

EFFECTIVENESS OF FACILITIES MANAGEMENT FOR PUBLIC SCHOOL’S CLASSROOM

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ABSTRACT: Malaysian is a forefront, in terms of its continued efforts towards modernization and transforming into a fully developed nation. This is evidence by the construction of multi-facet buildings and infrastructures that have been built across the nation for various purposes for example; residential, commercial, industrial, and education. For education per say, a school is generally a place where children received their education in a formal or informal way. From that point of view, children need a building to facilitate their daily learning activity as well as to protect them from the surrounding hazard. For a better conducive school environment, the condition of all building elements must be appropriately maintained. School at this juncture is an important institution and place to nurture people at an early age as well as to create a highly civilized and responsible citizen and society. Therefore, the objectives of this study to evaluate the satisfaction level of the respondents in a maintenance perspective. The respondent selected among the individual such as principles, teachers, and students who believe reliable in answering such questions.

Keywords: school maintenance, facilities maintenance, school’s facilities

1. INTRODUCTION

Every building element requires care to restrict the There are many definitions of Facilities Management. Some that commonly used to best describe the real function of Facilities Management are: ‘An integrations approach to operating, maintaining, improving and adapting the buildings and infrastructure of an organization in order to create an environment that strongly supports the primary objectives of that organization.’[1, 3, 9]

The British Institute of Facilities Management (BIFM) defines as ‘the practice of coordinating the physical workplace with the people and work of an organization.’[1, 2, 9]

The term facilities management has been around for a long time, but its meaning has changed dramatically over the years. Facilities management once only related to the physical maintenance and operating of buildings [12, 15]. As these activities became more complex and expensive, facilities management, architecture, engineering, real estate, construction, and human resources [7][8].

Facilities management is the process of coordinating the physical workplace with the people and work of an organization[10, 20]. The primary function of facilities management is to plan, establish, and maintain a work environment that effectively supports the goals and objectives of the organization. A common view of facilities management has taken shape among property and support services specialist that Facilities Management is the coordination of building work and people into a single interactive system [22, 26].

The principle and theory of Facilities Management can be described as the practice of coordinating the physical workplace (place) with the people and process of an organization. It also can be identified as an integration of business administration, architecture, and the behavioral and engineering sciences [16, 19].

The main agenda of Facilities Management is focusing on user needs to support the task of each people in the organization in such a way;

a. Quality

To ensures the continual improvement of the operating requirement in terms of premises and facilities. The improvement must be accompanied by an educational process within the organization [10, 11].

b. Value

Add or maintaining the value of the premises in terms of contribution to productivity. In this context, FM looks at the ways in which value is added in the organization through FM and suggests that if facilities are tuned in helping to meet business objectives [12, 13]. In general, it is the value-added to an organization in term of:

- The maximum value for money on any works
- Savings in time procuring works in order to allow the efficiency of an organization and therefore provide maximum benefit to its users.
- Ensuring high-quality workmanship
- Enhancing image, financial benefit and etc.

c. Risk

Risk is the possibility of loss or incurring misfortune. Risk management is vital to adopt by the Facilities Management organization to ensure smooth operation. Risks to the person for which facilities manager may have responsibility include:

- Health and safety at work
- Physical injury or death through disaster
- Environmental pollution
- Loss or damage to personal property



Figure 1: Facilities Management Model
Source: eurofm.org

2. RESEARCH BACKGROUND

To be an effective nation-building institution, schools must be supported with good facilities that would enable teachers and administrators to perform their roles and functions. Facilities should not be construed only in terms of mortar and fabric of the building themselves, but fixtures, fittings, and information technology must in sync with the effectiveness of overall arrangement in order to get a well-balanced ambiance [19, 22].

The problems of repair and maintenance are alarming in our school buildings. Some of them are quite advanced but some are left behind until it becomes unsafe for the school children and expensive to repair. These problems occurred in many school buildings in our country, particularly to the classrooms. In addition to the unnecessary cost of maintenance, this situation will somehow affect the teachers' motivation and disturb the learning process. [16, 18].

Very often, facilities of public schools, in particular, are not given appropriate concern and as a result, they are often improperly maintained. Malaysian's ex-Prime Minister, Tun Abdullah Hj. Ahmad Badawi had stressed out that buildings and their physical services are part of the country's valuable assets. Yet, for some time now, they have suffered due to inept management, poor execution, and shoddy maintenance [6, 23].

This situation should not happen and can be avoided in many ways either supervise the quality of works or follow the sequence of work in facilities management. The facilities management policy either in the house or contract out applied may be not suitable and the work carried out maybe not efficient or standardized. Each school must implement its own facilities management task, especially in the classroom to make certain improvements in quality work and to ensure that the environmental condition of the classroom can be safer, healthier, and conducive for educational activities [27, 32].

