

**UNIVERSITI TEKNOLOGI MARA**

**A STUDY OF SAFETY AWARENESS, TIME  
BARRIERS AND MANAGEMENT  
COMMITMENT ON SUBCONTRACTORS'  
SAFETY PERFORMANCE IN MALAYSIA  
MARINE AND HEAVY ENGINEERING  
(MMHE)**

**ENNA FASIHAH BINTI FADILAH  
IZZAH ASILAH BINTI MOHAMAD ROSLI  
MUZAFFAR SHAH BIN MOHAMED ARIFF**

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## **ABSTRACT**

Oil and Gas construction industry has accomplished growth globally in terms of technology advancement and design requirement in order to ensure reliability and safety of the built structure. Generally, Oil and Gas operator will award a full scope of contract which consists of Engineering, Procurement, Construction, Installation and Commissioning (EPCIC) to a main contractor to undertake the responsibility and to provide end-to-end solution. A few accidents caused by subcontractor workers were recorded in MMHE from year 2018 to 2019 which had impacted its overall business performance. As such, the objectives of this study are to identify the degree of understanding in safety awareness among subcontractors and to understand the relations of Safety Awareness, Time Barriers and Management Commitment on subcontractor's Safety Performance in Malaysia Marine and Heavy Engineering (MMHE). Apart from that, this study aims to propose recommendations to the management of MMHE in order to improve the overall safety performance of subcontractors. This study encompasses an academic construct of collecting qualitative and quantitative data and applying strategic business tools. It involves activities such as conducting interviews and distributing questionnaires to 50 employees of 15 active subcontractors of MMHE. It is found that safety awareness is having the most significant relationship with subcontractor's safety performance. By applying the Blue Ocean Strategy, it is concluded that Value Innovation and Strategy Canvas Frameworks are the two most appropriate analysis tools to be recommended to MMHE in improving the overall safety performance.

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