

Ways to ensuring
efficiency in building
maintenance
practices construction
essay



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ABSTRACT

Building maintenance practice is one of the responsibilities of facilities management. The important to having building manager in the building as to monitor, planning, and implement the maintenance works. Nowadays, the demand of building maintenance is increasing due to the increase number of development by developer and government. In Malaysia, the building maintenance practise is ordinary condition as the lack of the experienced and specialist people in this part. Besides that, the weakness can be detected in the procedure of the maintenance which does not holistic between users need. The quality of maintenance is regarding to the performance and value of the building. The strategic process should be applied to sustain the building. The advances of technology uses are for easier of maintenance work such as recording and keep the data information of the building. The planning of the maintenance work should be arranged accordingly due to efficiency of maintenance. The good planning will reduce the maintenance cost better than replace to the new one. The ways to ensure efficiency of building maintenance have to be review as reference to the building manager in this day which the challenges are more advanced.

2. 0 INTRODUCTION

British Standard 3811: 1984 defines maintenance as:

An affiliation of any actions carried out between to maintain an item in, or restore it to an acceptable condition (Barrie Chanter, 2007).

What can be understood from the definition is the action taken is not only about the physical of the building but including the financial and <https://assignbuster.com/ways-to-ensuring-efficiency-in-building-maintenance-practices-construction-essay/>

organisation. In addition, the acceptable condition means the effective usage of the building as the performance showed.

Nowadays, the needs of building maintenance management are rapidly changing throughout the years. Building maintenance usually related to the process to maintain, preserve of the building structure and its condition. Usually, the building maintenance systems are used for factory, housing, school, hotel or office. This essential to ensure the building itself can give convenience and attractive environment to people work and live in the building.

The private and public sector should provide these services in case the building is under construction and completed. Usually for public building, government had spent a budget to allocation maintenance of the building. Meanwhile, for private developer they also have to provide this regarding the need to maintain the building and fulfil their users. Unfortunately, we always heard that public sector that government had problem to maintain the building. Our former Prime Minister, Dato' Seri Abdullah Ahmad Badawi said that government had spent a lot of money allocated equipment for the building because it better than spend money in the end when the serious problem already occurs. The Ministry of Works Malaysia should take the responsibility seriously and stop accused each other when the weakness exposed (Henti tuduh menuduh isu bangunan kerajaan rosak, 2007)

Malaysia still has many weaknesses in practising building maintenance management system. The system did not have connection between the need of maintenance the building and client or user (lateef, 2009). The good

maintenance should involve the satisfaction of users. So, we can see what the user's needed in the building to maintain it function.

This assignment is to identify what can be done to ensure efficiency of the building maintenance management. The building manager must know how it is important to be held organization in the building and maintain the building as well. The system practice is based on the planning, understanding and method to be use before we start the construction.

3. 0 THE WAYS TO ENSURING EFFICIENCY IN BUILDING MAINTENANCE PRACTICES.

The meaning of efficiency is ' do the right thing' or what actually the produced and performed with can be achieved with the same consumption of resources (BusinessDictionary. com, 2012). So, in context of building maintenance practise, the efficiency is how the building manager can arrange and manage the building to maintain its good condition. The elements have been identifying to ensure the building manager can do the work efficiency as stated below:

DESIGN/ MAINTENANCE RELATIONSHIP OF THE BUILDING.

The role of building manager start is at the stage building in design brief. The initial stage of the building design brief must be follow the principles such as produce a building is appropriate and efficient for the function, produce building that's provides the optimum physical and environment, produce building that balance between initial and operating cost and lastly, consistent of the building base on the need and aspiration of the community

(Barrie Chanter, 2007). This is very important to seek a satisfactory design and to set off problem solution in the future.

Another meaning of design brief is including of the function of the building, performance requirements, and overall design (Brian Atkin, 2009). The relationship between design and maintenance is to ensure the building can be performing as its function. This is special for aesthetically design of building to ensure the long term maintenance. Then, the building manager taking part in this stage to assist the engineer installs the equipment correctly because they have to take care the building after the construction completed. For example, the building manager discuss with the engineer regarding installation of machinery and electrical equipment. They must be deciding where to put the lift, and escalator. Besides that, the building manager should know how the equipment maintenance such as easier to get the spare parts. This design brief also can be referring by the project team members, consultants and others to get the more detailed information.

PERSONNEL CHARACTERISTIC.

The personnel characteristic is the important element in handling building maintenance. The characteristic needed is qualification, soft skill and also the knowledge in the maintenance (Emma Marinie Ahmad Zawawi, 2009). Usually, the building manager practice base on the experience. The relationship between client and building users should be considered. As acknowledgement, the building manager knows that the clients and users is centre of maintenance management. This group should be focuses as to preserve and enhance value of the building (lateef, 2009). The clients are owner of the building, who provides finance and also a project brief in the <https://assignbuster.com/ways-to-ensuring-efficiency-in-building-maintenance-practices-construction-essay/>

early stage of maintenance works (Ali, 2009). The building manager should have good communication and relationship between them to avoid any misunderstanding and make sure the budget allocation is sufficient.

