

CEM-515 Project Quality Management

Empirical Study: “Critical Success Factors (CSFs) of TQM implementation in Saudi Arabian Industries”

Presented to:

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Presentation Outline

- ❑ Reasons of Selecting Empirical Study's Topic
- ❑ Previous Empirical Studies' Overview
 1. **India**
 2. **UK**
 3. **Palestine**
- ❑ Objective of Proposed Empirical Study
- ❑ Proposed Research Methodology
- ❑ Proposed Questionnaire & Data Collection
- ❑ Expectations From Empirical Study

Reasons of Selection

Empirical Study: “**Critical Success Factors (CSFs) of TQM implementation in Saudi Arabia Industries**”

1. The increasing acceptance of TQM as a Management Philosophy for improving organizational competitiveness and effectiveness **left development of empirical research behind**. The problem is much more apparent in the developing countries where knowledge of TQM is in the very early stages.
2. Although TQM is a proven approach for success in manufacturing, services and the public sector, **several organizations failed in their campaigns** because of many reasons like lack of top management commitment, ignoring customers etc.

Previous Empirical Studies' Overview

First Article: **An Instrument for measuring TQM implementation in manufacturing-based business units in India**

Objective: Describes an empirical research on the development of an instrument for TQM implementation in business units in India

Author(s): F. Joseph, C. Rajendran, I. Kamalanabhan

Journal: International Journals of Production Research

Year: July 1999 **Volume:** 37 **Number:** 10 **Page:** 2201 - 2215

Methodology: Undertakes a thorough and detailed analysis of the literature and 111 measures were identified to develop a questionnaire. These items were empirically tested by data collected from 50 companies

Previous Empirical Studies' Overview

First Article: **An Instrument for measuring TQM implementation in manufacturing-based business units in India**

Analysis: **Identifies as a result, Nine Prime Factors affecting the implementation of TQM:**

Organizational Commitment	Quality Information System
Human Recourses Management	Technology Utilization
Supplier Integration	Operating Procedures
Quality Policy	Training
Role of Quality Department	

Previous Empirical Studies' Overview

Second Article: **Factors affecting the implementation and success of TQM**

Objective: Provides an empirical study on the critical success factors (CSFs) of TQM implementation in UK industries
Author(s): Robin Mann, Dennis Kehoe
Journal: International Journal of Quality & Reliability Management

Year: Feb 1995 Volume: 12 Issue: 1 Page: 11 - 23
Methodology: Questionnaires and structured interviews, involving the participation of over 200 companies, were used as the main tools for the investigation

Previous Empirical Studies' Overview

Second Article: **Factors affecting the implementation and success of TQM**

Analysis: **Identifies as a result, Seven Prime Factors affecting the implementation of TQM:**

Process Factors	Organizational Structure
Type of Employees	Number Of Employees
Shared Values	Industrial Relations
Management Style	

Previous Empirical Studies' Overview

Third Article: **Empirical Study of Critical Factors of TQM in Palestinian organizations**

Objective: Provides an empirical study on the critical success factors (CSFs) of TQM implementation in Palestinian organizations
Author: Samir Baldoun
Journal: Logistics Information Management

Year: 2003 **Volume:** 16 **Number:** 2 **Page:** 156 - 171

Methodology: Undertakes a thorough and detailed analysis of the literature and 31 success factors were identified to develop a questionnaire. These items were empirically tested by data collected from 78 companies in Palestine

Previous Empirical Studies' Overview

Third Article: Empirical Study of Critical Factors of TQM in Palestinian organizations

Analysis: Identifies as a result, 16 Prime Factors affecting the implementation of TQM:

Benchmarking	Top Management Commitment	Reward and Recognition	Supplier Management
Cost of Quality	People Management	Teamwork	Accredited Quality Management System
Quality control techniques	Middle Management Involvement	Quality Policy and Strategy	Organizing for Quality
Measuring Customer Satisfaction	Training and Education	Communicating for Quality	Managing by Process

Previous Empirical Studies' Overview

Author	Critical success factors for TQM implementation
Saraph <i>et al.</i> (1989)	<ol style="list-style-type: none"> 1. Top management leadership 2. Role of the quality department 3. Training 4. Product design 5. Supplier quality management 6. Process management 7. Quality data reporting 8. Employee relations
Black and Porter (1996)	<ol style="list-style-type: none"> 1. People and customer management 2. Supplier partnerships 3. Communication of improvement information 4. Customer satisfaction orientation 5. External interface management 6. Strategic quality management 7. Teamwork structures for improvement 8. Operational quality planning 9. Quality improvement measurement systems 10. Corporate quality culture
Tamimi (1998)	<ol style="list-style-type: none"> 1. Top management commitment 2. Supervisory leadership 3. Education 4. Cross functional communications to improve quality 5. Supplier management 6. Quality training 7. Product/service innovation 8. Providing assurance to employees
Joseph <i>et al.</i> (1999)	<ol style="list-style-type: none"> 1. Organisational commitment 2. Human resources management 3. Supplier integration 4. Quality policy 5. Role of quality department 6. Quality information systems 7. Technology utilisation 8. Operating procedures 9. Training

