of Public Sector Staff

Answer	Frequency	Percent	Cumulative Percent
1	1	1.9	1.9
2	11	20.4	22.2
3	15	27.8	50.0
4	18	33.3	83.3
5	9	16.7	100.0
Total	54	100.0	

Table 44: Lack of early involvement of public sector staff

Lack of early involvement of public sector staff is also one of the reasons given in the questionnaire. 1 respondent strongly disagree while another 11 respondents disagree with the reason given. However, for this reason, 15 respondents stand neutral. 18 respondents agree that lack of early involvement of public sector staff is one of the reasons of low PFI monitoring skills among the public servants. The other 9 respondents strongly agree that this is the reason of the perceived low PFI monitoring skill.

The Use Of Consultants by the Government

Answer	Frequency	Percent	Cumulative Percent
1	3	5.6	5.6
2	13	24.1	29.6
3	15	27.8	57.4
4	17	31.5	88.9
5	6	11.1	100.0
Total	54	100.0	

Table 45: The use of consultants by the government

Other than the previous possible reasons, the use of consultants by the government was also evaluated in the questionnaire. here, only 3 respondents strongly disagree while another 13 respondents disagree with it. However, 17 out of 54 respondents agree that this is the reason of the low PFI monitoring skills among public servants. Then another 6 respondents strongly agree with this statement. However, there are also many respondents who are neutral towards it (15 respondents).

Poor Remuneration in the Public Sector

Answer	Frequency	Percent	Cumulative Percent
1	4	7.4	7.4
2	10	18.5	25.9
3	16	29.6	55.6
4	13	24.1	79.6
5	11	20.4	100.0
Total	54	100.0	

Table 46: Poor remuneration in the public sector

The last possible reason given is poor remuneration in the public sector. Again, the distribution are almost equal in each group except for the strongly disagree group. There are only 4 respondents who strongly disagree. 10 respondents disagree while 16 respondents are neutral. There are 13 respondents agree and another 11 respondents strongly agree that this may be one of the factor behind the perceived low PFI monitoring skills among public servants in Malaysia.

4.3 TRANSCRIBED INTERVIEW SESSION

4.3.1 Bank Pembangunan Negara Berhad (BPMB)

Interviewee's name: Ir. Sahri Bahari

Email : sahri@bpmb.com.my

Interviewers : 1) Mr. Umar Abdulahi Ahmed

2) Abdullah Khafif bin Sapari

Date : 18th October 2011 (Menara Bank Pembangunan, Kuala Lumpur)

Time : 2.30 pm

Legends : 1) Interviewer (I)

2) Ir. Sahri Bahari (Ir.SB)

Interviewers introduce themselves and give a brief explanation on the research at the starting of the interview.

Ir.SB: BPN is funders and finance projects. We are not directly involved or not really active. We are not involved into any operations of the project but we have to closely monitor because progressively they (Concession Company, CC) will ask for payment.

I: Do you balance between the payments to the contractor and also the work done at site?

Ir.SB: The CC claim and we must verify that the claims is true as written on paper. They might claim more than they have done at site. So my job is to go and verify and attend site meetings on behalf of the bank.

I: Generally, within a PFI arrangement we have the government on one side and the consortium on the other side. The consortium consists of construction management contractors, the funders etc. Are you in the government part or the consortium part?

Ir.SB: [Ir. Sahri Bahari explained while drawing diagram showing the real position of their bank in a PFI project] Government award project to the CC,

we are here, we are the funders [showing to the interviewer that the bank is on the consortium side]. We don't actually involve into the project. We are the body which finances the project.

I: Is this a public bank or private bank?

Ir.SB: It's a government bank. Bank Negara more of monitor the financial policy, monetary policy, fiscal etc. Bank Pembangunan is also like Bank Negara but in terms of infrastructure development which the government identifies. We cannot lend to anybody. Only in four areas, maritime, advance technology/materials/ICT (biodiesel, renewable energy, defence-simulation facilities), infrastructure (express railing, SMART tunnel, MRR2, PLUS Highways) in total of RM25 Billion for 350 projects, the other area is tourism.

Infrastructures basically have 2 categories; the first one is basic infrastructure and the other in institutional development (education, health etc). Some of the projects are under PFI. Institutional development under PFI is like UPSI, campus development for UITM campus.

I: You don't actually determine the project; you take the position of funding the project are you?

Ir.SB: Yes, we don't determine the project. The government determines the projects and sometimes the private sector identifies the project themselves. They do the feasibility studies and proposed to the government.

I: What actually determine the projects that you fund? What are the criteria that you look?

Ir.SB: Three things. One is it meets the policy of the government, the project falls under strategic policy (strategic project). Second, it must be technically feasible. Third, it must be commercially viable. Although it is quite simple to have the three things but the compliance is a lot (technical compliance, technical evaluation, technical assessment, etc). It must be commercially viable as the CC need to pay back the bank. If the bank finds it not viable, it is a commercial risk.

I: We have a situation where we have to build school. It is not commercially viable but they are important strategically. So how do you respond to this?

Ir.SB: The three criteria must be met. We cannot compromise on the criteria. We don't fund normal school but if private want to build university, we can fund. Because the revenue comes from the student paying it and we know the revenue. PFI on universities basically like government guarantee where the private sector builds it. Last time the government builds the universities. In order to build they receive funding from us. Then they collect revenue from the government to pay back to the bank. It is because the government pay rental to the CC based on the floor area.

I: Do you have in-house skills and capabilities to monitor PFI projects?

Ir.SB: We do everything in-house except for very specialized area (to evaluate technology etc). We have risks department, technical department, and project monitoring department.

I: Are the departments mentioned staffed by competent employees?

Ir.SB: Yes they are competent in their job.

I: Is there any constraints in terms of level of expertise of the in-house staffs?

Ir.SB: I think so far it is okay. The bank has 30 years of experience. So they have capable in-house expertise.

I: when a project is identified, what are the processes that you take to get involved?

Ir.SB: Basically very simple, for PFI project, the project sponsor must sign the concession agreement with the government. Without it the bank cannot process it. Upon signing, they are given 6 months for project sponsors to find the funders. If everything is okay, the bank will offer the facility and assigned the concession to the bank as collateral. In case of failure, the bank will take over. All revenues goes to the bank first and the difference goes back to them (CC).

I: Do you allow the CC goes for refinancing?

Ir.SB: Of course but when they apply for the facility, there are terms and condition. Let say during construction, the risks is higher as the facilities are still yet to be built. If the CC wanted to determine the cost of fund from the funder, they must have the ratings. Example to Malaysian Rating Agency to rate a project whether triple A plus or etc. Government doesn't force the CC to get funding from them. The bank acts like commercial banks. The CC is free to choose their funder. In Malaysia, loans are highly regulated. The government will know where you get the funds. It is regulated as inflow and outflow of capital will have tremendous effect on the nation's economy.

I: What kind of finance system do you use? [At this time, ratchet margin is used as an example]

Ir.SB: We used Islamic Financing; the bank adopts Islamic based financing. We determined the profit based on the risks profile and market condition. The profit is fixed.

I: What happen if the contract is changed or extended?

Ir.SB: That is between the CC and the government. The extension of time is only allowed if only there are valid reasons for the CC to request for the extension. Therefore the repayment schedule will be restructured. They will discuss with the bank about the repayment schedule.

I: How do you monitor the performance of the operation?

Ir.SB: My role is to monitor the "pulse beat/health" of the project. Firstly, I monitor through the regular site progress meeting and the site visits. During the meeting, everyone is there. Secondly, I do site inspection and site evaluation. Third, I work closely with the owner (UPSI, UiTM, etc) because the owners also do quality assurance and project monitoring.

I: Do you only monitor the construction of a project or also the operation?

Ir.SB: It is simple; at the end of the day it is a fixed lump sum meaning there will be no escalation of cost and time. One is to monitor during the construction and in it there are four things must be monitored. First is the builders work, second is materials on site, third is the professional fees

(consultant fees, project management fees, etc), and lastly is all other soft cost like legal fees, payments to authorities, etc. That is with respect to the construction period. For builder's works, I must also anticipate problems. Therefore I monitor workers on site.

I: Beyond the construction period, how do you monitor the project?

Ir.SB: Technically it is finish. Our bank concerned is delivery and maintenance is between the CC and the government. The commercial monitoring is not my area anymore; we have different team for that.

I: In the event of failure, do you still fund the project?

Ir.SB: No, the government has to pay to the bank in the event of failure.

I: You have finance almost 350 projects; do you feel any financial pressure?

