Knowledge Sharing in Private Finance Initiative (PFI) Project in Sarawak

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Article Info

Abstract

Private Finance Initiative or PFI is still considered a new procurement in the Sarawak construction industry because most people still do not know the concept of a PFI project. Simply put, PFI is a contract based on Built Maintain Lease Transfer (BMLT). PFI projects also have a different construction period than conventional contracts, where a PFI project typically takes 20-25 years to complete. To ensure that this project can be completed, good knowledge of management is needed. Good knowledge management can be derived from how the parties involved in this project share their knowledge, essentially with the customers, in this case, UiTM and the concession parties. This research focuses on the sharing of knowledge in the facilities and maintenance stage. The methodology adopted in this research was the qualitative method, namely interviews. The respondents consist of two facilities managers and two civil engineers. The findings show that there are three methods of knowledge sharing: mentoring, face-to-face, and using IT currently used in knowledge sharing for the two PFI projects, which are the UiTM Sarawak, Samarahan 2 Campus and UiTM Sarawak, Mukah Campus.

1. Introduction

Private Finance Initiative or PFI was first introduced in the UK in 1992, and since then, the number of projects provided through PFI/PPP has increased greatly in both the UK and worldwide. A PFI project involves a long-term agreement between a public sector client and the private sector to provide a facility such as a school, hospital, prison, bridge, IT facility, etc. The private sector constructs the asset and is also responsible for its maintenance and continued operation (Rob Ball *et al.*, 2007). Knowledge Sharing has a significant influence on

improving the Facilities Management Performance of Private Finance Initiative Projects (Ali *et al.*, 2018 ;Zainal *et al.*, 2020).

1.1 The Concept of Knowledge Sharing

Knowledge management is the systematic management of an organization's knowledge assets for the purpose of creating value and meeting tactical and strategic requirements. It consists of the processes, strategies, and systems that sustain and enhance the creation, storage, and sharing of knowledge (Yee, Y.M. *et al.*, 2019).

Leadership and knowledge sharing (KS) have widely recognized as the key sources for firms to foster innovation capability and attain organization's effectiveness, survival and sustainable competitive advantage (Choi *et al.*, 2016; Le and Lei, 2017; Ritala *et al.*, 2018). According to Nahyan *et al.*, 2019) stakeholders influence communication, coordination, decision-making and knowledge-sharing at different stages of the construction project while Quinn *et al* (1996)emphasized from long time ago that knowledge sharing is a basis or foundation of the Knowledge Management and a great output of knowledge will derive from the increasing value of knowledge shared. As such, both parties who received and shared the knowledge will benefit through the feedback from the questions and comments.

The exponential growth of knowledge is demonstrated if there is a proposal to change the added value of the original knowledge. Hansen *et al.* (1999) stated that personalization and codification are two processes contributing to the rapid information and knowledge sharing in an organization. Instead of developing the knowledge themselves, the Knowledge Management System (KMS) can be used to attain explicit knowledge. However, tacit knowledge sharing is not included in the knowledge work strategy that delivers some amounts of information efficiently (Newell *et al.*, 2006). Dixon (2000) described the knowledge that employees adapt and learn from the organizational task as "common knowledge". The sharing of the understanding among team members would lead to the attainment of a common knowledge state. Thus, a different process of sharing is needed to gain explicit and tacit knowledge. Based on the definitions by the cited authors, it can be concluded that knowledge sharing is crucial in knowledge management. Knowledge sharing is essential as it will improve the interactions among individuals and enhance teamwork.

1.2 The Concept of Private Finance Initiative (PFI)

The concept of PFI involves transferring the responsibility of financing and managing the fund of a project to private financing from the government. In return, the government needs to pay the lease that is equivalent to the appropriate amount of the services to secure the profit of the investment/funding. The ownership of the assets and the facilities will be transferred to the government once the period of the concession ends (Economic Planning Unit, 2006).