Table II.
Analysis of common
CSFs extracted from
researchers

Objectives of Proposed Empirical Study

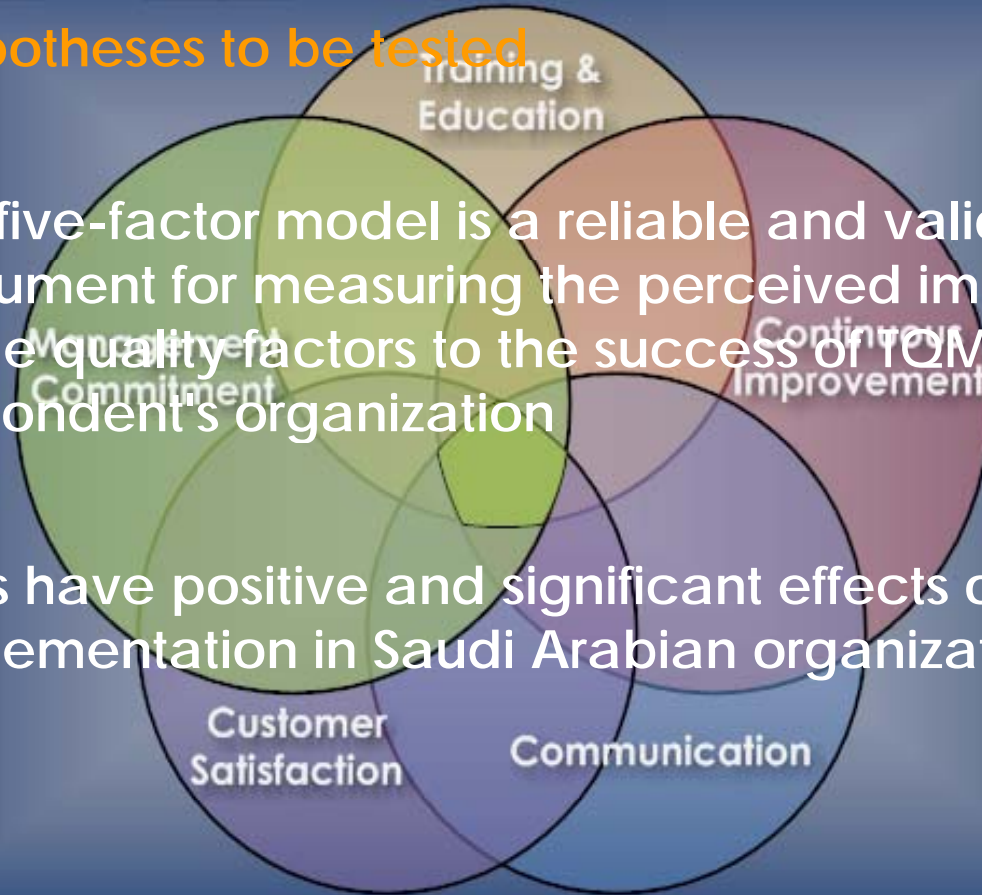
- ❑ Primarily identifying critical quality factors by interpreting consensus amongst Eastern Providence TQM organizations as to level of perceived importance of each of Five quality factors required for success of TQM implementation in their organizations
- ❑ Secondly stratifying factors in a descending order of criticality

Proposed Research Methodology

- ❑ Common CSFs extracted from previous researchers

5 CSF to TQM Success:

- ❑ Hypotheses to be tested
 1. The five-factor model is a reliable and valid instrument for measuring the perceived importance of the quality factors to the success of TQM in the respondent's organization
 2. CSFs have positive and significant effects on TQM implementation in Saudi Arabian organizations



Proposed Questionnaire & Data Collection

- ❑ Questionnaire will be targeted those organizations which have already registered to ISO quality management system standards
- ❑ Questionnaire will be sent to the managing directors/general managers/ quality managers of these companies
- ❑ The level of measurement used in the survey questionnaire is a three-point ordinal scale with critical, important, and minor important as categories
- ❑ Frequency Distribution will be the most appropriate for data analysis
- ❑ Drop-off and pick-up method, commonly employed by researchers conducting surveys will be used in gathering the data

Proposed Questionnaire & Data Collection

List of 5 CSFs with 34 questionnaire items was designed based on *Map*

Source: Critical success factors of TQM implementation in Hong Kong industries

Author(s): Jiju Antony, Kevin Leung, Graeme Knowles, Sid Gosh

Journal: International Journal of Quality & Reliability Management

Year: Aug 2002 Volume: 19 Issue: 5 Page: 551 - 566

Expectations From Empirical Study

In accordance with thorough and detailed analysis of the literature, it might be concluded with

1. Management commitment will be the most important factor for the successful implementation of TQM. Management involvement and their total participation in necessary to lead and facilitate the implementation
2. Communication will appear as the second most critical success factor, which reflects those organizations have a relatively open culture
3. Training and Education will be the third most important success factor. Those companies which have spent a huge effort and investment on the development of employees and teamwork. Trained employees would contribute to the success of the business

Empirical Study: “Critical Success Factors (CSFs) of TQM implementation in Saudi Arabian Industries”

Thank You