Ir.SB: Actually the pressure is to get more people to borrow for more projects. The margin is a spread as the RM 25 Billion, but if you spread it over 20 years concession, therefore the annual volume is little. I think the issue is that we don't have enough good projects to be funded.

I: Why do you say that a total funding of RM 25 Billion is not much?

Ir.SB: It is because RM 25 Billion is under the bank. In Malaysia, we have other instruments like EPF, Khazanah, etc. Everyone is competing with one another.

I: How do you train your staffs on this project monitoring?

Ir.SB: We got in-house training and also professional training. They also gained experience while working on a real project and we take staffs with experience to work with us.

I: For the in-house training, how often do you provide it?

Ir.SB: There is a lot of training here because this is a financial institution and by law we must have certain training on policies, procedure, etc.

I: Have you ever finance foreign projects?

Ir.SB: No, we are not allowed to fund foreign projects. Only within Malaysia.

I: Let say a foreign CC asked you to fund their project here in Malaysia, can you provide it for them?

Ir.SB: No we cannot because it is the policy. The policy requirements of each country are different and it is impossible for the bank to know everything (to fund in other countries). We leave that to the private institution.

I: Supposing any of the contractors you are funding are facing problems, so how do you deal with it?

Ir.SB: We don't deal directly with the contractors; CC must sort up their problems themselves. The bank doesn't want to be entangled or involved in their problems. However, we might advice them to terminate.

I: From time to time, it has discovered that the operation done 10 years ago had effects on the environment. Then the government empowers new policy as a reaction to the problem and this new policy affects the cash flow of the particular CC. If things like this happen to a concession that you are funding, how do you handle this problem?

Ir.SB: Basically funder doesn't concern much about the environment. We are lending the money and we expect to get it back. We have insured the concession as if anything bad happen, somebody will pay to us. There are a lot of issues in this topic. Some of the issues are costs [Ir.SB talked while making a diagram].

I: Are there any possibilities that the end user is cheated by the CC?

Ir.SB: It is not the issue of being cheated, it is financial maneuvering. At the end of the day, everything is opened up. The government is fully aware of the costs. I think there is a loop hole in the process evaluation.

I: On behalf of us, our supervisor and university, we are very grateful for your time. Thank you very much!

4.3.2 Public Works Department (PWD)

Interviewee's name: Dato' Ir. Hj. Salahuddin Bin Mohd Isa

Interviewers : 1) Mr. Umar Abdulahi Ahmed

2) Abdullah Khafif bin Sapari

Date : 20th October 2011

(Ibu Pejabat Jabatan Kerja Raya, Kuala Lumpur)

Time : 10 am

Legends : 1) Interviewer (I)

2) Dato' Ir. Hj. Salahuddin Bin Mohd Isa (Dato')

Interviewers introduce themselves and give a brief explanation on the research at the starting of the interview.

I: Generally are you just called upon to monitor any project that the government goes into?

Dato': The selection is not under our work scope. The private sector can come up to the government and propose a project. If there are advantages to both parties, then only the government decides to go on with it. The project will be given to us only after they have already got the funds. When they come to us to monitor, we will treat it as any other project.

I: Specifically, what do you actually monitor?

Dato': It depends on what we are required to do. If the government wants us to monitor only the construction phase then we will only be there at that particular phase.

I: Are you assigned to do specific work or you have to do everything?

Dato': For this particular PFI, the owner will give us the project and the scope. We will build and maintain it normally for two years. If the government decides to extend the maintenance period, they have choices whether they want us to monitor or the maintenance branch to monitor it.

I: Considering the fact that under PFI, it is the private people who come out with the design and they usually come with their own funds. So what do you actually do in monitoring the project?

Dato': Recently, we don't have that type of contract. However I did a project on PFI myself, the JKR Headquarter (HQ). It was a concession type but the funding is from the private. We agree the cost with the contractor and later come out with the agreement. Even though they have the money, we have the scope of what we want. We have expectation on what should be delivered to us.

I: How did you evaluate the contract of PFI project?

Dato': This is open contract; we will call for Request for Proposals (RFP). We will give statement of what we want. Then we tender it out so when the bids come in, we will look at both technical and financial aspect. When we evaluate the technical aspect, we have our guidelines.

I: Within JKR, do you have the professional with financial engineering skills?

Dato': Yes we have the expertise in the Quantity Surveying Department. However, we still need accountants from the government to help us as we are more towards the technical part.

I: When there are any PPP/PFI projects, is the staff available for monitoring purposes?

Dato': Yes, we have a setup in JKR. It is the monitoring section and they monitor the whole project that the JKR handle. We start to monitor it from the beginning of the project. We have a system to determine whether we can do everything in-house or we have to outsource. The system allows us to determine the workload at that time.

I: What is your staff strength in the monitoring team?

Dato': Not many, only about 6 peoples. However we still have Project Monitoring Office (PMO) staff with a total of about 15 peoples. It is because the actual work is mainly done by the states. The design is done by the

designer group (architect, engineer, etc) that we call the expert section. On top of that, we do have small PMO in each of the states or branch.

I: How do you make use of the information generated from the states and how the information goes through?

Dato': When we received the project, it will be registered in a system called SKALA (system to control and monitor project). The entire project handled is about 3000 projects at the moment. It ranges from small to big projects. Anybody from JKR can access the system to monitor any projects in JKR. Any data will be recorded in the system (payments, problem etc.)

I: From the 3000 projects, how many are PFI projects?

Dato': Not many, it's only about 20 or 30 projects. It is because PFI projects are usually a very big project.

I: In your opinion, what is the competency level of your staffs in monitoring PFI projects?

Dato': My staffs are very competent, even the young staff are learning and become more competent each day.

I: When the government gives you a PFI project to monitor, how you determine the type of staffs that you sent and how do you choose the staff to go and monitor such project for example 2nd Penang Bridge.

Dato': That is a very special project; we have to send a special team. For normal project, we will make use of the state staff and send whatever staff available at the moment. For projects like the 2nd Penang Bridge, we need to gather and work together with central agencies as it is a really big and special project.

I: If the expertise to monitor such projects is not available within the JKR, where do you get them?

Dato': We can outsource from outside (consultants) to get the expertise that we need for the project.

I: Among the 20 to 30 PFI projects, are there any projects that you actually outsourced from outside to assist you in monitoring?

Dato': No, we did the monitoring ourselves. However, the design maybe outsourced from outside.

I: Given only 20 people in the department, is there any constraint for you to monitor PFI projects?

Dato': No, there is not much constraint as the number of people can be change according to the requirement.

I: Supposing you are flooded with let say 50 projects now, do you have the capacity to monitor all the projects?

Dato': Yes, we have the capacity as there are no problems for us to monitor projects. The problem is delivering as they usually only 20%-30% in-house designing and the rest is by the consultants.

I: How do you use the information generated during the monitoring process? [Example given- problems occurring during the construction phase]

Dato': If the is any problem, we will try to settle it ourselves. We will follow the contractual agreement unless it is outside of our authorities. However most of the times it is solved by our in-house staffs. For the project management maturity level, we are at level 2. We are trying to get to level 3 as it is already good enough. We also have project management certification; we want to certify all our project management office by the next five years.

I: How often do you send your staff to training?

Dato': Vey often, now we are having space to train our staffs. Every staffs in the government must attend 7 days of training per year. The training can be done either here in the department or even outside the office.

I: Are you allowed to bring in experienced people into your department from the private sector to work?

Dato': Yes, the government is flexible for engaging these people but now they stopped doing that.

I: Do you have expertise in negotiation of PFI project in JKR?

Dato': I think we haven't arrived at that level yet. We have negotiation skill on normal tender process or direct negotiation. Simply to say, we have the basics of negotiation of any projects.

I: Do you have any specific area of training right now for your staff?

Dato': The concentration right now is on project management. It is because we found that our staff lack on that skill. One of the reasons is because we are very limited in terms of lecturers among our department that can train our own people. Each of the staffs needed to be train in the project management aspect.

I: Have you successfully monitored any PFI project until the end of the construction?

Dato': Generally, we are not give special attention to PFI project as to us, every project have the same importance and treated the same.

I: After the construction, do you still monitor the maintenance aspect of the project?

Dato': Yes, we continue to monitor during the defect liability period. After that, it depends on the ministry either they still want us to monitor or not.

I: Have you ever faced any failed PPP/PFI projects? In the event of failure, what is your reaction?

Dato': PFI can still fail. If it fails, we will terminate the contract just like normal contract procedure.

I: In your opinion, what specific skills do you think that your staffs really need to build up a PFI contract from scratch?

