# THE TOTAL QUALITY MANAGEMENT PRACTICES IN YEMENI PUBLIC UNIVERSITIES

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A thesis submitted in fulfillment of the requirement for the award of the Degree of Master of Science in Technology Management

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# **DEDICATION**

I dedicate this thesis to my beloved father, my beloved mother, and my beloved grandfathers who have always supported me in all stages of life, and my success in life, is always their dream.

I would like to dedicate this thesis to my beloved wife for her patience all through my studies, and for her support all through life for achieving my goals. Her help and her belief in me always had been my motivation. I also would like to dedicate this thesis to my brothers, Abdulmalik, Saif, Mohammed, and Saleh, my sisters, my uncles, and all my family members for the support, encouragement and patience.



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#### **ABSTRACT**

There is a mutual relationship between the prosperity of a nation and the quality of education it provides to its people. Quality education improves standard of living of people by enhancing the performance of engines of economic development. This study focuses on the practice and application of Total Quality Management (TQM) in Yemeni universities. A questionnaire was developed after a careful and thorough review of the related literature and consultations with experts. The questionnaire was administered to universities academy staff. The study was performed based on a survey method for collecting data. A total of 262 questionnaires usable surveys were received. Correlation Pearson, t-test, One-way ANOVA were applied to analysis the gathered data from the questionnaire. The data were analyzed using computer-mediated (Statistical Package for Social Sciences) (SPSS). According to the analysis of TQM made in Yemen universities using statistical methods; Cronbach Alpha was high enough to a value of 0.96. Unfortunately, the Yemeni public universities have low turnout of TQM practice.



#### **ABSTRAK**

Terdapat saling berkait antara kemakmuran Negara dan kualiti pendidikan yang disediakan pada penduduk. Pendidikan berkualiti akan meningkatkan taraf hidup rakyat melalui peningkatan prestasi pembangunan ekonomi. Kajian ini memberi tumpuan kepada amalan dan penggunaan Pengurusan Kualiti Menyeluruh (TQM) di universiti-universiti di Yaman. Soal selidik telah dibangunkan melalui ketelitian kajian semula terhadap sorotan dan perundingan dengan pakar-pakar berkaitan. Soal selidik telah diberikan kepada kakitangan akademik universiti. Kajian ini dilakukan berdasarkan kaedah kaji selidik untuk pengumpulan data. Sejumlah 262 soal selidik telah diterima. Korelasi Pearson, ujian t, "Satu hala ANOVA" telah digunakan untuk menganalisis data yang dikumpul daripada soal selidik. Data dianalisis menggunakan perisian (Pakej Statistik untuk Sains Sosial) (SPSS). Menurut analisis TQM yang dibuat di universiti Yaman menggunakan kaedah statistik Cronbach Alpha adalah cukup tinggi dengan nilai 0.96. Hasil depatan menunjkkan universiti awam di Yaman mempunyai kadar amalan rendah terhadap TQM.



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#### **CHAPTER 1**

# **INTRODUCTION**

### 1.1 Introduction

Arab societies are currently experiencing many changes in various areas of life that requires corporate and private organizations to change their traditional administration and management styles. Thus, it is required that each organization adopt modern management concepts if they desire to achieve their objectives more readily. These changes will increase their competitive edge in the global inter-institutional productivity and rapid technological development in the world in various areas, particularly in communications, computer and laser technologies. Further, this could strengthen economic relationship and interdependencies among neighboring states which could be a factor responsible for the positive advancement of the previously non-industrially developed nations like Malaysia, Taiwan, Philippine, and Indonesia to a developed one.

Some possible application of such development could result into merger or complete acquisition of one company by another, bearing in mind the respective social changes within and without the organizations, the social changes that have occurred in the values, principles and lifestyles of individuals. This requires the development and promotion of scientific research, building of qualified human capital in various areas of social sciences and community leadership.

However, this could only be achieved with scientific and educational functioning institution according to the requirements and needs of the community in which they operate.