International Facility Management Association (IFMA) has defined facilities as "something that is built, installed, or established to serve a purpose. The facility also can be illustrated as the premises and services required to accommodate and facilitate the business activity" (Bernard William, 1994). In other words, the facility also can be defined as "the infrastructure that supports the people in the organization in their endeavors to achieve the business goal" [18, 20].

Basically, a School can be defined as an institutional supported with funds, which provide services to serve children in kindergarten through grade 12, or in professional/technical, or adult high school, or in school that is classified as not graded, have one or more teachers to give instruction or care, located in one or more buildings and have an assigned administrator or headteacher.

There are several research findings that indicate that the students' academic outcome is affected positively or adversely by the visual, acoustical, and thermal characteristics of the classroom environment [24, 11] elements room is most important supporting elements in teaching and that process.

Traditionally, it is the space which is designed by the architect to accommodate various elements such as chair, desk, cupboard, whiteboard, and audio-visual equipment. Recently, increasing numbers of educators are beginning to believe that physical environment might have an impact on students' outcomes either in short term or long term.

The physical environment consists of various elements such as noise, humidity, thermal, ventilation, air quality, acoustic, lighting and etc. In fact, students have to spend lots of time in listening and understanding lessons. They are interacting with all those elements in the physical environment without knowing their circumstances may contribute to their performance, safety, and health.

The measurement of facilities performance has three main components, namely, physical, function, and financial [32]. Physical performance relates to the behavior of the building's fabric and embraces physical properties such as structural integrity, heating, lighting, energy efficiency, maintainability, durability, etc. Functional performance concerns the relationship of the building with its occupiers and embraces issues such as a spacious layout, ergonomics, image, ambiance, communications, health and safety, and flexibility, etc.

Undoubtedly, to gear up the idea of a safe and sound environment it is essential for every school to have an effective facility maintenance management plan and implementation. Therefore, the main purpose of this study is to identify and analyze how facilities management is planned, managed and implemented at public schools in Klang Valley specifically to the classrooms.

3. METHODOLOGY

Table 3 shows that the journals referred for the research and One of the methods is a survey that is preferred due to its ability to gather data from a relatively large number of respondents within a limited time frame. Furthermore, the survey is more often than not concerned with a generalized result when data is abstracted from a particular sample or population (Naoum, 1998). This type of data collection connects with the perception and attitudes of people and should be considered in depth.

To strengthen the findings, the second method need is the case studies method combined with a questionnaire survey (Norshana, 2006). In certain circumstances, there are some disadvantages of using a case study as a method, according to (Robson, 1994; McQueen and Knussen) are:

- a. Causal inferences are impossible because there is no control over confounding variables.
- b. Hypothesis testing is not possible.
- c. Time-consuming
- d. Observers may well attend selectively to the information presented to by overvaluing some events at the expense of others.
- e. Difficulty in expanding findings from the study involving a sample to a population and to make an argument for generalizing observation on an individual to society as a whole.

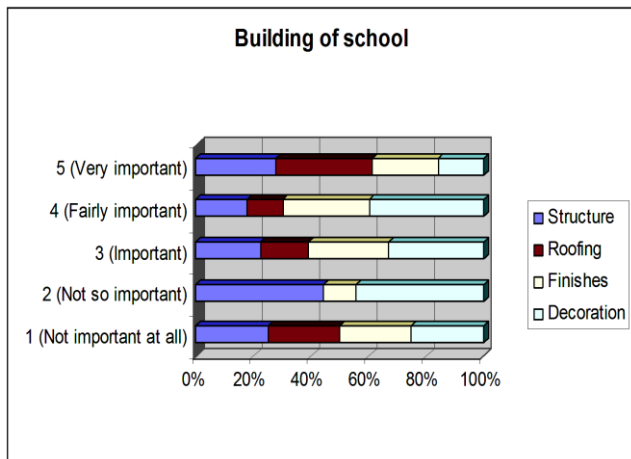
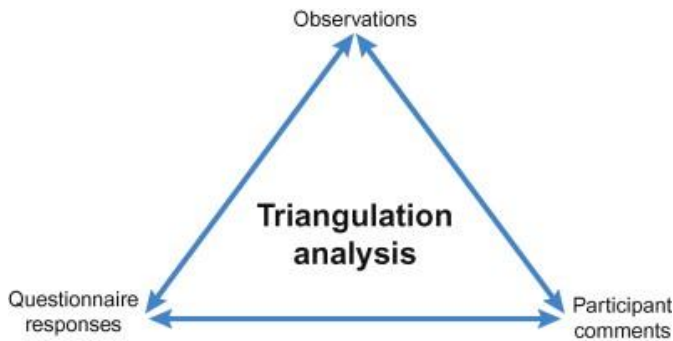


Figure 2: Combination between Survey and Case Study method

However, the case study method is used in this research because it can deal with a variety of evidence such as documents, diaries, observations, and interviews. The case study approach is also used to discover something about the unique nature of the cases and it offers an insight into the case. In Petaling Jaya, the growth population situation demands a great number of schools as a place for children's education. In such an area, some of the school is located in the city area and the other is in a rural area.