Dato': On the financial part as we already have the expertise in other parts. For the time being, we might need to bring in Bank Negara to help us as we lack the skills in financial aspect.

I: Do you have a specific risks management framework within your department?

Dato': Yes we have the risks management policy. Circular will be issued which we used to categorize the complexity of a project. We have to anticipate the risk and also the possible solutions too.

I: The staff involved in the 2nd Penang Bridge, what specifically are they doing and to whom do they report to?

Dato': They are doing project management and managing the consultant on behalf of the government. They report to the Ministry of Finance (MoF).

I: Do you have the capabilities to adequately monitor specialist projects such as hospitals and schools?

Dato': Yes, I did monitor for hospital myself and we do have a special division namely the Health Division. They have every related expert such as planner, medical planner and engineers.

I: We are very grateful and thank you very much for your time spent with us sir.

Dato': You're welcome.

4.3.3 Public Private Partnership Unit (3PU)

Interviewee's name: YBhg. Dato' Hj. Zohari Akob

Interviewers : 1) Mr. Umar Abdulahi Ahmed

2) Abdullah Khafif bin Sapari

Date : 24th October 2011

(Menara Usahawan, Presint 2, Putrajaya)

Time : 12 noon

Legends : 1) Interviewer (I)

2) YBhg. Hj. Dato' Zohari Akob (Dato')

Interviewers introduce themselves and give a brief explanation on the research at the starting of the interview.

I: First and foremost, what are the reasons why the government decides to undertake PFI projects?

Dato': Basically in Malaysia, the terminology PFI is used interchangeably with PPP. But in actual fact, PPP is a broader concept. PFI is a subset of PPP. In our case, most of our project relates to creation of an asset to the government. We procure the services and not the asset through Build Lease Maintain Transfer (BLMT). The project is basically about the services of the private sector. Normally before we embark on a particular project, first thing we decide whether it is really a need. When there is a need, then we determine the priority of the project. Then, we determine the Value for Money (VFM) drivers. Only PFI-able project will be undertaken. In PFI, we link the construction and the maintenance together. The contractor appointed will have to construct and maintain the asset within the agreed period of time. When we tender the project, the output will be determined by the government while the input will be from the private sector. There is a lot of flexibility in terms of getting the best design, methods, etc.

I: Which type of project specifically do you undertake?

Dato': We are more on the infrastructure side, the building assets for the government under the BLMT. In the services sector, there are not many projects. We are in the very early stage although we already have some equipment. For education, we are embarking to provide accommodation to the students. Some of our higher education institution doesn't have enough accommodation for their students. Government made a policy that they will provide up to 70% of the requirements [accommodation was used as an example]. The other 30% will be provided by the surrounding community. Therefore, we are mostly involved in infrastructure at the moment.

I: When bids are submitted by PFI contractors, how do you evaluate them?

Dato': In this matter, the government will decide the need of the particular project, and then the proposed project will be brought to the cabinet to be

approved by them. Next, there is a process of procurement through tender. We will go through the detail processes after the project is approved by the cabinet. At this point, we will look for qualified company or go straight for RFP. The next step is that we will float the RFP documents. They will be given 3 months to come back with conceptual proposal. Then it will take a month to evaluate the proposal. It is then brought back to the cabinet to propose the winning bid. After we get the winning bidder, we will go into detail negotiation. At the same time, the technical people will go on the details of the project. Upon signing, they also have to translate the conceptual drawings into what we call a PDA or Preliminary Design Abstract. It is a little bit less than construction design. The contractor is given some period of time to get everything they need (design financial cloth, etc). The fastest record time is 13 months.

I: PFI project requires so many skills. So, do you have all the skills needed within your organization or you need to outsource?

Dato': In our country, the PPP projects were done on centralized planning and decentralized implementation. That is the basic policy. All the PPP projects will be primarily planned here in this agency. In terms of the technical side, all our projects involved JKR. We have technical section in our agency consist of the engineers, architect and quantity surveyor. UKAS is a very unique department whereby only here you will find people from Government-Link Companies (GLCs) and private sector work closely with us. They are very experienced staffs, at least minimum 5 years of experience. Depending on the project, we do engage independent consultant. At the moment, we have different consultants to do feasibility studies. We are quite comfortable in this area in terms of the skills and issues related to PFI. There are certain specific areas that we need to get subject matter experts. To outsource, there are certain threshold. Anything below RM 2 Million, we have our own power to make decision. For projects between RM 2 Million – RM 5 Million, there is a special committee and for projects valued above RM 5 Million, you will have to go to the treasury. Therefore, we do have the adequate skills at the moment. However, we still need to outsource for specialized skills.

I: Which specific areas do you usually outsource for now?

Dato': Normally, we need to outsource if it involved special equipments. For example, some universities these day they have sophisticated new courses that require specialized equipment. That specialized equipment we usually get outside people to provide.

I: Who oversees the contractors work in terms of compliance?

Dato': There are two parts which is during construction and operation. During construction, we are slightly different with the UK system. The government doesn't want to have liability before the project is made available to us. The supervision is minimal as it is done by the bank. We don't get involved in their problems. So, the monitoring is done by the bank and also the financial institution. We are not the approving party for whatever you do but, we are the approving party for the PDA. When it comes to the maintenance period, we do Project Monitoring Committee (PMC) with a specific task to monitor the Key Performance Index (KPI) of the project. Our project has a very detail KPI and this is the committee that will monitor the performance of the company. PMC comprises of the representative from the private sector and the government which is the end user themselves.

I: If the service does meet the requirement, can you do anything about it?

Dato': Yes, we can penalize them as there a limit of which the contractor can default. Penalties will be imposed if they defaulted until a certain limit. At the limit, the termination process will be triggered. However, termination is the last thing that we wanted to do.

I: If you don't have active participation in monitoring what the contractor is putting in, how are you sure of the value of the asset that you will receive at the end of the concession period.

Dato': The contractor supposed to take care of the whole life cycle of the building or asset. We will specify the Condition of Contract (COC) meaning that they have to use materials up to certain standard and they also have to employ people who can produce the workmanship up to a certain standard. At

the end of the day, the government will only accept the asset if the building passed the requirements.

I: Do you practice design freeze?
Dato': Yes, however we don't call it design freeze. There will be no variation to the building except for innovations. It is the same with design freeze.

I: How many PFI projects have you entered since the creation of UKAS?

Dato': At the moment, we have six projects from UiTM campuses, five are ready but haven't take off yet, five projects have already signed that about to be started and another five project that is about to be signed anytime. That is strictly for PFI/BLMT project. If you talk about BOT and things like that, we have 514 projects at the moment.

I: How many of these projects are operational?

Dato': Most of the projects are operational.

I: Have you ever terminate or cancel any project?

Dato': There are only two projects that were terminated from BOT which is highway projects. The government had to step in and buy back the concession. We bought in half of the price as we go for high cut from the bank. Some of the projects were terminated because their time has come and we don't want to renew the concession. I think there are more than five projects that weren't renewed. Three BOT projects that already expired; the government gets the asset without any costs. The rest is either we extend the concession period, renew terms and condition or we restructure it.

I: How much do you spent on consultants?

Dato': For PFI asset creation, it is not much at the moment. In consultation fees as a whole, it depends on the project as we engaged them in various stages. It is quite hard for me to give a figure to it. Generally, if it is a very specialized project, then we will have feasibilities studies, subject matter expert and percentage of the project costs. The slight difference with the approach that we are having here with the UK is that their VFM in comparison

to the service level, it is okay for the government to pay higher as it commensurate with the service that we enjoy. In our case, we push on to the affordability of a project in order to achieve VFM.

I: Having the internal capacity in UKAS, is there any constraints in using the in-house staffs to monitor the projects?

Dato': We have a lot of programs for internal capacity but we always this problem where people moving to other department. We have flexi-post in our organization where we have scheme of services. This scheme relates to your position at the position ladder. Staffs may stay at the same position although they have had promotion. The problem is that, when they received the second or third promotion, we cannot cater within the institution. They will have to go somewhere else. Most of us here are the PTDs or elite service of the government which can be posted anywhere. We have a lot of training collaboration domestically and abroad. Our biggest training provider is the commonwealth secretariat. UKAS is the center of excellence of PPP for commonwealth countries.

I: How often do you send your staffs to training or seminars?

Dato': Very often, in our system every staffs have to complete more than 7 days of training per year. The training may be in the form of formal training like lectures, classrooms, site visit, etc. We do have programs to ensure that the staffs have the skills needed before they go up to the next step.

I: For the time being, do you have any specific area of training that you are focusing on?

