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THE INDUSTRIALIZED BUILDING SYSTEM (IBS) AS AN ALTERNATIVE TO THE CONVENTIONAL CONSTRUCTION METHOD

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ABSTRACT

Malaysia construction sector currently face a significant demand in development. This influenced the rise of projects in the construction sector how ever causing several issues regarding quality and productivity of project and there is a rise of project abandoned due to financial issues. IBS is a construction evolution that uses new and creative techniques that is presently being used in Malaysia. However, the most of projects in Malaysia are completed using this approach only in metropolitan areas, and it has not been embraced by every state in Malaysia. Hence, this research aims to be focusing on the implementation of the IBS method as a solution for issues in Malaysian construction industry in order the ensure the project finish on time. It identifies the factors on why this method should by applied by construction parties. The questionnaires were distributed to collect the data and been analyzed using Google Form platform to find frequency of analysis and mean score. The results demonstrated the construction practitioner's perspective in the adaption of this system and the element of system implementation based on their experience. IBS initiatives must be adopted by both generations, not only the younger ones. By evaluating all these factors, the outcome may be used as a guideline to enhance the present building project's performance in the future.

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CHAPTER ONE

INTRODUCTION

1.1. RESEARCH BACKGROUND

In comparison with other industries, the construction industry has an important role in the country's social development and economic infrastructure and buildings. There are a lot of problems and issues in the construction sector that need review and improvement to provide better development for the community and economy.

The construction industry is part of the production sector and is the main driving force contributing to Malaysia's economy every year. Since the 1990s, Malaysia's construction sector has contributed to the gross domestic product (GDP), and the contribution rate has been gradually changing every year. In 2017, the construction industry contributed 5.9% to GDP, but this year it kept the industry-wide growth rate at 6.7%. According to recent data, Malaysia's construction sector contributed only 4.5% to GDP, and the industry as a whole grew only 4.9% in 2019, the fastest growing since 2009 (Mahidin2020). This shows that the demand for construction is very sensitive to the development of other economic sectors.

In Malaysia, the use of the Industrialized Building System (IBS) method is still low, and this proves that the major player in the construction sector is not ready to implement this technology and system. This is because most contractors in Malaysia are still attached to the Conventional Construction Method. Thus, the Malaysian government started to foster a new interest in the Industrialised Building System (IBS) to replace the conventional method due to the slow development in the construction sector, the increase of population, and huge demand especially for building construction projects (Mohd Amin, et al., 2017). This is because due to the low production quality, slow speed of construction, and higher construction cost, the conventional construction method is no longer able to manage the huge demand for houses and needs to be improved.