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THE ROLES OF CONTRACTOR IN IMPLEMENTING INDUSTRIALISED BUILDING SYSTEM IN MALAYSIA

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2021

ABSTRACT

In line with the Government's Industrial Revolution (IR) 4.0 policies, Malaysia's rapid development is something to be proud of. However, the low implementation level of the Industrialized Building System (IBS) construction method is a main cause of concern for construction stakeholders due to negative perception toward this method. According to the literature, many contractors choose to use the traditional approach rather than the IBS method in their construction projects. As a result, the goals of this research are to identify the roles of contractors in the implementation of IBS construction, to identify the challenges that contractors faced in implementing IBS construction, and to recommend improvements on the IBS construction implementation. The data for this study were gathered using a questionnaire survey distributed to the target group of CIDB-registered grade 7 IBS contractors. A total of 200 questionnaires were distributed, with 90 being returned. The descriptive analysis method was used to analyse the data collected using SPSS software. The study concludes that despite the contractor's role and the barriers they encounters are not critical, most of strategies to enhance IBS construction usage are critical. Contractors' primary function in IBS construction is to train employees to improve their IBS construction abilities, whereas an oversupply of untrained labour in the IBS construction business is a major impediment to contractors implementing IBS construction methods. However, one of the most popular techniques for increasing IBS construction usage is for contractors to engage in continual learning and skill enhancement. Finally, it is believed that the findings of this study would help construction stakeholders improve the degree of implementation of the IBS construction method.

Keywords: *Industrialised Building System (IBS), contractor roles.*

ACKNOWLEDGEMENT

With my gratitude to Allah S.W.T. for providing me with the physical strength and inspiration to complete this final dissertation.

To begin, I would like to express my heartfelt appreciation to everyone who contributed to the successful completion of this project. I would like to offer my heartfelt appreciation to my supervisor, for all her wise counsel, outstanding direction, and amazing patience throughout the development of this research.

In addition, I'd want to thank my precious family for their financial and mental support while I was conducting this research. In addition, I'd want to thank my classmates, who were ready to exchange information with me and helped me when I ran into problems during this research. Next, I'd like to convey my gratitude to everyone who helped me by giving their time to help me finish this dissertation.

Finally, the experience, responsibility, and task assigned to me during this research provide me with priceless knowledge and experience before to begin my career in the construction industry. I hope that all the knowledge obtained will be brought to use in the future to make me a more productive person.

THANK YOU.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Construction is a vital sector in Malaysia because it has contributed around 4.9 percent of the country's Gross Domestic Product (GDP) value in the first quarter of 2019. (Gross Domestic Product First Quarter 2019, 2019). As Malaysia continues to develop, the Industrialised Building System (IBS) was implemented in the country's construction industry to increase productivity and quality. Building industrialization is most effective when prefabricated components are combined with appropriate equipment, efficient technological and managerial methods.

In Malaysia, utilising IBS in construction directly benefits the Construction Industry Transformation Programme (CITP) under sustainable construction. To us, IBS is a more cost-effective and secure method of construction than conventional approaches. IBS, also known as prefabrication, can save time and money if the project is effectively planned from the start (Alinaitwe et al. 2006), and can save up to 30% on the total overall cost (CIDB, 2003). This assertion can be demonstrated by the construction of 'Rumah Prima,' which took only six months to build (The Edge, 2010).

According to the CIDB (2016), IBS is a prefabricated manufacturing process that occurs off-site and is transported directly to the construction site, eliminating the need for additional on-site work such as component assembly. Nowadays, IBS is commonly used in public projects. "For all government projects exceeding RM10 million, the IBS method of construction is mandatory," Datuk Fadillah Yusof stated in March 2018. (The Edge, 2018). Nowadays, IBS is used to construct schools, hospitals, quarters' buildings, residential houses, and multifunctional halls.