

UNIVERSITI TEKNOLOGI MARA

**INTEGRATED FRAMEWORK FOR
QUANTITY SURVEYING
PRACTICES FOR CONSERVATION
PROJECTS**

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ABSTRACT

Majority of heritage buildings in Malaysia are deteriorating. Previous researchers observed that the deterioration affecting the structural and fabric of the heritage buildings. Continuous care and protection are needed through conservation to limit the deterioration. Conserving heritage buildings are difficult because conservation projects are ambiguous, unique and cannot be duplicated. The scope of work, specification, duration or cost of conservation works cannot be accurately predetermined at early stage. The tender documents can be complicated and lack of critical information due to failure in exploiting the integrated heritage documents by quantity surveyors. Therefore, the aim of this study is to develop an integrated documentation framework to overcome ambiguities in improving quantity surveyors' basic services in building conservation projects. This aim is achieved through the four following objectives; (1) to measure the level of ambiguities of building conservation projects; (2) to measure the level of performance of quantity surveyors' basic services in building conservation projects; (3) to measure the level of integration of documentation used by quantity surveyors' in building conservation projects and; (4) to establish relationships between ambiguities in building conservation projects', integrated documentation and performance of quantity surveyors' basic services. The study was conducted using mixed-method research design. For qualitative method, eight (8) registered quantity surveyors were interviewed using semi-structured interview and the data were analyzed using content and template analysis. For quantitative method, thirty six (36) questionnaires were analyzed using Software Package for Statistical Analysis and Partial Least Square of Structured Equation Modeling. The findings show that the variables with the highest level of ambiguity in conservation projects are the uniqueness of the building, the building technology and the complexity of the project. The result also revealed that the lowest quantity surveyors performances in basic services are in the 'preparing bills of quantities and other tender documents' and the 'preparation of preliminary estimates and cost plans'. The thesis also found that the documents used by quantity surveyor are moderately integrated. The results also show that there are significant relationships between ambiguities in building conservation projects and quantity surveyors' basic services. The integrated document is found to be partially mediating the ambiguities in building conservation project to the quantity surveyors basic services.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter presents an overall introduction and the aims of the research. First and foremost, relevant background information that documents the relevance and significance of the study is provided. Subsequently, the problem statement, defined aim and objectives are outlined. The scope of the research is subsequently discussed in this chapter. This chapter also explains the flow of the research to help the readers visualize the overall structure of the research. The research methods applied and the outline of the remaining chapters are also delineated in this chapter. Chapter 1 then concludes with a summary of information that is provided.

1.2 RESEARCH BACKGROUND

On 7 July 2008, Malacca Historical City and Inner City of George Town were declared and listed in UNESCO World Heritage List as World Heritage Sites (Harun, 2011). The two cities were selected because they met the requirements for outstanding universal value (OUV) as provided by UNESCO. Melaka reflects the early stages of Malaysian history originating in the 15th-century Malay Sultanate as well as the Portuguese and the Dutch periods beginning in the early 16th century while George Town reflects the British era from the end of the 18th century. Both cities constitute a unique and unparalleled architectural and cultural townscape in East and Southeast Asia (Sites, 2007). A lot of heritage buildings were built in these two cities. An inventory study undertaken in 1992 and 1993 by the Heritage Trust of Malaysia in conjunction with National Museum, the Ministry of Housing and Local Government and Faculty of Built Environment, Universiti Teknologi Malaysia (UTM), reveals that there are nearly 39,000 heritage buildings built between 1800 and 1948 throughout Malaysia which are worthy of conservation and preservation (Kamal, Wahab, & Ahmad, 2008).