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Name of Degree: **Ph.D.**

Title of Thesis (“this Work”):

“The Implementation of Total Quality Management (TQM) In Oil and Gas Industry In Indonesia”

Field of Study: **Total Quality Management (TQM)**

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ABSTRACT

The changing environment in an organization is forcing the organization itself to find a plan of an integrated management framework and an adequate performance measurement. Failure in planning means planning a failure of an organization. Finding out the critical factors of quality management practices (QMP), the mediation of the contextual factors (world-class company practice or WCC, operational excellence practice or OE, company non financial performance or CNFP), and company financial performance or CFP is becoming the way that would facilitate the sustainability of TQM implementation model.

This empirical study is aimed to assess how TQM (Total Quality Management)—a holistic management philosophy integrating improvement strategy, management practices, and organizational performance initially developed by W. Edward Deming—is specifically implemented in Oil and Gas companies operating in Indonesia. Some relevant literatures related to the TQM, world-class performance in operations (world-class company and operational performance), company performance (financial and non financial), and the amendment of law of the Republic of Indonesia concerning oil and gas; and how the oil and gas industry in Indonesia develops sustainable competitive advantage and sustainable development program are reviewed in detail since they could strengthen and assist the process of the study.

This study is an explanatory study (a quantitative research approach); based on a questionnaire mail survey, e-mail survey, and interview to the top level, middle level, and low level managers at the strategic business unit (SBU) in the oil and gas companies. The analyzed data collected from the structured questionnaire and hypotheses (quantitative

research method) in this study involve two major steps, namely the data reduction process using factor analyses and the structural relations analyses using structural equation modeling (SEM).

The findings obtained from data analyses of this study reveal that there is a strong positive relationship between quality management practices and company financial performance through three mediating effects of world-class company practice, operational excellence practice, and company non financial performance. Contributions from this study will be from three sources. *Firstly*, previous literature primarily focuses on the relationships between specific dimensions of critical factors of TQM and company financial performance with little consideration given to the contextual factors such as world-class company practice, operational excellence practice, and company non financial performance. *Secondly*, this study looks on how critical factors of quality management practices affect the company financial performance through the mediating variables of world-class company practice, operational excellence practice, and company non financial performance. *Thirdly*, this study has contributed to the knowledge of TQM by identifying the constructs associated with a comprehensive TQM implementation model, developing scales for measuring these constructs, and empirically validating the scales. More importantly, the ability of SEM technique to assess the structural relations comprehensively of the TQM implementation model has provided a transition from exploratory to confirmatory analysis (Bollen, 1989 cited in Curkovic et al., 2000).

Keywords: *Quality management practices, World-class company practice, Operational excellence practice, Company performance, Oil and gas industry, Indonesia*

ABSTRAK

Perubahan suasana di dalam organisasi adalah melalui cara organisasi itu sendiri melakukan perancangan rangka pengurusan bersepadu dan pengukuran prestasi yang mencukupi. Kegagalan dalam perancangan bermaksud merancang kegagalan organisasi itu sendiri. Mencari faktor-faktor kritikal di dalam praktis pengurusan kualiti atau *Quality Management Practices* (QMP), hubungan faktor-faktor secara konteks (*world-class company practice or WCC, operational excellence practice or OE, company non financial performance or CNFP*), dan prestasi kewangan syarikat (*company financial performance or CFP*) menjadi langkah yang boleh melengkapkan keberkesanan penerapan model TQM.

Kajian ini adalah bertujuan untuk menilai bagaimana TQM atau *Total Quality Management* - strategi filosofi pengurusan penambahbaikan bersepadu, praktis dan prestasi pengurusan secara menyeluruh yang dibangunkan W. Edward Deming - yang secara khusus di implementasikan di dalam syarikat cari gali minyak dan gas yang beroperasi di Indonesia. Beberapa kajian yang berkaitan dengan TQM, operasi berprestasi kelas dunia (*world-class company and operational performance*), prestasi syarikat (secara kewangan dan bukan-kewangan), dan perubahan undang-undang negara Republik Indonesia berkaitan bahan mentah minyak dan gas; dan bagaimana industri galian minyak dan gas di Indonesia membina kelebihan kompetitif dan program pembangunan yang mapan, akan diteliti dan dibahas secara mendalam memandangkan ianya dapat membantu dan menguatkan proses kajian ini.

Kajian ini adalah kajian penjelasan (pendekatan kajian kuantitatif); berdasarkan survey melalui emel dan *questionnaire*, temuduga dengan pegawai atasan, menengah dan bawahan, pengurusan di dalam *strategic business unit* (SBU) syarikat. Data-data yang telah

diperoleh dan dianalisis dari *questionnaire* dan hipotesis dalam kajian ini melibatkan dua langkah utama iaitu proses pengurangan data menggunakan analisis faktor dan analisis berkaitan struktur menggunakan model struktur persamaan atau *structural equation modeling* (SEM).

Hasil dari data analisis yang dijalankan di dalam kajian ini menemukan bahawa terdapat hubungan positif yang kuat diantara praktis pengurusan kualiti dan prestasis kewangan syarikat melalui tiga efek hubungan praktis pengurusan kelas dunia, praktis keberkesanan operasi dan prestasi *non-financial* syarikat. Manfaat dari kajian ini dapat dikategorikan ke dalam 3 jenis sumber. **Pertama**, sumber kajian terdahulu yang secara utama memberi fokus terhadap hubungan antara dimensi faktor kritikal TQM dan prestasi kewangan syarikat yang khusus dengan sedikit pertimbangan diberikan terhadap faktor secara konteks seperti praktis pengurusan kelas dunia, praktis keberkesanan operasi dan prestasi *non-financial* syarikat. **Kedua** adalah kajian ini melihat bagaimana faktor kritikal praktis pengurusan kualiti mempengaruhi prestasi kewangan syarikat melalui hubungan faktor diantara praktis pengurusan kelas dunia, praktis keberkesanan operasi dan prestasi *non-financial* syarikat. **Ketiga** adalah kajian ini telah memberi sumbangan terhadap ilmu pengetahuan TQM dengan mengenalpasti teori yang berkaitan dengan implementasi model TQM yang komprehensif, membangunkan skala-skala untuk mengukur teori-teori atau idea-idea ini dan membuktikan skala-skala ini secara empirikal. Lebih penting lagi, keupayaan teknik SEM dalam menilai struktur hubungan implementasi model TQM secara komprehensif telah menghasilkan transisi dari analisis secara eksplorasi kepada konfirmasi (Bollen, 1989 dipetik dari Curkovic *et al.*, 2000).

Keywords: *Quality management practices, World-class company practices, Operational excellence practices, Company performance, Oil and Gas industry, Indonesia*

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Allaah SWT., Prophet Muhammad SAW.

Amar Ma'ruf, Nahi Munkar
“Promote the good and prevent the bad”

Dedicated to my family:

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H. Sugeng Abdullah II
H. Samirin
Dyah Permana Cahyani
Sylvano Akbariansyah Cahyacipta
Yurivani Amanda Bonita
Pipien Pinarsih Soenarto II
Yanuar Fitriaji II
Priyo Pujiwasono II
Imam Hidajat Soenarto II
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Anang Muljanto, My Brother
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