According to Bernama *et al.* (2006) and Norwawi *et al.* (2006), to start a project, the PFI will set up a legal entity called the Special Purposes Vehicle or SPV, which provides the funding for the project. Most of the PFI projects demand the formation of new SPVs to fund the projects. After the expiration date of the concession period, the facility entitlement will be transferred to the client, namely the government, without any charge.

Muhammad Saad Ameer (2019) explains how knowledge-sharing processes, through software application and control over the delivery of information to employees, can be used to facilitate the completion of daily tasks and, more generally, to promote organizational performance. Singh and Kalindidi (2009) described PFI as a form of the private sector that design, build, finance, and operate; however, the specification is based on public sector managers and departments. The public sector does not own the asset, but it must pay the amount of the sum that has been stipulated for the use of the facilities over the period as stated in the contracts. Once the date has expired, the public sector and the private sector will determine the ownership.

In conclusion, the PFI can be defined as a private party that funds the infrastructure, facilities, and other projects. PFI consists of a Special Purposes Vehicle (SPV) that provides the funding/capital for the projects. There is a period called a concession period in the context of PFI. When the concession period of a project expires, the entitlement or the ownership will be transferred to the government. However, prior to the transfer, the government/public sector needs to pay the amount stipulated and agreed upon in the contract to the private sector.

Therefore, for the Private Finance Initiative projects to succeed, the combination of knowledge sharing in the PFI projects is crucial (Kipli, 2016). This research aims to find out what methods are used in the PFI projects.

2. Methodology

For this research, data were collected through a semi-structured interview. A semi-structured interview requires in-depth exploration by the interviewer using open-ended questions (Flick, 1998). The focus is on gaining an understanding based on the textual information obtained. The depth of understanding that the researcher pursues is used to characterize this type of interview, which is more flexible, but typically, a given set of questions is covered by varying levels of standardization. A semi-structured interview is divided into two types: *open-ended* but directed to obtain information and *close-ended* questions. The data obtained from the interview were analyzed. Semi-structured interviews are the preferred data collection method when the researcher's goal is to better understand the participant's unique perspective rather than a generalized understanding of a phenomenon (McGrath C. *et al.*,2019).

3. Findings

This section discusses the analysis of the results, which is based on the answers obtained from the four interviewees using structured interviews with open-ended questions. The interviewees were selected from the clients and concession agencies who carried out the facilities management works for PFI projects at UiTM Campus Samarahan 2 and UiTM Campus Mukah in Sarawak. The interviews' objective is to determine the method used for sharing knowledge between the clients, namely UiTM and the concession agencies. This research also focuses on the challenges of sharing knowledge about the project between the two parties. Lastly, this research aims to identify the current strategies used and seek ways to improve knowledge sharing of both parties. Data collected from the interviews were analyzed and presented in table forms; explanations and elaboration were presented.

Table 1 *Background of the respondents/participants in the interviews*

Respondent	Company Address	Position	No. of years in the current project	Duration of the current project
Engineer 1 (E1)	UiTM Sarawak, Samarahan 2 Campus, 94300, Kota Samarahan, Sarawak.	Engineer	5 years	20 years
Concession 1 (C1)	Rafulin FMS Sarawak Sdn. Bhd.	C & S executive, Head of Department.	5 years	20 years
Engineer 2 (E2)	UiTM Sarawak, Mukah Campus, 96400 Mukah, Sarawak	Assistant Engineer	3 and half years	20 years
Concession 2 (C2)	GFM, A-3A-1, Melawati Corporate Centre, Jalan Bandar Melawati, Taman Melawati,40450, Shah Alam, Selangor	Engineer	3 years	20 years

Table 1 represents the respondents' background. The first respondent (E1) is a civil engineer representing the client, which is UiTM Sarawak, Samarahan 2 Campus. He has a Bachelor of Science in Civil Engineering with 5 years of experience in the PFI project. He is responsible for ensuring that the works are carried out as mandated by the agreement; he is also responsible for the planning, executing, monitoring, recording, and reporting of the works carried out by the concession.

