

UNIVERSITI TEKNOLOGI MARA

**STRATEGIC TECHNICAL
PERFORMANCE CRITERIA OF
POST OCCUPANCY EVALUATION
OF REFURBISHED HERITAGE
MUSEUM BUILDINGS**

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ABSTRACT

Heritage buildings in Malaysia are important in view of the fact that it reveals the history of the country besides acting as a landmark and also as tourism booster. Due to many important roles they play, conservation refurbishment is executed to conserve and preserve heritage buildings for future generation and some of them were adapted into new uses such as a museum. Post Occupancy Evaluation (POE) is executed to evaluate the building performance after they undergone a refurbishment process. Technical performance is one of the elements POE. Previous studies focus on limited technical performance criteria; however this study will establish the technical part from a more holistic perspective focuses on a heritage museum building. This research aims to establish the technical performance criteria of post occupancy evaluation of refurbished heritage museum buildings. The research begins with semi-structured interview by interviewing five (5) experts which were the curators to identify any other missing criteria and also to confirm the technical performance criteria that the author had found from the literature review. The research proceeded by distributing 126 survey questionnaire to respondents; that related to museum either the management or technical from 18 different museums in order to identify the importance of each criteria that the author had found during semi-structure interview. Both data from semi-structured interview and survey questionnaire showed that there were eleven (11) technical performance criteria of POE of refurbished heritage museum buildings. The technical performance criteria identified were then formulated into three POE instruments; Survey Questionnaire, Observation Evaluation, and Physical Measurement based on their suitability of methods of data collection. However, prior to testing out the POE instruments, the three (3) POE instruments were formulated into a survey questionnaire to identify the suitability of each question in the POE instruments. The survey questionnaires were distributed to 100 experts (curator) from ten (10) museums and lecturers from UiTM. Results showed that all respondents were agreed on the how the Survey Questionnaire, Observation Evaluation, and Physical Measurement were formulated. Finally, the POE instruments were tested on two (2) museums. The data between those three (3) were correlated and showed a positive correlation. Therefore, the Survey Questionnaire, Observation Evaluation, and Physical Measurement can be used to evaluate the technical performance of heritage museum building in Malaysia. It is hoped that the study can contribute to the improvement of technical performance of heritage museum buildings in Malaysia.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF SYMBOLS	xiv
LIST OF ABBREVIATIONS	xv
CHAPTER ONE: INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	4
1.3 Research Questions	5
1.4 Research Objectives	5
1.5 Scope and Limitations of The Study	6
1.6 Significance of The Study	6
CHAPTER TWO: LITERATURE REVIEW	8
2.1 Heritage Buildings in Malaysia	8
2.1.1 Introduction	8
2.2 Conservation of Heritage Buildings	15
2.2.1 Definition	15
2.2.2 Concept	16
2.2.3 Approach	17
2.2.4 Conservation Principle	19

CHAPTER ONE

INTRODUCTION

1.1 Background Of Study

Post Occupancy Evaluation (POE) is a method of building evaluation which looks in several performances of the building such as the technical and functional performance. Mohammad (2005) defines POE as a process of evaluating buildings in a systematic and scrupulous manner by comparing overall building performance with stated performance criteria after they have been built for some time focussing on users need and the functionality of the design. POE provides review on the consequences of past building design decisions. Results from POE will provide a basis guideline for produce a better building in the future.

Technical performance evaluation measure how the physical systems of the building perform (Blyth et al., 2006). Many writers have a different idea regarding technical performance criteria. To name a few, Blyth & Gilby (2006) stated the technical performance evaluation focuses on four (4) main areas which are physical systems, environmental systems, adaptability and durability. While according to Cooper, Ahrentzen and Hasselkus (1991), technical evaluation environmental aspects are health hazards, fire safety and the heating and cooling systems of the building, energy consumption, maintenance requirement, etc. Many other technical performance criteria are discussed in the literature review chapter.

There are many technical performance criteria established to be use in Post Occupancy Evaluation. In addition, different types of facilities have different types of technical performance criteria. However, there is no technical performance criteria on refurbished heritage museum building were established. In addition, the existing performance criteria for evaluation of a museum only focuses on the preserving the collections inside the museum and not the visitors. The rationale for establishing specific technical performance criteria of POE for heritage museum building is that condition of heritage museum buildings is different from modern buildings due to its age and the need for prolonged its life due to many benefits its serve to our nation.