UNIVERSITI PUTRA MALAYSIA

THE EFFECT OF ORGANIZATIONAL CONTEXT ON QUALITY MANAGEMENT IN SMALL AND MEDIUM SCALE ENTERPRISES OF PAKISTAN

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By

ABDUL NAVEED TARIQ

Thesis Submitted in Fulfilment of the Requirement for the Degree of Doctor of Philosophy in the Graduate School of Management, Universiti Putra Malaysia

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UPM

DEDICATING THE FRUITS OF THIS STUDY
TO MY BELOVED PARENTS, BROTHER AND SISTER
WHOM I MISSED SO MUCH
DURING THIS STAY
AWAY FROM THEM

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

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Chairman: Professor Mohd. Zain Mohamed, Ph.D.

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Most of the literature available on quality management (QM) and ISO 9000 in Pakistan is in the form of case studies, conceptual papers, descriptions and prescriptions. The main focus of the study was to identify critical factors for effective implementation of Total Quality Management (TQM) and ISO 9000 certification, so that by managing these critical factors of QM, SMEs of Pakistan could flourish in a competitive world market. This research was an empirical attempt to investigate the relationship between organisational quality context (OQC) and level of quality management (LQM), using data from 94 Small and Medium Scale Enterprises (SMEs). Sample constituted 32 sports, 31 leather, and 30 surgical SMEs while one enterprise was involved in both sports and leather goods manufacturing.

The Chronbach's coefficient alpha and confirmatory factor analysis (CFA) were used to measure the internal consistency, reliability, and validity of the six main

constructs of the measuring instrument. Descriptive statistics and Pearson-coefficient of correlation gave a feel of the data that further helped to examine the current status of the SMEs towards their OQC.

The results indicated that the entrepreneurs were not well aware of the basic concepts of QM and ISO 9000 certifications. Similarly, it was found that the financial position of the SMEs was not good, however, the entrepreneurs were supportive to get ISO 9000 certification for their enterprises despite their poor financial position. Furthermore, descriptive statistics indicated that entrepreneur's perceptions towards the government assistance program (GOVT) to overcome financial constraints (GOVTF) and to increase awareness about QM and ISO 9000 certification (GOVTA) among the SMEs of Pakistan were very poor. Data were further analysed using structural equation modelling (SEM), multiple regression analysis and one-way analysis of variance (ANOVA) techniques. Using SEM, four competing models were developed based on the theoretical framework. Comparison of these competing models illustrated that management commitment (COM) was the most important factor affecting LQM in SMEs which was also supported by the findings from the multiple regression analysis, while COM was significantly affected by the financial position of the SMEs (FINAN), and GOVT. Results of one-way ANOVA indicated that the age of the SMEs and the process of ISO 9000 certification were the two significant factors affecting LQM. In other words the older the firm higher the LQM. Similarly, the SMEs at the advance stages of getting ISO 9000 certification were having better LQM as compared to those with no certification or those at initial stages of the process of certification.

Overall findings revealed that OQC had a significant impact on LQM in SMEs. Research presented the outcomes in the form of an implementation framework, constructed through the use of practical guidelines, the key steps of which have been validated and supported empirically. This empirical study suggested that knowledge of OQC is useful for explaining and predicting quality management practices (QMPs). This study is the first empirical attempt at studying QM in SMEs (leather, sports and surgical) of Pakistan and would be a step further in synthesising the theory of QM and also a good contribution to the existing literature on QM and ISO 9000 certification in SMEs of developing economies.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

KESAN KNOTEK ORGANISASI KE ATAS PENGURUSAN KUALITI DALAM INDUSTRI KECIL DAN SEDERHANA DI PAKISTAN

Oleh

ABDUL NAVEED TARIQ

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Sekolah Pengajian Siswazah Pengurusan

Kebanyakan bahan literatur yang ada mengenai pengurusan kualiti (QM) dan ISO 9000 di Pakistan adalah dalam bentuk kajian kes, kertas berdasarkan konsep, huraian dan preskripsi. Fokus utama kajian ini adalah untuk mengenalpasti faktor-faktor kritikal bagi melaksana Pengurusan Kualiti Total (TQM) dan pensijilan ISO 9000 dengan berkesan dengan mengenalpasti faktor-faktor pengurusan kualiti (QM) agar Perusahaan Kecil dan Sederhana (SMEs) Pakistan boleh berjaya dan berkembang maju dalam pasaran dunia yang kompetitif. Penyelidikan ini adalah satu usaha empirik untuk mengkaji perhubungan antara konteks kualiti organisasi (OQC) dan peringkat pengurusan kualiti (LQM) menggunakan data dari 94 SMEs. Sampel terdiri dari 32 SMEs dari sub-sektor barangan sukan, 32 SMEs dari sub-sektor barangan kulit dan 30 SMEs dari sub-sektor peralatan pembedahan atau surgeri, manakala satu perusahaan melibatkan kedua-dua sub-sektor pengeluaran barangan sukan dan kulit.

