

**LEARNING FROM CONSTRUCTION DEFECTS IN
DESIGN AND BUILD PUBLIC HOSPITAL PROJECTS IN MALAYSIA
DURING DEFECTS LIABILITY PERIOD**



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Contents

1. Letter of Report Submission.....iii

2. Letter of Offer (Research Grant) iv

3. Acknowledgements..... v

4. Enhanced Research Title and Objectives vi

5. Report..... 1

 5.1 Proposed Executive Summary 1

 5.2 Enhanced Executive Summary 2

 5.3 Introduction..... 3

 5.4 Brief Literature Review..... 5

 5.5 Methodology 10

 5.6 Results and Discussion..... 14

 5.7 Conclusion and Recommendation 31

 5.8 References/Bibliography 32

6. Research Outcomes 35

7. Appendix..... 36

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2. Enhanced Research Title and Objectives

Original Title as Proposed:

Construction Disputes in Design and Build Projects in Malaysia

Improved/Enhanced Title:

Construction Defects in Design And Build Public Hospital Projects in Malaysia During The Defects Liability Period

Original Objectives as Proposed:

- a) To investigate the type and causes of construction disputes in design and build project in Malaysia
- b) To identify the severity of the disputes towards the project progress
- c) To determine the means of construction dispute prevention to be taken in DB project

Improved/Enhanced Objectives:

- a) To identify the types of defects occurred in hospital projects in Malaysia
- b) To investigate the root causes of the identified defects
- c) To categorise the causes of the defects

3.3 Introduction

DB procurement system is believed to offers client value for money and guarantee project success. However, many DB projects presents problems and fails to satisfy their client. Failure in construction is mostly related to defects and shortcomings in the finished building either during the handling over or occupancy of the building. There are three types of project failure such as building defects, dilapidation of building due to aging factor and collapse. Due to the difficulties in obtaining data on building collapse, this research will be only looking into failures due to defects.

Defects are common phenomenon in the Malaysian construction industry (Judin, 2009) and (Nordin, 2010), particularly involving DB public buildings. Among few DB projects that faced most defects problems in Malaysia are educational and hospital projects. Usually parties managing construction projects fail to diagnose the causes of the defect, to allow them be aware of the danger signals and take preventive action. Consequently, similar defects are being repeated with the client ending up rectifying the defects themselves and at their own cost. As a result, it caused a great loss to the government. Due to the seriousness of the problem, several imperative preventive actions had been taken by the ministries including. suspending the use of DB procurement system in their projects in the upcoming Malaysia plan. In addition, the Public Work Department (PWD) had currently established Building Facility Maintenance Division to monitor and audit Malaysian public buildings. They had also assigned a special designated party to capture and record all the defects, propose the rectification method and monitor closely the works undertaken by the contractor. Although, this may be an additional cost to clients, but the cost can be offset by the defects being resolved, which might cost the clients directly or indirectly even more.

Besides cost overruns, defects will also hamper the smooth running of the building and affect the image of the industry. Therefore, this research was developed on the conception that if defects were to occur, it may originate from either any of the three key project stages namely, design, construction and occupation stages. Hypothetically if these project stages are effectively implemented, the end product should be able to perform as expected and problem free. Clients should be satisfied and get the value for money from their investments. Conversely, if this is not achieved, there are weaknesses within any of these stages. By recording those defects and classifying them into systematic categories, types and causes of each defect can be identified. In addition, the most recurring defects can also be traced.