Dato': Yes, financial and land is a must. First thing when you come into UKAS, you must go through land planning, management, law, etc. It is compulsory. Then cash flow basics. In the second level is basically the contract law, corporate law, arbitration and all these things. On the technical side, we have parallel skill set depending on your profession. For us, desk officer who is non-technical people, we must have a skill set to go through.

I: Do you allow for refinancing?

Dato': Yes, we do allow for refinancing but it is the same as in the UK, we have what we call refinancing gain. When they go for refinancing, the government have the rights to renegotiate the agreement because we afraid that these people wants to exit from the contract. It is difficult to control them because in the UK the always go for the secondary equity market. In our case, any change in shareholding and shareholding structure, they have to come back to the government. So, we have some sort of control on them.

I: Do you censor their sources of finance?

Dato': No but we do encourage them to go for Islamic Financing. Now, I think two or three of our project in on the Islamic Financing as we want to support Malaysia as the center of Islamic finance.

I: How do you determine affordability and how often do you get feedback from end users about the service delivery and their affordability.

Dato': In some industries, affordability can be measured. As example in water, we have benchmark on water bills as against your take-home pay. Projects that falls into which the pay master is the government, every ministry will take care of their own areas. They must determine themselves on how much they can spend on PFI projects. In UKAS, we always say that this particular project has a limit. The limit is on the macro level and also the micro level. We are in charge at the macro level and for the micro level, we will work together with Ministry of Finance dealing with annual budget. So, whatever the amount that we spend under the PFI, the numbers that we have had been already inserted to the macro-economic level. At the micro level, ministries and agencies must bear in mind what is the proportion of PFI payments as against their budget that had been cut by the government.

I: Do the government has the power to regulate the fees imposed to the end user?

Dato': Yes, the government has the power to regulate the fees. However, the end user is normally the government and we always play around with the

affordability issue. In agreement, we build flexibility where government can always terminate the contract for whatever reasons. The mechanism is that they will get back what they expect. If the concession defaulted, there is a lot of penalties while if the government default, they will get back what they have spent.

I: What specific area do you look for to determine the competency level of your staff?

Dato': First, we cannot control the people who come in into our organization because it is from the government. We need to train them to get a certain sets of skills. We focused the training more towards peoples in grade 41-48. Basically, it is about knowing the industry better. For example, we have "lunch and talk" sessions where everybody eat together and talk about anything such as experiences and problems. The other thing is that we have executive coaching whereas people like me go and give guidance to a group of people on certain subject. The first ten years of the people is the most important for us.

I: What is staff strength of UKAS?

Dato': We have 131 staffs where we suppose to be top-heavy meaning that there are a lot of officers and less supporting staff. On top of that we have 14 GLCs and private sectors, plus 3 advisors.

I: Among your staff, how many have experienced or monitored PFI projects?

Dato': I think all of our middle management have experienced PFI project.

I: Sir, we cannot thank you enough for the knowledge we gained here. On behalf of our supervisor, our university and ourselves, we want to say very big thank you for the time you have spent with us. We really appreciate it.

Dato': You're welcome.

CHAPTER 5

DISCUSSION AND RECOMMENDATION

5.1 DISCUSSION

5.1.1 Relative Importance Index (RII) Analysis

In the course of this study, 110 questionnaires were sent out to three different government agencies namely Public Private Partnership (3PU), Public Works Deaprtment (PWD) and Bank Pembangunan Malaysia Berhad (BPMB). 54 respondents returned their completed questionnaires which were then analysed using SPSS statistical software version 17. The descriptive statistics obtained were then used to calculate the relative importance index (RII) of the most important skills to monitor PPP/PFI projects and the possible factors of the perceived low PPP/PFI monitoring skills presented to the respondents in the questionnaires. From the profile of the respondents, it can be seen that they have adequate academic, professional and length of service experience to adequately give a reasonable verdict on the subject of the study. The RII used to rank the factors identified in this study, has been used in the past by (Odusami, 2002) to rank the most important skills of effective project leaders.

$$\text{Relative Importance Index (RII)} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5 \times N}$$

N_5 is the number of respondents for Strongly Agree, n_4 for the number of respondents for Agree, n_3 for the number of respondents for Neither Agree Nor Disagree, n_2 for the number of respondents for Disagree, while $n_1$is for the number of respondents for Strongly Disagree, for the denominators in the equation, 5 (highest weighing or highest number on the scale) and N for total number of respondents.

From the RII calculated, the values obtained were sorted in descending order and shown on the tables below.

Most Important Skills Required by Civil Servants to Effectively Monitor PPP/PFI projects in Malaysia

No	*VARIABLES*	*5 x n1*	*4 x n2*	*3 x n3*	*2 x n4*	*1 x n5*	*Σw*	*5 X N*	*RII*
2	Structural Design Skills	0	12	27	50	17	106	270	**0.39**
8	Environmental/ Sustainability Skills	0	4	18	64	15	101	270	**0.37**
1	Design/ Technical Skills	0	0	18	52	22	92	270	**0.34**
4	Financial Engineering Skills	0	4	6	56	23	89	270	**0.33**
6	Life-Cycle Costing Skills	0	0	15	42	28	85	270	**0.31**
3	Stakeholder Management Skills	0	0	12	42	29	83	270	**0.31**
5	Contract Design and Management Skills	0	0	3	54	26	83	270	**0.31**
7	Risk Management Skills	0	0	9	46	28	83	270	**0.31**

Table 47: RII for most important skills

From the analysis done for Section B of the questionnaire, we found that the structural design skill was ranked first among all other skill with the RII value of 0.39. The second skill that was found to be most important is the environmental/ sustainability skills. This may be due to the change in the industry nowadays which frequently includes greener approach and environmental friendly projects. The third most important skills needed was the design/technical skills. This is the nature of PPP/PFI project where it is complex, large and hard to be handled by inexperience workforce.

Degree of Availability of the Following Skills Among the Public Servants in Malaysia

No	*VARIABLES*	*5 x n1*	*4 x n2*	*3 x n3*	*2 x n4*	*1 x n5*	*Σw*	*5 X N*	*RII*
7	Life-Cycle Costing Skills	10	32	81	30	2	155	270	**0.57**
8	Risk Management Skills	10	32	72	34	3	151	270	**0.56**
2	Structural Design Auditing Skills	10	24	75	36	3	148	270	**0.55**
3	Environmental/ Sustainability Skills	5	20	87	32	3	147	270	**0.54**
1	Design Auditing Skills	5	16	90	32	3	146	270	**0.54**
5	Financial Engineering Skills	5	32	57	48	2	144	270	**0.53**
6	Contract Design and Management Skills	5	20	69	42	4	140	270	**0.52**
4	Stakeholder Management Skills	5	20	66	44	4	139	270	**0.51**

Table 48: RII for degree of availability

In the above table, the responds from the respondents allow us to rank the skills that are available in the current situation. It is ranked from the most available to the least available skills among the public servants. The most available skill is the life-cycle costing skills with RII value of 0.57. The second most available skill is the risk management skill with RII value of 0.56

while the third most available skill is the structural design auditing skills with the RII value of 0.55. However, the focus should be more on the least available skill which is the stakeholder management skills. The RII value is on 0.51. Therefore, if any focus area is to be suggested, this is it. They should try to enhance this skill. The government must make sure that the least skills are available along with other skills so that the public sector servants are developing and become very competent in their works especially in PPP/PFI projects monitoring.

Degree of Competency of the Following Skills Among the Public Servants in Monitoring PPP/PFI Projects (In General)

No	*VARIABLES*	*5 x n1*	*4 x n2*	*3 x n3*	*2 x n4*	*1 x n5*	*Σw*	*5 X N*	*RII*
7	Risk Identification and Management Skills	0	32	84	34	1	151	270	**0.56**
4	Traffic Forecasting and Reporting Skills	0	32	84	30	3	149	270	**0.55**
3	Sustainability/Environmental Governance	0	24	93	28	3	148	270	**0.55**
1	Design Auditing and Reporting Skills	0	20	90	34	2	146	270	**0.54**
5	Financial Engineering, audit and Reporting Skills	0	28	78	36	3	145	270	**0.54**
2	Structural Design Auditing and Reporting Skills	0	32	69	40	3	144	270	**0.53**
6	Contract Review and Reporting Skills	0	28	57	50	3	138	270	**0.51**

Table 49: RII for degree of competency

Table above shows the ranking of the most competent skills among the public servants in Malaysia. This is one of the derived results from the respond that came with the returned questionnaires. The skills are ranked from the most competent skills to the lease competent skills among the civil servants in Malaysia. The public servants are most competent in risk identification and management skills. The RII value for this skill is the highest among all other skills listed in the section which is 0.56. Then, it is followed by traffic forecasting and reporting skills with the RII value of 0.55. There are another skill that has the same RII value of 0.55, which is sustainability/environmental governance skills. Design auditing and reporting skill comes next with RII value of 0.54. Among all the skill listed the least competent skill in the contract review and reporting skills. Therefore, it is strongly advised that the government should look into this skill as contract review is very important.

