# The strategies to maintain building efficiently construction essay



## Introduction

Building maintenance management has always been seen as the ' Cinderella' activity in the construction industry where we shall be continuously done the maintenance work. The maintenance work has always been seen and carried out by the architects, surveyors, engineers or facilities managers in term of function or discipline (Allen, 1993). The maintenance has been required starting from the construction work at the first stage, where the significance of maintenance was not recognized because most early structures were massive, overdesigned, made from natural materials, in an unpolluted atmosphere and wore out very slowly (Allen, 1993).

When the maintenance was required, the individual owner was carried out and the maintenance was executed but in term of management is not properly done. The maintenance management was necessary when the advent of landlord-tenant relationships and together with the growth and spread of the population (Allen, 1993).

Normally, property owners always endeavor to keep their building maintenance expenditure in the minimum cost but the building must be in good condition and well-maintained (Seeley, 1976). The building maintenance is highly desired but hardly achievable to produce where the maintenance-free, although many work can be done during design stage to minimize the cost of maintenance work. According to the Building Maintenance by Seeley, the building deteriorates at a greater or lesser rate depending on the materials and methods of construction, environments and the use of the building (Seeley, 1976).

#### 2. 0 Definition of efficiency and building maintenance

The word of efficiency can be defined as an important quality because all ideas are scarce such as time, money and raw material, so they try to keep them while maintaining an acceptable level of output or a general production level. The efficiency would be reducing the amount of waste inputs (n. n. 2012).

There many definition of maintenance can be defined. British Standard (BS 3811: 1964) defines maintenance as " work undertaken to keep or reinstate every facility that is every part of a site, building and contents to an acceptable standard" (British Standards Institution 1964) . Besides that, maintenance can be defined as the improvement of any facilities including every part of a building, services and surrounding according to an adequate standard in order to sustain the value of building facility (Allen, 1993).

## 3. 0 Types of maintenance

According to British Standard Institution, maintenance divided into planned and unplanned maintenance where there have preventive and corrective in planned maintenance and unplanned same as an ad-hoc basis because uses when necessary. Planned preventive maintenance is working direct in order to prevent the failure of facility where the maintenance done within the expected life of facility to ensure the facility can be operation continuously (Seeley, 1976).

Planned corrective maintenance where the work performs in order to restore any facility to operation or acceptable standard and unplanned maintenance where we were unpredicted the unforeseen breakdowns or damage occurred by external causes (Seeley, 1976).

## 4. 0 Strategies to maintain building efficiently

Building maintenance is an important thing where to preserve the building in its initial stage of the construction. Furthermore, the execution of building maintenance allows the building to operate effectively. The building shall be maintain in order to make sure the building can be retain investment value, an acceptable condition and required standard, looking good appearance of building, generate income for building owner and conserve historical and architectural values of building (Ali et al. 2010). There are some strategies to ensuring the efficiency in building maintenance practices which is;

Work schedule

Computerized maintenance management system (CMMS)

Involvement of Building Maintenance Profession during Design Stage

Outsourcing

# 4.1 Work Schedule

In future, more people are demanding in term of building care where they are wants their building facility always in good condition and well-maintain. For more efficiency in building maintenance, any property management shall be having work schedule for contractor to maintain each of equipment or building facility. In the building maintenance management process, every organization has their objective in order to success in maintenance work and they were determines the effectiveness of implementation in term of maintenance plans, schedules, controls and improvements (Márquez et al. 2009)

Besides that, any organization also can produced checklist for building maintenance such as checklist for air-conditioner, mechanical and electrical, water supply and others. So, when there have several checklists at the particular area, the maintenance workers are easy to do their job where they were just going to the particular area and check any equipment through the checklist whether there have equipment breakdown or not.

With have a checklist, the maintenance workers will know when the next checking for that building to do maintenance. Checklist schedule can be done in daily, weekly and monthly based on type of maintenance facility or equipment. It will be more efficiently to the maintenance workers to do their job.