Alfa koefisien Chronbach serta faktor analisis kepastian (CFA) telah digunakan untuk mengukur konsistensi dalaman, realibiliti dan kesahan enam konstruk yang terdapat dalam alat pengukuran. Statistik deskriptif dan koefisian korelasi-Pearson telah memberi gambaran awal terhadap data yang kemudiannya membantu dalam pemeriksaan status semasa SMEs ke arah konteks kualiti organisasi (OQC).

Hasil kajian menunjukkan bahawa usahawan-usahawan tidak menyedari tentang konsep asas QM dan pensijilan ISO 9000. Didapati bahawa kedudukan kewangan SMEs adalah tidak begitu baik. Walau bagaimanapun, usahawan-usahawan tersebut bersedia membantu perusahaan mereka untuk mendapatkan pensijilan ISO 9000 walaupun kedudukan kewangan perusahaan mereka lemah. Malah, statistik deskriptif menunjukkan bahawa persepsi usahawan-usahawan terhadap program bantuan kerajaan (GOVT) untuk mengatasi masalah kewangan yang terdesak (GOVTF) dan untuk meningkatkan pengetahuan mereka terhadap program-program kesedaran kerajaan (GOVTA) di kalangan SMEs Pakistan adalah sangat lemah. Data seterusnya telah dianalisis menggunakan pemodelan persamaan berstruktur (SEM), analisis regrasi pelbagai dan teknik-teknik analisis varians sehala (ANOVA). Dengan menggunakan SEM, empat model bersaing telah dibina berdasarkan rangka kerja teoretikal. Perbandingan model bersaing ini menunjukkan bahawa komitmen pengurusan (COM) adalah faktor yang paling penting mempengaruhi LQM dalam SMEs yang juga disokong oleh hasil yang didapati dari analisis regrasi pelbagai. Manakala komitmen pengurusan dipengaruhi secara signifikan oleh kedudukan kewangan SMEs (FINAN) dan program bantuan kerajaan (GOVT). Hasil ANOVA sehala menunjukkan bahawa umur SMEs dan proses

pensijilan ISO 9000 adalah dua faktor nyata yang mempengaruhi LQM. Dengan kata lain, lebih lama sesuatu firma itu beroperasi, lebih tinggi LQMnya. Begitu juga dengan SMEs yang berada di peringkat yang lebih ke hadapan dalam proses mendapatkan pensijilan ISO 9000 mempunyai LQM yang lebih baik berbanding dengan SMEs tanpa pensijilan atau yang hanya berada pada peringkat awal dalam proses pensijilan.

Keseluruhan hasil penyiasatan mendedahkan bahawa terdapat suatu kesan OQC yang signifikan pada LQM dalam SMEs. Penyelidikan telah mengemukakan hasil dalam bentuk rangka kerja pelaksanaan, yang dibina melalui garis panduan praktikal dan langkah-langkah utama yang mana telah disahkan dan disokong secara empirik. Kajian ini mencadangkan bahawa pengetahuan OQC adalah berguna bagi menjelaskan dan menjangka amalan-amalan pengurusan kualiti di dalam organisasi. Kajian ini merupakan penyelidikan empirik yang pertama yang cuba mengkaji QM di kalangan SMEs (dari sektor barangan atau peralatan kulit, sukan dan surgeri) di Pakistan. Ianya merupakan satu langkah kehadapan untuk mensintesis teori QM dan ianya telah dapat memberi sumbangan yang berguna kepada literatur yang berkaitan dengan QM dan pensijilan ISO 9000 di kalangan SMEs daripada negara-negara membangun. Secara ringkas, kajian ini mengandungi kedua-dua perspektif penyelidikan iaitu dari segi teori dan amalan.

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LIST OF ABBREVIATIONS

QMS	Quality Management System
QM	Quality Management
IQM	Integrated Quality Management
TQM	Total Quality Management
OQC	Organisational Quality Context
QMPs	Quality Management Practices
SPC	Statistical Process Control
TQ	Total Quality
SQC	Statistical Quality Control
PIQC	Pakistan Institute of Quality Control
SMEDA	Small and Medium Enterprises Development Authority
CFA	Confirmatory Factor Analysis
LQM	Level of Quality Management