Public servants who are directly involved in these PPP/PFI project should and must know about the basics and also the extensive knowledge about PPP/PFI projects.

Reasons for the Perceived Low PFI Monitoring Skills Among Public Servants in Malaysia

No	*VARIABLES*	*5 x n1*	*4 x n2*	*3 x n3*	*2 x n4*	*1 x n5*	*Σw*	*5 X N*	*RII*
2	Staff transfer to private sector	30	56	63	18	4	171	270	**0.63**
4	Promotion of experienced staff to top management levels	15	48	45	42	3	153	270	**0.57**
8	The use of consultants by the government	15	52	45	34	6	152	270	**0.56**
9	Poor remuneration in the public sector	20	40	48	26	11	145	270	**0.54**
3	Retirement of experienced staff	5	40	57	32	8	142	270	**0.53**
7	Lack of early involvement of public sector staff	5	44	45	36	9	139	270	**0.51**
6	Complexity associated with PFI contracts	5	28	42	42	11	128	270	**0.47**
1	Inadequate training in PFI	5	28	24	46	15	118	270	**0.44**
5	Inadequate documentation of lessons learned	10	20	33	32	20	115	270	**0.43**

Table 50: RII for the perceived low PPP/PFI monitoring skills among civil servants

From the table above, we found that the most agreed reasons for the perceived low of PPP/PFI monitoring skill are ranked as shown. Most of the respondents agreed that staff transferred to private sector is the number one reason of why is it happening. Second in rank is promotion of experienced staff to top management levels. This is true as what we got during the interview session. Staffs are promoted when they reach to a certain level in government services. The third most agreed reason is the use of outside consultant by the government to complete special tasks. The respondents are saying that they should reduce or eliminate the outsourcing of these consultants to enhance their own capabilities in managing or monitoring PPP/PFI projects.

5.1.2 Interviews

After four interview sessions done with Ir. Sahri Bahri (Bank Pembangunan Negara Berhad), Dato' Ir. Hj. Salahuddin Bin Mohd Isa (Public Works Department) and YBhg. Dato' Hj. Zohari Akob (Public Private Partnership Unit) and also Mr. Norizam Hasyim (Public Private Partnership Unit). We got a lot of information needed for this research. On average, each interview took 1 hour 15 minutes. Within this period, a lot of questions have been asked to the respective respondent. Many of the questions asked were open-ended

question which give some free space for the respondent to lead us to any area within the topic discussed. Even though the respondent lead us to so many areas, we still able to get information needed specifically for this research which is on the availability and the competency level of the public servant who get involve with PPP/PFI project monitoring.

The interviews were transcribed in order for us to extract the information given by the respondent during the interview. From the transcribing process, we are able to have an understanding on the two focused area (availability and competency level). In addition, the interviews also lead us to other areas that can be explored and research can be done in such areas. The findings from the three interview sessions are further discussed below.

In public services, the staffs needed to monitor PPP/PFI projects are widely available. In all three interview sessions, every respondent stated that the availability is there. The numbers of available staffs in each of the three organizations however differ from one another. For example in Public Works Department, they have only about 15 peoples in the Complex Project Branch which responsible to monitor any project that were given to them. The project can be any project, either PFI or conventional method. Meanwhile in Public Private Partnership Unit (3PU), a total of 131 staffs were available and it is also a top-heavy organization where the number of officers is higher than the supporting staffs.

In 3PU, the number of staff might change as we were told during the interview session with YBhg. Dato' Hj Zohari Akob where when a person gets promoted, they will probably go to another department as there is no suitable position for them. This situation will affect the availability of the people with PPP/PFI project monitoring skills. Therefore, we can say that the availability is not a constant area as it changes from time to time.

The availability will always be there but the number should be watch closely. Availability is very important as the government decided to increase the usage of PFI type project in the 10th Malaysian Plan. It means that the public sector workers can expect that there will be more PFI projects in the future and each project will need close monitoring.

For the second focused area of our research, we also found that the competency level is fairly high among the public servants who have the required skills in monitoring PPP/PFI projects. For the three respondents, each of them have experienced in handling PPP/PFI projects.

From the interviews, it is believed that the competency level are getting higher and higher everyday as the staffs in each organization received many kind of training to enhance and sharpen their skills in monitoring PPP/PFI projects.

However, there are still areas that must be improved in terms expertise. The examples given during the interview sessions are in project management and also in financial skills. These are the two areas that were being focused specifically by Public Works Department (PWD) and also Public Private Partnership Unit (3PU),

According to them, we found that they need to bring in consultants into a project if a very specialized work is required as they do not have that level of expertise in their organization. Therefore, the competency level would be a lot higher if this thing can be done internally without any help from the consultants.

5.2 RECOMMENDATION

Recommendations can be given which might enhance the data we could get from the future interview sessions and also for the questionnaire. The questions asked during the interview sessions should be designed to answer the objectives of the research. Balance between open-ended questions and close-ended questions because if there are too many open-ended questions asked, it is afraid that we might be deviated too far from our objectives. The questions should be made clearer so that the respondent will straight away understand the issues being asked. By ensuring a clear question, the probability to obtain a good and accurate response would be higher.

In the future, interview sessions with the private sector should be done to avoid biased results. For the time being, the three organizations we have been into is all government body. Therefore, interview sessions with the private sector should be done in order to obtain a good data which will lead us to the exact accurate point related to the objectives of this research. As the interviewer, we must make sure that

the respondents know what we came for and what kind of data that we need to achieved our objectives. This could be done by briefly explain to the respondents about the research. Therefore, the respondent will be in the correct mindset to answer our questions after being brief. It is very important for us to get a good data which can be used in our research.

By doing the interviews, we got some new issues being raised by the respondents. One of the issues raised is the evaluation of PPP/PFI contract. It might be good if the researches are to be done in these issues. These areas are new and it can be said that there are so few research that was done in these areas.

To enhance the data accuracy, the questionnaire should be send to other agencies which are involved in PPP/PFI projects. Identify these agencies and send them the same questionnaire to get batter number of questionnaire returned. In addition, interview sessions should be done further in other agencies such as the ministry of finance. It is because ministry of finance has their role in the procurement of PP/PFI projects. We can also approach other persons in different level of management to collect data. Their view might be different and these differences may help us to find the real situation and maybe the real problem faced by the public servant related to PPP/PFI projects. Furthermore, extensive research will definitely allow us to get more data and insights about the degree of availability and also the degree of competency among the public servants in Malaysia.

By using the RII values earlier, it is advisable that a new branch of research can be done. The research should cover the action taken by the government to enhance their degree of availability and also the degree of competency of their workforce. This is because this study has already produced the data which shows them the current situation of their workforce. Therefore, we can expect that the government will start their plan of action to further increase the availability and also their competency in handling PPP/PFI projects.

CHAPTER 6

CONCLUSION

The research objectives are to investigate the degree of availability as well as the degree of competency of the PPP/PFI monitoring skills among the public servants in Malaysia. In order to fulfill the objective, data was collected by adopting two methods which are questionnaire and interview sessions. Both methods were used successfully during the data collection stage. For questionnaire, 110 questionnaires we dropped in two different agencies namely the Public Private Partnership Unit (3PU) and the Public Works Department (PWD). Online questionnaire were used for Bank Pembangunan Malaysia Berhad (BPMB). Out of 110 questionnaires, 54 questionnaires (49.09%) have been returned. The data was process carefully to get a good and reliable result.

Other than that, a total of four interview sessions were done in those three agencies. These interview sessions allowed us to get to know about the subject better, it gave us the opportunity to get an answer from various people in various agencies. The data collected during these sessions have proved to be very accurate and it enabled us to use it to come out with a good result. At the later stage of the research, both data obtained from the questionnaires and also the interview sessions were integrated to further strengthen the findings. Each data was supported by the other data collected thus making our result accurate and very reliable.

Further research can be done either in the same area or in other areas that was already identified in this research such as the evaluation of PPP/PFI contract. The continuous research in this area will be a boost for the government as this research will enable them to see the degree of availability and also the competency level of their workforce. By using the data and findings from this research, the government can also plan the actions that needed to be taken to ensure the level of availability and the competency will increase from time to time. It is very important for them to have a competent workforce as they have already planned to expand the use of PPP/PFI methods for public services provision in the 10^{th} Malaysian Plan in the near future.

