

CENTRE OF STUDIES FOR BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

DOES IBS IMPLEMENTATION AFFECT THE CONSTRUCTION COST

MUHAMMAD SYAHIR BIN SOLEH (2018680188)

Dissertation submitted in partial fulfillment of the requirements for the degree of

Bachelor of Building Surveying (Hons)

Faculty of Architecture, Planning and Surveying

ABSTRACT

This research is about the IBS implementation impact toward construction cost. Various cost related factors are listed in this research in order to find out the most significant factor that give impact on the construction cost. The factor is then justified with reasons to clearly show its significance toward contributing to the cost impact in IBS construction project. The early stage of this research include research background, research objective, research question and many more. The literature review is produced by reviewing previous related research regarding this research topic. This research only use questionnaire as its main source of data alongside few journal reference as secondary source of data. The respondent involved in this research is 22 respondent with construction related career. The result received from the data collected is the analyzed to fulfill the research objective. The result produce then will be used for reference in generating recommendation on reducing cost related factor in IBS construction project.

ACKNOWLEDMENT

Alhamdulillah and praise to Allah S.W.T, I express my sincere gratitude to all those people who have been help me to finish this report. Firstly, I would like to give special grated to my supervisor, Dr. Norehan Haji Mohd Noor whose contribute a lot in giving opinion, encourages and always help me during the process of writing and completing this report.

I would like to appreciate my beloved parents for them prays and wishes for the successful completion of this project and they always give their support for me to do the best for my assignment. In addition, I would also like to say thank you to all my classmates from AAP229D6B that always giving their opinion or the ideas in throughout the process to doing this assignment.

Without some helps that I mentioned above, I would face many difficulties while doing this assignment and I may not learn and gain as much information as I can. I hope that all of this knowledge will not be forgotten and will continue to bring wonders in the future.

TABLE OF CONTENT

LIST OF TABLE

LIST OF FIGURE

CH	APTER 1: INTRODUCTION	
	1.1 RESEARCH BACKGROUND	. 1
	1.2 PROBLEM STATEMENT	3
	1.3 AIM AND OBJECTIVES	. 3
	1.4 RESEARCH QUESTION	3
	1.5 SIGNIFICANCE OF STUDY	. 4
	1.6 SCOPE AND LIMITATION	4
	1.7 RESEARCH METHODOLOGY	. 5
	1.8 RESEARCH OUTLINE	. 6
CH	APTER 2: LITERATURE REVIEW	
	2.1 INTRODUCTION	. 7
	2.2 DEFINITION OF IBS	. 8
	2.3 CLASSIFICATION OF IBS	9
	2.4 TYPE OF IBS	16
	2.4.1 Precast Concrete Frame Panel And Box System	16
	2.4.2 Steel Formwork System	17
	2.4.3 Steel Framing System	18
	2.4.4 Block Work System	19
	,	
	2.5 ADVANTAGES OF USING IBS	

CHAPTER 1

INTRODUCTION

This research is about the effect of IBS implementation toward construction cost. This research will cover research background, problem statement, aim and objectives, research question, significance of study, scope and limitation and research outline.

1.1 RESEARCH BACKGROUND

In Malaysia, the Industrialized Building System (IBS) was initiated since the 1960s, when the Ministry of Housing and Local Government made visits to several European municipalities with the objective of assessing their housing development plans. After a successful tour run in 1964, the Malaysian government launched a project to put to the test the efficiency of the IBS. This is to gauge its potential as a system that could be deployed as an alternative to the conventional system which already had a strong foothold in Malaysia [1]. The key objectives looking to be fulfilled include the acceleration as well as the increase of affordable housing of substantial quality here in Malaysia [2]. The IBS proved to be a success. Not only was it efficient in accelerating the construction of housing projects, it also improved the quality and affordability of the projects in which the IBS was deployed. Based on different reference materials accepted by authorities in the construction fraternity, we have several ways of defining the IBS [3]. Despite the IBS being well-known and accepted by most construction firms due to its theoretical advantage in terms of speed, safety and quality, wet construction method is still widely regarded in Malaysia as a conventional and safe option despite incurring higher costs and slower production rates.

According to A. Kazaz and S. Ulubeyli, IBS is defined as a construction technique in which components are manufactured in a controlled environment either on or off-site. These are transported, positioned and assembled into a structure with