DEPARTMENT OF BUILT ENVIRONMENT STUDIES AND TECHNOLOGY

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THE CHALLENGES OF SMALL AND MEDIUM CONTRACTORS IN ADOPTING INDUSTRIALISED BUILDING SYSTEM (IBS)

Dissertation submitted in partial fulfilment of the requirement for the award of Bachelor of Quantity Surveying (Honours)

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DECLARATION

“I declare that this dissertation is the result of my research and thatall sources are acknowledged in the references.”

Student signature :……

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ABSTRACT

The Malaysian construction industry is a pivotal sector contributing significantly to the nationaleconomy, especially through the activities of small and medium contractors (SMEs). The Industrialised Building System (IBS) has been promoted by the Malaysian government as aninnovative and sustainable construction method that offers numerous advantages over conventional building practices, including reduced construction time, cost savings, and enhanced quality. Despite these potential benefits, the adoption of IBS among SMEs remainslow. This research objective is to investigate the challenges faced by SMEs in adopting IBS, explorethe benefits of IBS implementation, and propose solutions to enhance its usage within the industry. The study employs a quantitative research methodology, collecting data through structured questionnaires distributed to SMEs in the Klang Valley region which ranges from Grade G1 until Grade G5. Key findings from the research indicate that the primary barriers toIBS adoption include high initial capital costs, lack of technical expertise and training, limited availability of IBS manufacturers, and insufficient government incentives. Additionally, clients' preference for conventional construction methods further hinders the widespread adoption of IBS. Despite these challenges, the study reveals that SMCs recognize the benefitsof IBS, such as improved construction efficiency, higher quality of finished projects, and significant long-term cost savings. The research concludes with several recommendations aimed at overcoming the identified barriers include the implementation of more robustgovernment policies and incentives to support IBS adoption, the development of comprehensive training programs to enhance the technical skills of contractors, and initiativesto increase the awareness and acceptance of IBS among clients and stakeholders in the construction industry. In conclusion, by implementing the proposed solutions, the industry can achieve greater efficiency, sustainability, and competitiveness, ultimately contributing to the economic growth and development of Malaysia.

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