## **UNIVERSITI TEKNOLOGI MARA**

# IMPROVING OF QUALITY MANAGEMENT SYSTEM IMPLEMENTATION AND EFFECTIVENESS FOR SEALINE PROJECT

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Dissertation submitted in partial fulfillment of the requirements for the degree of **Master in Engineering Management** 

**Faculty of Mechanical Engineering** 

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#### **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This dissertation has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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#### ABSTRACT

As Malaysia targets to become a developed nation and focus on its industrial sector, Malaysia has to secure energy through cost-effective means and diversifying its fuel supply portfolio. Petroleum and other liquids and natural gas are the main primary energy sources consumed in Malaysia and therefore oil and gas industry nowadays become the most valuable commodity traded on world markets. Engaging with the current oil and gas companies that are certified under ISO 9001 certification does it not reflect the existence of a well-operated QMS, which is capable of giving customer and project end-users are satisfaction. Implementing quality management systems (QMSs) based on ISO 9001 standard are important in helping oil and gas companies become more competitive and sustainable. Hence, the study is motivated to investigate the Culture Based Quality Management System Implementation and Effectiveness Framework to achieve quality and higher performance, either in the local or international market for oil and gas project. The framework compasses all elements accordance to the Engineering, Procurement, Construction, Installation and Commissioning (EPCIC) contract and the development of quality approached for all the key elements in the contract. From the study, the established Culture Based Quality Management System Implementation and Effectiveness Framework it has proved that the project delivery was on time and also within financial budget and cost, hence increased customer satisfaction.

#### ACKNOWLEDGEMENT

In the Quran Chapter 29 verse 43 mentioned "And these examples, We present to the *people, but none will understand them except those of knowledge*". In the Name of Almighty, The Most Knowledgeable, The Most Beneficent and The Most Merciful Allah SWT.

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