After finding the results, it is believed that the degree of availability are still average among the public servants in Malaysia. The same thing can be said on the second

objective which is about the degree of competency. It is concluded that the degree of competency among the public servants are also average for the time being. Therefore, the government will need to enhance these two areas to allow them to be better in the PPP/PFI projects monitoring. Also from the survey, they should revise the frequency of their training and they also need to revise the training methods to ensure maximum knowledge will be gained by the participant. Moreover, the employees should also be given the opportunity to apply what they learned in the training by sending them to handle a lot more projects. This will definitely increase the level of availability and also the competency among the public servants in Malaysia in monitoring PPP/PFI projects.

As a conclusion, the research has fulfilled its objectives by applying a good and suitable method to obtained data. The data obtained was reliable, accurate and valid. From there, data was processed carefully and we manage to come out with the expected results. It is hoped that the findings from this research will be used to enhance the PPP/PFI project monitoring skills among the civil servants in Malaysia.

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1st Draft

Sir,

Survey Research on PPP/PFI Projects.

We seek your help in a university research survey on the topic of the degree of availability of PPP/PFI monitoring skills and the competency level among public servant in Malaysia.

Knowledge in PPP/PFI is very important in order to successfully manage such projects. It has been known that several PPP/PFI projects are either underway or will be started in the near future. As the monitoring entity in the projects, government servants must be able to monitor and manage this kind of project to ensure its success. To manage project like these requires many skills as there will be numerous things to be attended by persons involved in the project both in the project works and even in the contract itself.

The objective of our research is to determine the degree of availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia. As a professional in the industry, your views on the issues raised are very much appreciated.

This research hopes that it can benefit the related organizations by providing them with the data which will give an overview related to the areas covered by the research which are the degree of availability and also the competency level of the personnel. The data obtained can be used as an initial benchmark to start further research or even corrective actions if necessary. In relation of the above matter, we have devised a questionnaire that we would like you to complete which will only take not more that 15 minutes of your time. With your cooperation, we should be able to collect as many data possible regarding this research.

Thank you.

Yours faithfully,

(Assoc. Prof. Ir. Dr. Arazi Idrus)
Head of Structure and Construction Cluster,
Civil Engineering Department,
Universiti Teknologi PETRONAS.

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2nd Draft

Sir,

Survey Research on PPP/PFI Projects.

In the 10th Malaysian Plan, there will be much more PPP/PFI projects which needed to be monitored as the government decided to increase the funding in that area. Therefore, we seek your help in our university research survey related this topic

As the monitoring entity in the projects, government servants must be able to monitor and manage this kind of project to ensure its success. To manage project like these requires many skills as there will be numerous things to be monitored by personnel involved in the project both in the project works and even in the contract itself.

The objective of our research is to determine the degree of availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia. As a professional in the industry, your views on the issues raised are very much appreciated.

This research hopes that it can benefit the related organizations by providing them with the data which will give an overview related to the areas covered in the research. So, we have devised a questionnaire that we would like you to complete which will only take not more that 15 minutes of your time. Your response will be used for research purpose only. It would be appreciated if you could keep this questionnaire to be picked up by us soon. Alternatively, you may also fax this questionnaire to 05-3656716 with attention to Assoc. Prof. Ir. Dr. Arazi Idrus/ Abdullah Khafif Bin Sapari. Please contact Mr. Abdullah Khafif Bin Sapari, *(017-7472279)* or e-mail *abdullahkhafif@gmail.com* if you have any question regarding to the survey.

Thank you.

Yours faithfully,

(Assoc. Prof. Ir. Dr. Arazi Idrus)
Head of Structure and Construction Cluster,
Civil Engineering Department,
Universiti Teknologi PETRONAS.

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3rd Draft

Sir,

Survey Research on PPP/PFI Projects.

In the 10th Malaysian Plan, the government expressed its desire to expand the use of PFI for public services provision. This has further increased the importance of developing internal capability to monitor the performance of theses proposed projects hence the need to assess the availability of the required monitoring skills within the public sector. Therefore, this research intends to investigate the availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia.

As the monitoring entity in the projects, government servants must be able to monitor and manage this kind of project to ensure its success. To manage project like these requires many skills as there are numerous areas to be monitored by personnel involved in PFI.

The objective of this research is to determine the degree of availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia. As a professional in the public sector, your views on the issues raised will be appreciated.

It is our hope that the results of this study would be used to develop a guideline on monitoring PFI projects. Therefore, we have devised a questionnaire that we would like you to complete which will only take not more that 15 minutes of your time. Your response will be used for research purpose only. It would be appreciated if you could keep this questionnaire to be picked up by us soon. Please contact Abdullah Khafif Bin Sapari, *(017-7472279)* or e-mail *abdullahkhafif@gmail.com* if you have any question regarding to the survey.

Thank you.

Yours faithfully,

(Assoc. Prof. Ir. Dr. Arazi Idrus)
Head of Structure and Construction Cluster,
Civil Engineering Department,
Universiti Teknologi PETRONAS.

Final Draft

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Sir,

Survey Research on PPP/PFI Projects.

In the 10th Malaysian Plan, the government expressed its desire to expand the use of PFI for public services provision. This has further increased the importance of developing internal capability to monitor the performance of these proposed projects hence the need to assess the availability of the required PFI monitoring skills within the public sector. Therefore, this research intends to investigate the availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia.

Your views and opinions as a staff of the public sector will be highly appreciated and will go a long way in assisting this current study. The benefits of understanding the issues associated with monitoring of PFI projects performance will go a long way in helping the government make the best use of its scarce resources while achieving value for money. Furthermore, it is our hope that the results of this study would assist in further developing a framework for monitoring PFI projects in Malaysia. The study is not limited to traditional PFI but also covers BOT, BLT, DBFO and all their variants.

Therefore, we have devised a questionnaire that we would like you to complete which will take not more that 15 minutes of your time. Your response will be used for research purpose only. It would be appreciated if you could keep this questionnaire to be picked up by us soon. Please contact Abdullah Khafif Bin Sapari, *(017-7472279)* or e-mail *abdullahkhafif@gmail.com* if you have any question regarding to the survey.

Thank you.

Yours faithfully,

(Assoc. Prof. Ir. Dr. Arazi Idrus)
Head of Structure and Construction Cluster,
Civil Engineering Department,
Universiti Teknologi PETRONAS.

1st Draft

Section A: General Information

1. Profession

Architect [_] Engineer [_] Quantity Surveyor [_] Project Manager [_]
Accountant [_] Lawyer [_] Planner [_] Others [_]

2. Education Level

PhD [_] M.Sc [_] B.Sc [_] PGD/Dip. [_] Other [_]

3. Years of Service in PPP/PFI

1-5 years [_] 6-10 years [_] 11-15 years [_] 16-20 years [_] Above 21 years [_]

4. Do you aware about PPP/PFI or other similar project concept?

Yes [_] No [_]

Section B

Do you agree that the following are the most important skills required by civil servants to effectively evaluate and monitor PPP/PFI projects in Malaysia?

Please tick the appropriate level from 1-5, with 1 being Strongly Disagree and 5 being Strongly Agree.

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design auditing skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing skills	(1)	(2)	(3)	(4)	(5)
4.	Stakeholder management skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
6.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
7.	Risk management skills	(1)	(2)	(3)	(4)	(5)
8.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)

How do you rate the degree of availability of the following PFI skills among the public servants in Malaysia?

Please rate by ticking the appropriate level from 1-5, with **1** being **None** and **5** being **Very High.**

1= None, 2= Very Low, 3= Moderate, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design auditing skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing skills	(1)	(2)	(3)	(4)	(5)
4.	Time and Management skills	(1)	(2)	(3)	(4)	(5)
5.	Financing engineering auditing skills	(1)	(2)	(3)	(4)	(5)
6.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
7.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
8.	Risk management skills	(1)	(2)	(3)	(4)	(5)

Section C

What is the monitoring skills level that you possess in the following areas?

Please rate the level of the skills that you possessed by ticking the appropriate level from 1-5, with 1 being none and 5 being very high

1= None, 2= Very Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Technical/ Design skills	(1)	(2)	(3)	(4)	(5)
2.	Sustainability related skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing skills	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
6.	Contract administration skills	(1)	(2)	(3)	(4)	(5)

Section D

In general, how do you rate the competency of the following skills among the public servants in monitoring PPP/PFI projects?

