

**MOHD.SUHAIMI BIN SHAMSUDDIN**

**DOCTOR OF PHILOSOPHY**

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**A STUDY OF BEST PRACTICES PRINCIPLES  
AMONG JOB SHOP MANUFACTURING SMEs  
IN MALAYSIA**

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AMONG JOB SHOP MANUFACTURING SMEs IN  
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**MOHD.SUHAIMI BIN SHAMSUDDIN**

**Thesis Submitted in Fulfillment of the  
Requirement for the  
Degree of Doctor of Philosophy in the  
School of Maritime Business and Management  
Universiti Malaysia Terengganu**

**JANUARY 2016**

## DEDICATION

This thesis is expressly dedicated to the memory of my father, Haji Shamsuddin bin Ibrahim, who let us with the most precious asset in life, knowledge. I know that he would be the happiest father in the world to know that his son has successfully completed his thesis. May Allah places his soul among the righteous; and to my mother, Hajjah Zaharah Binti Abdullah, for her continuous blessings and prayers and whose love and guidance throughout my life can never be repaid.

Secondly, I dedicate this thesis to my family members, my two wonderful cheerleaders, Farah Nabila and Farisa Najwa, my handsome bodyguard, Muhammad Faris Nakimi and especially to my beloved wife, Fadzlina Binti Halim for your endless support, love, understanding, and sacrifice. Thank you for your continued encouragement and be my life and my inspiration.

## ABSTRACT

Abstract of thesis presented to the Senate of Universiti Malaysia Terengganu in fulfilment of the requirement for the degree of Doctor of Philosophy

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**JANUARY 2016**

**Main Supervisor : Professor Mohd Shaladdin bin Muda, Ph. D**

**Co-Supervisor : Associate Professor Ismail bin Omar  
: Muhammad Shahar bin Jusoh, Ph. D**

**School : School of Maritime Business and Management**

Small and Medium Enterprises, the main Malaysian economic contributor are struggling to identify the best practice compatible with their environment. Despite lots of previous research suggest that appropriate best practice procedures are contingent upon company type, none of this research has tried to develop a principle or model for this sector. This paper tries to prescribe the factors which pertinent to the best practices among Malaysian job-shop manufacturing SMEs based on a mix-model approaches and Rasch analysis. The research began with qualitative approach, where selected SMEs being approached in Kedah and Terengganu together with an intensive desk research. The outcome of this part is used to develop the questionnaire for the quantitative part. The respondent for the quantitative part came from Job-shop type manufacturing SMEs throughout Peninsular Malaysia. Data from quantitative part was analysed using PASW 18 software (normal statistic approach) and Winsteps (Rasch model approach). The

outcomes, then are used to develop the principles to help Malaysian enterprises to craft their own “best practice” in order to achieve their vision. The results revealed that all of the twelve (12) items identified in 5 localities focus or characteristics, are significant to help enterprises in crafting their own practice, and is compiled in four (4) general principles, namely; Principle 1: Integrate the functions of quality system and codification in all process; Principle 2: Design for competitiveness; Principle 3: Improve flexibility in operation flow; and Principle 4: Promote good relationship with stakeholder.

## ABSTRAK

Abstrak tesis yang dikemukakan kepada Senat Universiti Malaysia Terengganu sebagai memenuhi keperluan untuk ijazah Doktor Falsafah.

### **KAJIAN KE ATAS PRINSIP AMALAN TERBAIK DI KALANGAN INDUSTRI KECIL DAN SEDERHANA BERASASKAN PEMBUATAN ATAS PERMINTAAN**

**MOHD.SUHAIMI BIN SHAMSUDDIN**

**JANUARI 2016**

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**Pusat Pengajian : Pusat Pengajian Perniagaan dan Pengurusan Maritim**

Perusahaan Kecil dan Sederhana merupakan penyumbang ekonomi utama Malaysia, bergelut untuk mengenal pasti konsep amalan terbaik yang serasi dengan persekitaran mereka. Walaupun terdapat kajian terdahulu yang merumus prosedur amalan terbaik yang bersesuaian bergantung pada jenis syarikat, tiada satupun kajian cuba mengenegahkan prinsip atau model bagi sektor ini. Tesis ini cuba menentukan faktor-faktor yang berkaitan dengan amalan terbaik di kalangan sektor pembuatan perusahaan kecil dan sederhana di Malaysia, menerusi pendekatan model campuran dan analisis Rasch. Kajian ini bermula dengan pendekatan kualitatif di mana PKS terpilih di Kedah dan Terengganu didekati serta disokong dengan penyelidikan sorotan secara intensif. Dapatan daripada bahagian pertama kajian, diguna-pakai untuk membangunkan soal

selidik bagi bahagian kuantitatif. Responden di bahagian kuantitatif datang dari PKS jenis pembuatan atas permintaan, di seluruh Semenanjung Malaysia. Data dari bahagian kuantitatif ini, dianalisis menggunakan perisian PASW 18 (pendekatan statistik biasa) dan Winsteps (pendekatan model Rasch). Hasil kajian, kemudiannya digunakan untuk membangun prinsip-prinsip yang mampu membantu syarikat Malaysia mencipta "amalan terbaik" mereka sendiri bagi mencapai wawasan yang ditetapkan. Hasil kajian menunjukkan bahawa kesemua dua belas (12) pekara yang dikenal pasti dalam 5 fokus lokaliti atau faktor, adalah penting untuk membantu syarikat dalam mencorak amalan mereka sendiri dan disusun dalam empat (4) prinsip umum dikenali sebagai; Prinsip 1: Penyatuan fungsi sistem kualiti dan pengendalian dalam semua proses; Prinsip 2: Rekabentuk untuk persaingan; Prinsip 3: Meningkatkan keanjalan dalam aliran operasi; dan Prinsip 4: Menggalakkan hubungan baik dengan semua pihak..