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**APPLICATION OF SAFETY AND HEALTH  
ASSESSMENT (SHASSIC METHOD) IN  
MALAYSIAN CONSTRUCTION SITES**

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

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## **ABSTRACT**

Construction sector has high injury and fatality rates, making it one of the most dangerous industries to work in. Safety and Health Assessment System in Construction (SHASSIC) has been established since 2008 by CIDB with its main aim to benchmark the level of safety and health performance, to have a standard system of safety and health assessment, to evaluate contractors' performance on safety and health practices and to improve and take actions on safety and health performance and management on construction sites. Thus, this study aims to study usage level of SHASSIC. Specifically, it identifies the components and elements of SHASSIC, indicates the advantages in using SHASSIC and determines the implementation level of SHASSIC at construction sites. To achieve these objectives, online questionnaires were distributed to G7 contractor's company. Responses were obtained and analysed by using Statistical Package for Social Sciences (SPSS) Software. It was concluded that while majority of construction sites implement SHASSIC, some are still ignorant and unaware of it. Based on the findings, recommendations were made to increase SHASSIC's efficacy in achieving high safety performance in the construction sector. As a result, there is a need to assess the whole concept of SHASSIC to identify and improve SHASSIC method for safety management as well as to satisfy the industry's demand for proactive safety performance.

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## 2.1 INTRODUCTION

Construction industry undeniably plays an important role in the economic sector and despite being classified as the top three major economic sectors, building industry has a high accidents rate due to the complexities and nature of the industry and the risks involved during construction (Jaafar et al., 2017). Accidents are unintended accidents that occur out of expectation and controlled which not only causing harm to humans but property damage as well (Ali, Kamaruzzaman and Sing, 2010).

According to Hafiidz et al. (2017), falls, being struck by an object, getting caught in or between things, electrocution, and other causes like as drowning, fire and toxic gases are the most common causes of deaths and injuries on construction sites. Accidents involving machines or vehicles are particularly dangerous, especially when cranes are involved which are commonly used for transporting and lifting (Hamid, 2019b). For example, the most recent accidents involving crane in Malaysia which was on 22<sup>nd</sup> March 2021 is the Sungai Besi-Ulu Klang Elevated Expressway (SUKE) project that has claimed the lives of three workers as the incident is understood to have occurred after one of the component of the crane's gantry fell (Zulkifli, 2021).

Furthermore, the frequency of accidents on building sites is increasing, and according to Social Security Organization (SOCSSO) figures, 7,338 accidents were reported in the construction industry in 2016 compared to 4,330 instances in 2011, representing a 69 percent increase over the five years (Thye, 2018) and according to the Department of Occupational Safety and Health (DOSH) Malaysia, the fatality rate in Malaysian Construction Industry is the highest between 2009 and 2018.