Please rate the degree of competency by ticking the appropriate level from 1-5, with 1 being incompetent and 5 being very competent.

1= Incompetent, 2= Poorly Competent, 3= Not Sure, 4= Competent, 5= Very Competent

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
2.	Structural design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting and reporting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering, audit and reporting skills	(1)	(2)	(3)	(4)	(5)
6.	Contract review and reporting skills	(1)	(2)	(3)	(4)	(5)
7.	Risk identification and management skill	(1)	(2)	(3)	(4)	(5)

Section E: Comments and Suggestions

1. In your opinion, what action(s) do you think is necessary to increase the competency level among the public servants in Malaysia in monitoring PPP/PFI projects (e.g. classes, seminars, training)?

_____

_____

_____

2. Please give your comments and suggestions in relation to this research.

_____

_____

_____

THANK YOU VERY MUCH

SURVEY QUESTIONNAIRE

2nd Draft

/ESTIGATING THE LEVEL OF PUBLIC-PRIVATE PARTNERSHIP (PPP) MONITORING SKILLS AMONG CIVIL SERVANTS IN MALAYSIA

he 10th Malaysian Plan, the government expressed its desire to expand the use of PFI for public ices provision. This has further increased the importance of developing internal capability to itor the performance of theses proposed projects hence the need to assess the availability of the ired monitoring skills within the public sector. Therefore, this research intends to investigate the lability and also the competency level in monitoring PPP/PFI projects among civil servants in aysia. The questionnaire below is divided into 5 sections which are section A, B, C, D and E. Please ver the questionnaire by referring to every section's instruction.

Section A: General Information

Please tick [/] in the box provided.

1. Profession

   Architect [ ] Engineer [ ] Quantity Surveyor [ ] Project Manager [ ]
   Accountant [ ] Lawyer [ ] Planner [ ] Other [ ]

2. Years of Service in the public sector

   1–5 years [ ] 6 -10 years [ ] 11-15 years [ ] Above 21 years [ ]

3. Have you ever been involved in any PPP/PFI project?

   Yes [ ] No [ ]

Section B

Do you agree that the following are the most important skills required by civil servants to effectively monitor PPP/PFI projects in Malaysia?

Please tick the appropriate level from 1-5, with 1 being Strongly Disagree and 5 being Strongly Agree.

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design/technical skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design skills	(1)	(2)	(3)	(4)	(5)
3.	Stakeholder management skills	(1)	(2)	(3)	(4)	(5)
4.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
5.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
6.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
7.	Risk management skills	(1)	(2)	(3)	(4)	(5)
8.	Environmental/Sustainability skills	(1)	(2)	(3)	(4)	(5)

How do you rate the degree of availability of the following PFI skills among the public servants in Malaysia?

Please rate by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2=Low, 3= Moderate, 4= High, 5= Very High

No.	Skills	1)	2)	3)	4)	5)
1.	Design auditing skills	1)	2)	3)	4)	5)
2.	Structural Design auditing skills	1)	2)	3)	4)	5)
3.	Environmental/Sustainability skills	1)	2)	3)	4)	5)
4.	Stakeholder Management skills	1)	2)	3)	4)	5)
5.	Financial engineering skills	1)	2)	3)	4)	5)
6.	Contract Design and management skills	1)	2)	3)	4)	5)
7.	Life-cycle costing skills	1)	2)	3)	4)	5)
8.	Risk management skills	1)	2)	3)	4)	5)

Section C

What is your competency level in the following areas?

Please rate the level of the skills that you possessed by ticking the appropriate level from 1-5, with 1 being Very Low and 5 being Very High

1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High

No.	Skills	1)	2)	3)	4)	5)
1.	Technical/ Design skills	1)	2)	3)	4)	5)
2.	Sustainability related skills	1)	2)	3)	4)	5)
3.	Stakeholder management skills	1)	2)	3)	4)	5)
4.	Traffic forecasting skills	1)	2)	3)	4)	5)
5.	Financial engineering skills	1)	2)	3)	4)	5)
6.	Contract administration skills	1)	2)	3)	4)	5)

Section D

In general, how do you rate the competency of the following skills among the public servants in monitoring PPP/PFI projects?

Please rate the degree of competency by ticking the appropriate level from 1-5, with 1 being incompetent and 5 being very competent.

1= Incompetent, 2= Poorly Competent, 3= Not Sure, 4= Competent, 5= Very Competent

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
2.	Structural design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting and reporting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering, audit and reporting skills	(1)	(2)	(3)	(4)	(5)

6.	Contract review and reporting skills	(1)	(2)	(3)	(4)	(5)
7.	Risk identification and management skill	(1)	(2)	(3)	(4)	(5)

In your opinion, which of the following do you think may be responsible for low PFI monitoring skills among public servants in Malaysia?

Please tick the appropriate level from 1-5, with 1 being Strongly Disagree and 5 being Strongly Agree.

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Inadequate training in PFI	(1)	(2)	(3)	(4)	(5)
2.	Staff transfer to private sector	(1)	(2)	(3)	(4)	(5)
3.	Retirement of experienced staff	(1)	(2)	(3)	(4)	(5)
4.	Promotion of experienced staff to top management levels	(1)	(2)	(3)	(4)	(5)
5.	Inadequate documentation of lessons learned	(1)	(2)	(3)	(4)	(5)
6.	Complexity associated with PFI contracts	(1)	(2)	(3)	(4)	(5)
7.	Lack of early involvement of public sector staff	(1)	(2)	(3)	(4)	(5)
8.	The use of consultants by the government	(1)	(2)	(3)	(4)	(5)
9.	Poor remuneration in the public sector	(1)	(2)	(3)	(4)	(5)

Section E: Comments and Suggestions

3. In your opinion, what action(s) do you think may be necessary to help increase the PFI monitoring skills among the public servants in Malaysia?

   _____

   _____

4. Please give your comments and suggestions in relation to this research.

   _____

   _____

Section F: Feedback

1. Would you willing to be contacted to provide additional information to support this research?

   [ ] Yes, my contact telephone number is _____ ext:_____

   [ ] No

Thank you for your time and cooperation in completing the questionnaire. It would be appreciated if you could keep this questionnaire to be picked up by us soon. Alternatively, you may also fax this questionnaire to 05-3656716, ***Attention:*** Assoc. Prof. Ir. Dr. Arazi Idrus/ Abdullah Khafif Bin Sapari.

THANK YOU VERY MUCH

SURVEY QUESTIONNAIRE

3rd Draft

ESTIGATING THE LEVEL OF PUBLIC-PRIVATE PARTNERSHIP (PPP) MONITORING SKILLS AMONG CIVIL SERVANTS IN MALAYSIA

In the 10th Malaysian Plan, the government expressed its desire to expand the use of PFI for public services provision. This has further increased the importance of developing internal capability to monitor the performance of theses proposed projects hence the need to assess the availability of the required monitoring skills within the public sector. Therefore, this research intends to investigate the availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia. The questionnaire below is divided into 7 sections which are section A, B, C, D, E, F and G. Please answer the questionnaire by referring to every

Section A: General Information

Please tick [/] in the box provided.

1. Profession

Architect	[ ]	Engineer	[ ]	Quantity Surveyor	[ ]	Project Manager	[ ]
Accountant	[ ]	Lawyer	[ ]	Planner	[ ]	Other	[ ]

2. Years of Service in the public sector

1–5 years	[ ]	6-10 years	[ ]	11-15 years	[ ]	16-20 years	[ ]	Above 21 years	[ ]

3. Professional qualification

PMP	[ ]	P.Eng	[ ]	MISM	[ ]	APAM	[ ]
PhD	[ ]	MSc	[ ]	Other	[ ]		

4. How many PFI projects have you involved with?

1–3 projects	[ ]	4-6 projects	[ ]	7-9 projects	[ ]	10-12 projects	[ ]	Above 12 projects	[ ]

Section B

Do you agree that the following are the most important skills required by civil servants to effectively monitor PPP/PFI projects in Malaysia?

Please tick the appropriate level from 1-5, with **1** being **Strongly Disagree** and **5** being **Strongly Agree.**

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design/technical skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design skills	(1)	(2)	(3)	(4)	(5)
3.	Stakeholder management skills	(1)	(2)	(3)	(4)	(5)
4.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
5.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
6.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
7.	Risk management skills	(1)	(2)	(3)	(4)	(5)
8.	Environmental/Sustainability skills	(1)	(2)	(3)	(4)	(5)

How do you rate the degree of availability of the following PFI skills among the public servants in Malaysia?

