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DEPARTMENT OF BUILT ENVIRONMENT STUDIES AND TECHNOLOGY  
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UNIVERSITI TEKNOLOGI MARA PERAK BRANCH**

**THE EFFECTIVENESS OF THE MAINTENANCE  
MANAGEMENT SYSTEM IMPLEMENTATION FOR  
HIGH-RISE BUILDING**

Dissertation submitted in partial fulfillment of the requirement for the award of  
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## **ABSTRACT**

Building maintenance is required when the building is completed to keep it in good condition. Therefore, the best way to accomplish outstanding maintenance is to provide maintenance management that meets the user's anticipated demands as closely as possible. However, when it comes to building and infrastructure management and maintenance, we have many shortcomings, such as occupants living in high-rise buildings face several problems, disastrous defects as the roof collapsed and can lead to injuries and accidents. Therefore, this research aim is to analyse the effectiveness of maintenance management toward high-rise building. In order to achieve the aim of the study, the objectives of this research are to identify the factors contributing to maintenance problem that faced in managing maintenance works, to determine the effect of unsystematic maintenance management toward high – rise building and to suggest the suitable solution to improve the maintenance management systems toward high – rise building. This study used a quantitative approach and questionnaire as the data collection instrument. The result indicates that one of the most factors significant contributes to the maintenance problems is insufficient budgets to efficiently run maintenance operations. Furthermore, the most major effect of unsystematic maintenance management that have been identified in this research is financial effect where it may have a huge effect on construction project progress. Thus, the suitable solution to improve the maintenance management systems is by having strict supervision for monitoring the construction sites so that remedial work can be carried out immediately.

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# CHAPTER 1

## INTRODUCTION

### 1.1 RESEARCH BACKGROUND

Since construction began in the early 1990s with the development of mammoth projects, the construction industry in Malaysia has been recognised as the main productive sector (Hasan et al., 2015). According to Alshehri et al., (2015), with too many facilities and infrastructure being built, more maintenance work is required to ensure the facilities serviceability and protection of the facilities being built. A building is an asset whose value varies according to the quality (and amount) of maintenance invested in it (Mohd Nasrun Mohd Naw, Nurul Azita Salleh, Herman Shah Anuar, 2014).

According to Abd-Wahab et al., (2015), high-rise buildings demonstrate the rapid development influenced by the housing price factor in urban towns. High-rise buildings, including integrated facilities near one's office, have their attractions. Light Rail Transit (LRT) and Mass Rapid Transit (MRT) stations and shopping complexes are constructed close to high-rise buildings, for example. This construction style often offers basic facilities, like a 24-hour service—protection system, gym, clinic, swimming pool, restaurants and recreation centre. Therefore, high-rise buildings provide their tenants with utmost comfort by having all the above facilities accessible within their vicinity. However, to guarantee that they are still in good shape, all these facilities must be maintained according to their maintenance schedule.