# 4. 2 Computerized Maintenance Management System (CMMS)

Next, strategies to maintain the building efficiently is using the computerized maintenance management system (CMMS) where this system is software that contains the information about company's maintenance operations. This system is useful to the company because it will help their maintenance worker to handle the maintenance job become more efficiently (Herbert W. Stanford III, 2010).

Other than that, CMMS also can help them to saving the data about maintenance operations where the maintenance worker will alert on the https://assignbuster.com/the-strategies-to-maintain-building-efficientlyconstruction-essay/ schedule for their inspection on the building maintenance area such as mechanical and electrical equipment, air conditioner, water supply and others. They are also will know when there have some equipment were breakdown or who the maintenance worker was responsible for the job (Ruud, 2009). Normally, CMMS used by companies which have high standard for their maintenance work.

In CMMS, there have some package offer included which are a work orders, preventive maintenance, asset management and inventory control. All programs will be easily for maintenance workers to do their job such as scheduling maintenance procedures, tracking relevant information, keeping track of preventive maintenance components and procedures, recording data about equipment, management of tools, materials and others (Herbert W. Stanford III, 2010).

# 4. 3 Involvement of Building Maintenance Profession during Design Stage

The design of building structures is an important thing because at initial stage of the construction, the building maintenance profession shall be involved in order to make sure the suitable building design to be designed by architect. The building maintenance profession is not only involved during the construction completed but they shall be involved before the construction start. So, they can consult with the architect to do the suitable design in term of long-term planning and a long-term maintenance on which are predicted by them (Allen, 1993). After the construction is completed, the building maintenance profession is easily to do their maintenance works because the architect are design the building structure according to their planning. When the design of structure is an efficiently, it's required to be understands the way how to be used and maintained the building structure.

# 4.4 Outsourcing

Any organizations in the world try looking for new approaches in outsourcing to maintain the building facility or equipment or develop competitive advantage (Campbell, 1995). By outsourcing a particular area of building maintenance to other organization, the in-house organization can maximize their return because their management will be more efficient.

Outsourcing also will be an effective way in order to reduce costs, free-up capital and improve quality and service, but outsourcing cannot be seen as an automatic way to be success (Campbell, 1995). Outsourcing also known as contract maintenance where there have a survey done by FM Link, the contracting for unskilled or semi-skilled services such as landscape services and housekeeping was very high which is 65-75%, the use of outsourcing for preventative maintenance was much lower which is 50% or less and for public owners, public schools, universities and others the use preventive maintenance was below 20% (Herbert W. Stanford III, 2010).

There are some benefits of outsourcing because these benefits are related to the quality of the products and services provided to the customers (Campbell, 1995). There are some benefits enjoy by organizations which are:

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Contractors will be performed a good services where they were might be has more specialized the equipment and allowed the contractor to provide a good quality and service at a lower price.

When do the outsourcing, the organization may provide a greater flexibility because the outsourced organization are able to operate their maintenance works according to their own plan.

The supplier will enjoy personnel depth and sophistication in technical knowledge in particular area and support more specialized proficiencies.

When the outsourcing strategy in well-planned, the approaches which can deliver a competitive advantage by allowed company to focus its resources on their business.

## 5.0 Conclusion

As a conclusion, to ensuring the efficiency in building maintenance practices, the approaches will be used in this building maintenance management is expected to reduce the building maintenance costs, to improve the health, safety and satisfaction by the users. All strategy or approaches in building maintenance are easily to the maintenance workers do their job and become more efficiently. When they are doing their maintenance works according to the schedule, then the works become more save the time, the equipment always in good condition, the checklists will be done by the maintenance workers and others.

Other than that, the strategy will be used in building maintenance management to ensure the performance of the maintenance works is well-

https://assignbuster.com/the-strategies-to-maintain-building-efficientlyconstruction-essay/ maintained. The maintenance works must be effective and the most

important thing is efficient.