The second respondent (C1) represents the concession with UiTM CS2, which is Rafulin FMS. He has a diploma in civil engineering and is responsible as the Head of the Department of Civil & Structure and Facilities Management on behalf of the concession agencies at UiTM Sarawak, Samarahan 2 Campus. His responsibility includes ensuring all works regarding the civil structure and facilities are carried out as per instruction from the UiTM facilities. He has 5 years of experience in the PFI project.

The third respondent (E2) is an assistant engineer of civil engineering representing the client, which is the UiTM Sarawak, Mukah Campus. He possesses a Diploma in Civil Engineering. His responsibility is similar to E1, which is to ensure that all stipulated works are carried out by the concession as per the agreement; he also has to plan, execute, monitor, record, and report all the works. He has 3 and a half years of experience in the PFI project.

The fourth respondent (C2) is an engineer representing the concession with UiTM Sarawak, Mukah Campus, which is the GFM (Global Facilities Management). His responsibility is to ensure that the site operations are well managed as per company policies, practices, and regulations. He has 3 years of experience in the PFI project.

Table 2 Method *of sharing knowledge*

Question	Feedback	Code
What is the method that your department uses for sharing knowledge between the client and concession?	The method used is verbal, which is face-to-face, sharing knowledge by discussion on the issue. Another way is by writing followed by the verbal session, which is more on the agreement, minutes of the meeting, etc; also using CFMS (Computerized Facilities Management System) to do the maintenance work, which is preventive, corrective, and statutory maintenance; and using email.	E1
	The method used is verbal, which is by meeting, briefing, etc. Another method is by writing, which is more on formal issues. The sharing of knowledge is also carried out by using WhatsApp, email, etc.	C1
	The method that is used is verbal, which is face-to-face for minor problems, sharing knowledge by discussion on the issue. Another way is by writing, which refers to a major problem that is more on the agreement, minute meeting, etc. Also, by using CFMS (Computerized Facilities Management System) to do the maintenance work. Also, using email.	E2
	Sharing knowledge verbally/face-to-face, which is more on presentation and briefing and by using email	C2

Based on Table 2, several methods were used in the sharing of knowledge between the two parties, which is the UiTM, on behalf of the client, and the concession that carried out the facilities and maintenance works. The results of the interview were based on two parties and two campuses, which are:

(a) UiTM Sarawak, Samarahan 2 Campus

Based on respondent E1, the method used for sharing knowledge is verbal, which is face-to-face communication. Additionally, they shared knowledge through discussions about issues regarding the contract, as well as the facilities and maintenance. They also used a written method, which is usually followed by a verbal session. When it comes to writing, it focuses more on the discussion about the agreement, the minutes of meetings, etc. In addition, they also used a system known as a Computerized Facilities Management System (CFMS), which is used mostly on maintenance works, such as preventive, corrective, and statutory maintenance. Another way is by using email for formal matters.

Based on C1, they also used the verbal method, which is more on meeting, briefing, etc. They used the written method for formal issues. C1 also mentioned that they used email for formal matters and *WhatsApp* for informal matters.

(b) UiTM Sarawak, Mukah Campus

Based on respondent E2, the method used for sharing knowledge is verbal or face-to-face, particularly for minor problems. In other words, verbal communication is more about discussing arising issues. The written method, on the other hand, focused more on major issues, such as matters regarding the contract agreement, minutes of meetings, etc. E2 also stated that they are using a similar system, which is the CFMS, for the maintenance works. E2 also mentioned that they used email for formal matters.