Public school can be defined as the institution which supported with public funds, operated by an education agency, provide educational services to student, having teachers who provided instruction with an administrator or headteacher as top management and provide the country statewide assessment test to its students at benchmark years furthermore public school is normally occupying one or more buildings. Out of the 200 questionnaires sent out, at the time of writing this research, replies had been received from 150 respondents, which is only 80% of the questionnaires sent.

4. RESULTS AND FINDINGS

The survey for this study about the building of a school includes structure, roofing, finishes, and decoration. From the survey, about 25 percent give respond is a structure for the building of the school is very important. Mostly from respondents, about 42 percent said the structure of the building is not important. 18 percent give respond the structure is fairly important, 20 percent said is very

important. About 22 percent give a response to the structure of the building is not important at all.

Roofing for the building of school mostly responds is very important about 30 percent and 28 percent give respond about the roofing is not important at all. Mostly give responsibility for the building of school from the chart show respondent choose roofing is very important and decoration also is fairly important for the school of building. Refer to Figure 3.

Figure 3: Perception toward Building of school Survey on services facilities school.30 percent respond electrically is very important. 60 percent of survey services on services are responded to communication are fairly important. Some of the responses show that electrical, security, and communication is very important. Refer to Figure 4.

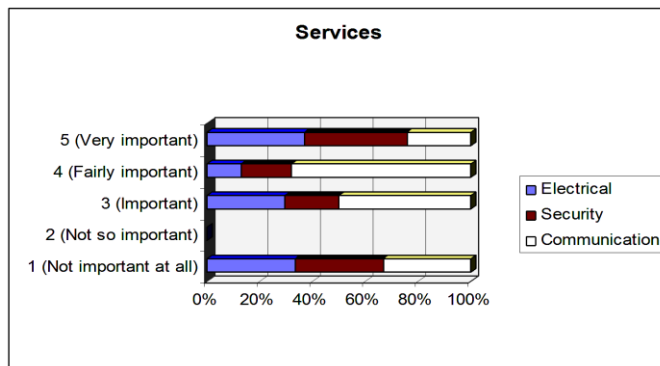


Figure 4: Perception toward services in school

Facilities in school such as the structure of the building, roofing, building exterior, building interior, electrical, furniture, and equipment. Feedback from the respondent shows that a 30 percent structure of the building is not very important and almost 80 percent shows that is very important. 75 percent shows that roofing is very important besides only 25 percent to respond which is not very important. Almost 80 percent showing from the respondent that building exterior is not very important. The Survey of building interior feedback from respondents 50 percent respondent is very important and 50 percent is not important. From figure 25 show chart for electrical 50 percent of the survey from primary and secondary schools respond that electrical is very important and for the furniture and equipment also 50 percent said that is very important. Refer to figure 5.

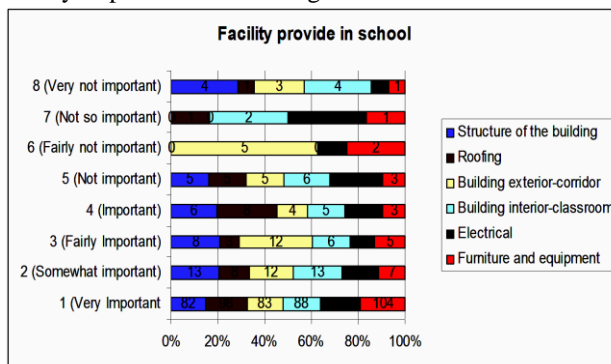


Figure 5: Perception of facilities provide in school

5. DISCUSSION AND RECOMMENDATION

On the facilities implementation aspect, the school that has its own specific facilities management departments is definitely give a good implication on the overall classroom and school condition. Through the survey, it is proven that the overall mostly at the school have their own specific facilities, management team. The facilities management department should employ a well-trained and high committed person. Their specific rules are to carry out such a good standard of facilities maintenance work or under the close supervision of the superior in their related specialization.

Avoid delays in facilities problem action can prevent the existing problem condition from getting worst. This means all complaints need to get immediate intention from the respective facilities staff. In order situation, during the facility's management implementation, a sufficient budget is strictly required. This is to avoid a delay situation on facilities maintenance works. Considering the comfortable at school especially in classroom future budget projection for any building.

For future research, it is recommended that through survey conduct on a different type of area at public schools such as survey facilities management in the library area, laboratory area, or another area. Different types of area and function of school building portray different characteristics in terms of facilities management. It is also recommended that the outlined critical factors for facilities management consideration be carried out on school in order to determine their effectiveness and to enable further improvement to be made for the benefits of future projects and suitable with students.

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