Please rate by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2=Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design auditing skills	(1)	(2)	(3)	(4)	(5)
3.	Environmental/Sustainability skills	(1)	(2)	(3)	(4)	(5)
4.	Stakeholder Management skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
6.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
7.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
8.	Risk management skills	(1)	(2)	(3)	(4)	(5)

Section C

What is your degree of competency in the following areas?

Please rate the level of the skills that you possessed by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Technical/ Design skills	(1)	(2)	(3)	(4)	(5)
2.	Sustainability related skills	(1)	(2)	(3)	(4)	(5)
3.	Stakeholder management skills	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
6.	Contract administration skills	(1)	(2)	(3)	(4)	(5)

Section D

In general, how do you rate the degree of competency of the following skills among the public servants in monitoring PPP/PFI projects?

Please rate the degree of competency by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
2.	Structural design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
3.	Cost auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting and reporting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering, audit and reporting skills	(1)	(2)	(3)	(4)	(5)
6.	Contract review and reporting skills	(1)	(2)	(3)	(4)	(5)
7.	Risk identification and management skill	(1)	(2)	(3)	(4)	(5)

Section E

In your opinion, which of the following do you think may be responsible for low perceive of PFI monitoring skills among public servants in Malaysia?

Please tick the appropriate level from 1-5, with **1** being **Strongly Disagree** and **5** being **Strongly Agree.**

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Inadequate training in PFI	(1)	(2)	(3)	(4)	(5)
2.	Staff transfer to private sector	(1)	(2)	(3)	(4)	(5)
3.	Retirement of experienced staff	(1)	(2)	(3)	(4)	(5)
4.	Promotion of experienced staff to top management levels	(1)	(2)	(3)	(4)	(5)
5.	Inadequate documentation of lessons learned	(1)	(2)	(3)	(4)	(5)
6.	Complexity associated with PFI contracts	(1)	(2)	(3)	(4)	(5)
7.	Lack of early involvement of public sector staff	(1)	(2)	(3)	(4)	(5)
8.	The use of consultants by the government	(1)	(2)	(3)	(4)	(5)
9.	Poor remuneration in the public sector	(1)	(2)	(3)	(4)	(5)

Section F: Comments and Suggestions

5. In your opinion, what action(s) do you think may be necessary to help increase the PFI monitoring skills among the public servants in Malaysia?

_____

_____

6. Please give your comments and suggestions in relation to this research.

_____

_____

_____

Section G: Feedback

2. Would you willing to be contacted to provide additional information to support this research?

   [ ] Yes, my contact telephone number is _____ ext:_____

   [ ] No

Thank you for your time and cooperation in completing the questionnaire. It would be appreciated if you could complete and keep this questionnaire to be picked up by us soon. Please contact Abdullah Khafif Bin Sapari, *(017-7472279)* or e-mail *abdullahkhafif@gmail.com* if you have any question regarding to the survey.

THANK YOU VERY MUCH

Final Draft

SURVEY QUESTIONNAIRE

'ESTIGATING THE LEVEL OF PUBLIC-PRIVATE PARTNERSHIP (PPP) MONITORING SKILLS AMONG CIVIL SERVANTS IN MALAYSIA

In the 10th Malaysian Plan, the government expressed its desire to expand the use of PFI for public services provision. This has further increased the importance of developing internal capability to monitor the performance of these proposed projects hence the need to assess the availability of the required monitoring skills within the public sector. Therefore, this research intends to investigate the availability and also the competency level in monitoring PPP/PFI projects among civil servants in Malaysia. Your candid perception through response to the issues raised will assist greatly in achieving these objectives. Please answer the questionnaire by

Section A: General Information

Please tick [/] in the box provided.

5. Profession

Architect	[ ]	Engineer	[ ]	Quantity Surveyor	[ ]	Project Manager	[ ]
Accountant	[ ]	Lawyer	[ ]	Planner	[ ]	Other	[ ]

6. Years of Service in the public sector

1–5 years	[ ]	6-10 years	[ ]	11-15 years	[ ]	16-20 years	[ ]	Above 21 years	[ ]

7. Professional qualifications attained

PMP	[ ]	P.Eng	[ ]	MISM	[ ]	APAM	[ ]
PhD	[ ]	MSc	[ ]	Other	[ ]		

8. How many PFI projects have you been involved with?

[ ] 1–10 projects	[ ] 11-20 projects	[ ] 21-30 projects	[ ] 31-40 projects	[ ] 41 and above projects

Section B

The following are the most important skills required by civil servants to effectively monitor PPP/PFI projects in Malaysia, what is your opinion?

Please tick the appropriate level from 1-5, with **1** being **Strongly Disagree** and **5** being **Strongly Agree.**

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design/technical skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design skills	(1)	(2)	(3)	(4)	(5)
3.	Stakeholder management skills	(1)	(2)	(3)	(4)	(5)
4.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
5.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
6.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
7.	Risk management skills	(1)	(2)	(3)	(4)	(5)
8.	Environmental/Sustainability skills	(1)	(2)	(3)	(4)	(5)

How do you rate the degree of availability of the following PFI skills among the public servants in Malaysia?

Please rate by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2=Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing skills	(1)	(2)	(3)	(4)	(5)
2.	Structural Design auditing skills	(1)	(2)	(3)	(4)	(5)
3.	Environmental/Sustainability skills	(1)	(2)	(3)	(4)	(5)
4.	Stakeholder Management skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering skills	(1)	(2)	(3)	(4)	(5)
6.	Contract Design and management skills	(1)	(2)	(3)	(4)	(5)
7.	Life-cycle costing skills	(1)	(2)	(3)	(4)	(5)
8.	Risk management skills	(1)	(2)	(3)	(4)	(5)

Section C

What is your degree of competency in the following areas?

Please rate the level of the skills that you possessed by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Technical/ Design audit	(1)	(2)	(3)	(4)	(5)
2.	Sustainability related issues	(1)	(2)	(3)	(4)	(5)
3.	Stakeholder management	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering	(1)	(2)	(3)	(4)	(5)
6.	ct administration	1)	2)	3)	4)	5)

Section D

In general, how do you rate the degree of competency of the following skills among the public servants in monitoring PPP/PFI projects?

Please rate the degree of competency by ticking the appropriate level from 1-5, with **1** being **Very Low** and **5** being **Very High.**

1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
2.	Structural design auditing and reporting skills	(1)	(2)	(3)	(4)	(5)
3.	Sustainability/environmental governance	(1)	(2)	(3)	(4)	(5)
4.	Traffic forecasting and reporting skills	(1)	(2)	(3)	(4)	(5)
5.	Financial engineering, audit and reporting skills	(1)	(2)	(3)	(4)	(5)
6.	Contract review and reporting skills	(1)	(2)	(3)	(4)	(5)
7.	Risk identification and management skill	(1)	(2)	(3)	(4)	(5)

Section E

The following are responsible for the perceived low PFI monitoring skills among public servants in Malaysia, do you agree?

Please tick the appropriate level from 1-5, with **1** being **Strongly Disagree** and **5** being **Strongly Agree.**

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

No.	Skills	(1)	(2)	(3)	(4)	(5)
1.	Inadequate training in PFI	(1)	(2)	(3)	(4)	(5)
2.	Staff transfer to private sector	(1)	(2)	(3)	(4)	(5)
3.	Retirement of experienced staff	(1)	(2)	(3)	(4)	(5)
4.	Promotion of experienced staff to top management levels	(1)	(2)	(3)	(4)	(5)
5.	Inadequate documentation of lessons learned	(1)	(2)	(3)	(4)	(5)
6.	Complexity associated with PFI contracts	(1)	(2)	(3)	(4)	(5)
7.	Lack of early involvement of public sector staff	(1)	(2)	(3)	(4)	(5)
8.	The use of consultants by the government	(1)	(2)	(3)	(4)	(5)
9.	Poor remuneration in the public sector	(1)	(2)	(3)	(4)	(5)

Section F: Comments and Suggestions

7. In your opinion, what action(s) do you think may be necessary to help increase the PFI monitoring skills among the public servants in Malaysia?

_____

_____

8. Please give your comments and suggestions in relation to this research.

_____

_____

_____

Section G: Feedback

3. Would you willing to be contacted to provide additional information to support this research?

   [_] Yes, my contact telephone number is _____ ext:_____

   [_] No

Thank you for your time and cooperation in completing this questionnaire. It would be appreciated if you could complete and keep this questionnaire to be picked up by us soon. Please contact Abdullah Khafif Bin Sapari, *(017-7472279)* or e-mail *abdullahkhafif@gmail.com* if you have any question regarding the survey.

THANK YOU VERY MUCH