# CENTRE OF STUDIES FOR QUANTITY SURVEYING FACULTY OF ARCHITECTURE, PLANNING & SURVEYING UNIVERSITI TEKNOLOGI MARA CAWANGAN SARAWAK

# EVALUATION OF MAINTENANCE MANAGEMENT IN HOSPITAL

Final Project submitted in partial fulfilment of the requirement for the award of Bachelor of Quantity Surveying (Honours)

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# **DECLARATION**

"I declare that this Dissertation is the result of my own research and all sources are acknowledged in the references"

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## **ABSTRACT**

Hospital consists of various facilities and various machinery that operates to support the hospital building systems. Healthcare has a wide community of stakeholders, including patients, visitors, administrative staff, and employees at the hospital. Any customer who is the users of the hospital facilities should be optimally comfortable with the hospital management services provided. Maintaining the life cycle of complicated buildings such as hospital with numerous assets that operate almost all the time on a daily basis therefore requires more attention. A strategic maintenance strategy is needed for hospital management to track each facility so that it can perform well with less risk of failure. Therefore, hospital end-use facilities should be maintained and monitored according to their function. The purpose of this research is to evaluate the performance of maintenance management in the hospital. There are three objectives for this research which are to identify the Key Performance Indicator (KPI) for the effectiveness of maintenance management in hospital, to evaluate the effectiveness of maintenance management using Key Performance Indicator (KPI), and to recommend the improvement of maintenance management in hospital. A quantitative method will be used to gather data and the analysis would be produced based on the data collected using the questionnaire. The research showed that a lot of hospital maintenance management has poor in term of financial allocation especially for technical management spare parts that can cost overruns and affects prompt maintenance delivery. In order to prevent this to happen, it is recommended that maintenance management provide a financial allocation for the installation of new equipment due to some of the old equipment in the hospital has difficulty in spare parts.

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## **CHAPTER 1**

## INTRODUCTION

# 1.1 BACKGROUND OF STUDY

Over the passage of time, there has been an increase in the amount of construction in Malaysia as it is part of the overall development of the country. Every process of the construction consists of three main phases which are planning, design, and operation of the building. Under the operation phase there will be maintenance involve that will undergo activities of improvement, refurbishment, and repair works of the building components (Alshehri et al.,2016).

Maintenance of work can be defined as work that helps to keep something in a good condition which means that maintenance can help to prevent a component or a device from broken or repair existing equipment to keep it in proper working order. The primary objective of the maintenance unit is to maintain all facilities and infrastructures and to determine the continuity of the support system for the activity and work process (Enshassi et al., 2015). Mostly in past and current maintenance practices of the building usually imply maintenance work after the equipment is broken. The maintenance work usually is done after the equipment failure occurs then they will take actions to replace or repair the equipment. Maintenance of each building is important to reduce and prevent the building's operations to be interrupted. Failure to maintain the building and physical facilities can cause the poor performance of the building.

The hospital building is important to any community and also the design, construction and operation of the building do have a significant impact on the health of users and the environment (Olanrewaju et al., 2018) since the hospital consists of a variety of equipment to support the hospital building systems. Healthcare consists of many different stakeholder groups, such as medical personnel, visitors, and