Next, the building manager should be thinking beyond the current condition of building as the initial of beware action (lateef, 2009). The good maintenance is also based on the funding collection. The building manager has to ensure that the account funding to maintain and repair the building is enough. The insufficiency in maintenance fund could affect maintenance performance (Ali, 2009). Hence, the clients have to cooperate with the building manager in order to collect the fund besides giving moral support to the management. The decision of payment cash is influence the maintenance budget of the building.

In addition, the good building manager should organize the organization of the department. The arrangement of the organization must be good in order to get the efficiency of the building maintenance. Each of them must know their responsibility taken. As the building manager, he/she must be monitoring the staff doing the work correctly (Emma Marinie Ahmad Zawawi, 2009). Besides that, the building manager have to decide whether the maintenance work is done by outsource or in-house management. This shows that relationship between contractors and building manager should be concern as they have to do the maintenance work in the building.

Furthermore, decision making. The building manager must be looking forward into this sector. The decision making made by the building manager depends on the comprehensive information of the building matters. The

element that must be consider is the client's request, building age, funding, safety and health requirements, and existing building condition (Ali, 2009). The good decision making will affect the performance of the building. The manager can manage the cost expenditure with efficient and effectively.

PLANNING.

Planning is needed in the building maintenance. The planning must be plan as the way to predict on the failure incoming as to keep the equipment and system can be functionally with efficiently according to its design life component (G. P. Sullivan, 2010). There are three types maintenance program detected such as:

Preventive maintenance

The maintenance work is base on the predetermined intervals. The concept is reducing the probability of failure or before the problem occurs.

Predictive maintenance

The maintenance work done as the condition mechanical or operation condition. For example, lift. The building manager has to check the equipment of lift as the routine or continuous monitor to prevent higher cost of repairing.

Proactive maintenance

The maintenance schedule is by step up and doing something to solve the problem before becomes issue. The other meaning is avoiding the problem

in first place. For example, the equipment that is redesigned or modified. The building manager has to analyse the problem before occurs.

The building maintenance establish based on the concept of value for money. The other name is Push-pull factor. The concept work is with evaluating the performance measure and after that they have to implement the new way of the management (Barrie Chanter, 2007). This concept provides a brief definition and the goals of the maintenance programmes and policies as the problem can be solve (lateef, 2009). The figure 1 below show how the concept applied in this system:

PUSH FACTORS RESPONSE PULL FACTORS

VALUE FOR MONEY

NEED FOR PERFORMANCE MEASURES

Strategic building evaluation

Post-occupancy evaluation

Building condition assessments

Premises audits

Strategic facility planning

Improve workplace environment and productivity

Cost-effective asset management and maintenance

Figure 1: Push-pull factors

Source: (Barrie Chanter, 2007)

The value based maintenance is when the maintenance is unexpected occurs, so the effective and proactive action should be taken place as the demand of current users craving for high quality service, good in time and less cost (Arazi idrus, 2009).

TECHNOLOGY

Computer-aided facilities management (CAFM).

The CAFM is between computer-aided design (CAD) and space planning of the building, in order to monitoring and planning space and activities in the building (Brian Atkin, 2009). This system needed by building manager to update the information of the building maintenance work. This system does not keep the administration data only but include the maintenance work plan. From this, the building manager can always check, review and planning outcome plan of the maintenance. The data collection in this system is about the property record file, contractor file, works orders, live orders file, and invoicing (Barrie Chanter, 2007). The diagram below shows the data collected and the solution of the maintenance work:

Figure 2: Five steps of maintenance solution program

Source: (Emma Marinie Ahmad Zawawi, 2010)

HEALTH AND SAFETY OF THE BUILDING

The quality of the building is taken into consideration. The building manager must enhance the productivity and satisfaction and efficiency of the activity around the building (lateef, 2009). For example, the building must be installed by fire extinguisher, building alarm system, security guard and else. The clients and users will feel comfortable when they in the building. The building manager also has to check the safety equipment to prevent malfunction when emergency occurs. The health and safety assessment procedure is documented by the building manager (Ali, 2009).

4. 0 CONCLUSION

The essential of the building maintenance practices needed to be review by the building manager whether from public or private sector. The efficiency of the building maintenance can result the good performance of the building. The building manager should have the experience and soft skill in handling the department of maintenance. Besides that, the maintenance budget must be sufficient to avoid the delay of the repairing work. The users' satisfaction is taking into consideration as the benchmark of the value system. The existing of intelligent building is need for good maintenance and requires well-trained maintenance organisation. Finally, the effective and efficient of the building maintenance practise is base on the allocation of resources to meet maintenance needs.