

**PROJECT PERFORMANCE EVALUATION BASED ON MAN POWER  
QUALIFICATION AND SKILL OF SHIPBUILDING  
INDUSTRY IN TERENGGANU**

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QUALIFICATION AND SKILL OF SHIPBUILDING INDUSTRY IN TERENGGANU**

**By**

**MUHAMMAD FAIZ ROSLAN**

**A Thesis submitted in partial fulfillment  
of the requirement for the award of the degree of  
Bachelor of Applied Science (Maritime Technology)**

**DEPARTMENT OF MARITIME TECHNOLOGY  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU  
2012**



**DEPARTMENT OF MARITIME TECHNOLOGY  
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU**

**DECLARATION AND VERIFICATION REPORT  
FINAL YEAR RESEARCH PROJECT**

It is hereby declared and verified that this research report entitled:

**PROJECT PERFORMANCE EVALUATION BASED ON MAN POWER  
QUALIFICATION AND SKILL OF SHIPBUILDING INDUSTRY IN TERENGGANU**

by **MUHAMMAD FAIZ BIN ROSLAN**, Matric No. **UK 17948** have been examined and all errors identified have been corrected. This report is submitted to the Department of Maritime Technology as partial fulfillment towards obtaining the Degree of Applied Science (Maritime Technology), Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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## DECLARATION

I hereby declare that this thesis entitled Project Performance Evaluation based on Man Power Qualification and Skill of Shipbuilding Industry in Terengganu is the result of my own research except as cited in the references.

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## **PROJECT PERFORMANCE EVALUATION BASED ON MAN POWER QUALIFICATION AND SKILL OF SHIPBUILDING INDUSTRY IN TERENGGANU**

### **ABSTRACT**

Local yards are confronted with many issues, including lack of qualified personnel in shipbuilding project to fulfill global demands. Demands for shipping services in the country are rising fast, in tandem with its growing trade. To become competitive shipyard, some aspect must be improved in local shipyard capabilities especially in using qualified man power in shipbuilding project. The objectives of this study are to identify man power qualification and skill in Terengganu Shipyard and to evaluate shipyard project performance based on man power qualification and skills. Methods used in this project have been divided into three main phase which include questionnaire, interview and observation. The survey questionnaire has been divided into several sections which cover the man power qualification and skill and project performance. Interview session was set as a backup method plan if the correspondents are incapable of answering the questionnaire. The observation method has been used to make sure the man power qualification and skill and also performance project per year are validated with respect to the answers in the questionnaire. This study has been identified the man power qualification and skill in Terengganu Shipyards. Then, a set of benchmark have been used in evaluating shipbuilding projects. On the basis of existing condition and future vision, some recommendations have been made which might be useful for accelerating the development of this sector. Status of man power skills still low compare to established shipyards such as from China and USA that have high skilled workers and high technologies in production process. Without initiative to change, the shipyards in Terengganu shall maintain low in performances and productivity of the vessels.

# **PENILAIAN PRESTASI PROJEK BERDASARKAN KEPADA KELAYAKAN DAN KEMAHIRAN TENAGA KERJA DALAM INDUSTRI PEMBINAAN KAPAL DI TERENGGANU**

## **ABSTRAK**

Limbungan kapal tempatan berdepan dengan beberapa isu, termasuk kekurangan tenaga kerja mahir dan projek pembinaan kapal dalam memenuhi keperluan global. Permintaan dalam perkhidmatan perkapalan negara meningkat dengan mendadak, sejajar dengan perkembangan perdagangan. Untuk menjadi limbungan kapal yang berdaya-saing, beberapa aspek perlu ditingkatkan dalam keupayaan limbungan kapal tempatan terutama dalam menggunakan tenaga kerja yang mahir dan berkelayakan dalam projek pembinaan kapal. Objektif utama kajian ini adalah untuk mengenal pasti kelayakan dan kemahiran tenaga kerja dalam limbungan kapal di Terengganu dan untuk menganalisa prestasi projek berdasarkan kemahiran dan kelayakan tenaga kerja. Kaedah yang telah digunakan dalam kajian ini akan dibahagikan kepada tiga fasa utama; soal selidik, temu bual dan pemerhatian. Fasa pertama adalah soal selidik atau kaji selidik. Kaji selidik telah dipecahkan kepada beberapa bahagian dimana akan merangkumi kelayakan dan kemahiran tenaga kerja dan prestasi projek. Temu bual telah dilakukan jika responden gagal menjawab soal selidik yang dijalankan. Pemerhatian juga digunakan untuk memastikan kelayakan dan kemahiran tenaga kerja dan juga prestasi projek setiap tahun adalah sah dan memenuhi jawapan dalam borang soal selidik. Kajian telah dilakukan di limbungan perkapalan di Terengganu dan telah mengenalpasti kelayakan dan kemahiran tenaga kerja. Justeru itu, penendarasan akan digunakan dalam menilai prestasi projek pembinaan kapal. Atas dasar keadaan yang sedia ada dan visi masa depan, beberapa cadangan telah dibuat yang mungkin berguna untuk mempercepatkan pembangunan sektor ini. Status kemahiran tenaga kerja masih rendah berbanding dengan limbungan kapal terkemuka seperti di China dan Amerika Syarikat yang mempunyai kemahiran pekerja yang tinggi dan teknologi yang tercanggih dalam proses pengeluaran. Ini akan menjadikan limbungan kapal di Terengganu masih rendah dalam prestasi dan produktiviti kapal.