Meanwhile, based on respondent C2, the sharing of knowledge is carried out verbally, which is face-to-face communication, and focused more on presentations to UiTM and briefing sessions. The following Figure 1 summarizes the results of the interviews.
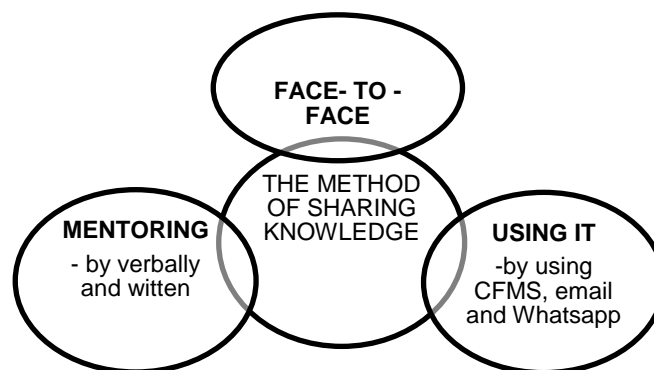
Fig.1 *Summary of methods for knowledge sharing*

Based on the literature review, there are three methods of knowledge sharing, namely **mentoring**, **face-to-face,** and using IT.

3.1 Mentoring

This method is supported and agreed upon by Von Krogh *et al.* (2000). The concept of care is crucial in an organization when those in charge provide a context in which knowledge is shared freely. In the general concept of the mentoring system, the organization will be supported by the concept of care, where the top management also needs to communicate with care, for example, through oral and written statements.

Based on the respondents' feedback on the UiTM Campus Samarahan 2, both E1 and C1 mentioned the sharing of knowledge that can be shared verbally and in written form. Similarly, respondents from UiTM Campus Mukah, E2 and C2 stated that they shared knowledge verbally, in writing, and through presentations. Therefore, it is agreed that mentoring is one of the methods for knowledge sharing in the PFI projects' facilities management stage throughout the concession period.

3.2 Face to Face

According to and agreed by Jo, Richard, Bella Ya-Hui, Chi-Min, and Peter (2008), Kumar and Ganesh (2009), and Mingu-ela-RataLopez-Sanchez, and Rodriguez Benavides (2010), knowledge can be shared through the exchange of knowledge between individuals that will bring the knowledge sources together and operates into new knowledge structures or routines.

   The respondent from the UiTM Sarawak, Samarahan 2 Campus, on behalf of the client and concession, which is E1 and C1, asserted that they share knowledge face-to-face through meetings to discuss issues or problems about the maintenance works. They also conducted briefing sessions. As for UiTM Sarawak, Mukah Campus, respondents C2 and E2 also stated that the knowledge-sharing sessions were conducted through face-to-face communications, discussions and briefings about the maintenance works.

3.3 Using IT

According to Mitchell (2003), IT is a powerful means to share knowledge, and it is a main enabler of knowledge management. Meanwhile, Song (2001) stated that an effective knowledge-sharing medium can be in the forms of IT, such as databases, intranets, web pages, e-mail, bulletin boards, and electronic forums. Thus, it can be concluded and agreed upon that using IT is also one of the methods for sharing knowledge. Furthermore, using IT is more effective and convenient as well as a time-saving approach for sharing knowledge.

   According to the respondents from UiTM Sarawak, Samarahan 2 Campus, namely E1 and C1, they did knowledge sharing using IT; in particular, they used an application known as CFMS (Computerized Facility Management System) and email for formal matters. They also used an application called WhatsApp. For UiTM Sarawak, Mukah Campus, E2 informed that they used CFMS and email; meanwhile, C2 mentioned that they also used email for formal matters.

4. Conclusion

In summary, there are three methods of knowledge sharing, namely mentoring which support the candidate to fulfill the competency gap within the superior and junior staff (Secundo *et al.*, 2022); face-to-face through tacit

knowledge (Boamah *et al.*, 2021), and IT such as email and social media like whats app (Yunis, *et al* , 2019). These three methods are currently used for the sharing of knowledge in the two PFI projects - UiTM Sarawak, Samarahan 2 Campus, and UiTM Sarawak, Mukah Campus.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** *Noremiza, Kumalasari ;* **data collection:** *Noremiza;* **analysis and interpretation of results:** *Noremiza, Kumalasari, Favilla, Dzuliqyan;* **draft manuscript preparation:** *Favilla, Dzuliqyan. All authors reviewed the results and approved the final version of the manuscript.*

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