Clearly, education is a set of operations being conducted for the training and development of knowledge, skills and thinking of the individual through the various educational institutions to the individual duties to themselves and to the community in which they live (*Al-Khfaji*, 1995).

It is not any education, because education creates the required individual and society to the reality and dynamics of the technological revolution and the rapid change era. These vast amounts of knowledge are needed for the organization rapidly and continuously, due to the flow of information and identify the ways to use them, in order to progress towards development (*Jolie*, 2002).

At this moment, universities are the symbol of renaissance of the people and nation, and address of the greatness in culture and advancement. This axis has an essential place of cultural life in the comprehensive sense, and the dimensions of intellectual, literary, scientific and technological development.

Higher education institutions and management are no longer hardware and accountable institutions and fiduciaries for cultural heritage to be transferred to younger generations. It also have become a player in the development of knowledge and the development of the community and development and assist in meeting the challenges in political and economic difficulties together with social and cultural rights. This is imposed on higher education institutions working to change its ways of administrative and educational facilities, if they are to achieve their objectives efficiently and effectively (*Al-Mallah*, 2005).

Improving the performance of higher education institutions is a global concern in all countries in the world. Among the most important characteristics that distinguish a community from other communities, is its ability to manage institutions and vital programs, not only effectively and efficiently, but fairly innovative. Linked to the size and quality of services in the founder in higher education systemmanaged, those make the university a letter Compass movement through the guidelines and university ethics. Any success of its founder, is a success in its management, hence the importance of management's commitment to higher education institutions to improve the overall philosophy constantly in order of arrival

to TQM in universities, which need the participation of all to ensure survival and continuity of Universities (*Al-Khatib*, 2000).

It supports the field of quality in higher education institutions on an integrated system of educational information and education within each university. On the other hand, an Interdisciplinary Study to identify the best methods to apply the principles of total quality after a diagnosis of the status and knowledge shortcomings and work to address them to gain access to better, brighter future for generations to come. Thus, Total Quality Management performance evaluation is the most important entrances to the university entrance Total Quality Management.

A set of standards and procedures designed and implemented by the introduction of continuous improvement (TQM) in the product, taking into consideration that these actions are not limited to an individual without the other in the institution, not a job without the other, but all the elements of physical and human resources in the enterprise Educational (*Jeryes*, 2004).

In modern management philosophy, based on a number of (TQM) definition, is a comprehensive quality management concept of modern management-oriented, which is based on the combination of management tools, the efforts innovation, and specialized technical skills in order to improve the level of performance and improvement and ongoing development (*Al-Khatib*, 2000).

The beginning of many of the administrative institutions in the application of this concept to improve the quality of its services, assistance in the face of difficult challenges, and gaining the satisfaction of society, has made the administrative institutions great success following the implementation of this concept especially in some countries, such as Japan, United States, France and Britain. The concept of Total Quality Management has impacted the administrative role by the achievements of this new type of tangible successes in the department and the description of this concept as the revolutionary wave after the third industrial revolution, the revolution of computers (*Al-Saoud*, 2002).

The success of management based on industry has provoked the question about the applicability of quality in education and Edward Deming has pointed to the need leading to TQM. The introduction of TQM in education, viewed as a system for quality processes in education, and continuous improvement in the educational process - learning (*Al-Musawi*, 2003).

The attention to quality management in education does not mean that he plans to make the education institutions, especially universities, businesses, or industrial plan to double the profits to improve their products, but, what should be benefited from the entrance of the Total Quality Management in education. In purpose to develop the methods, one need to achieve educational quality of the product, and in order to double the benefit the beneficiary, first of all is the educational efforts, then the community of all its institutions, and groups, and individuals in the filed of education. This will spark competition among universities in order to achieve the best results (*Alawnah*, 2004).

The Quality is a relative phenomenon related to and rooted in educational institutions, and differs from one institution to another in many ways. Whether the institution uses the principles of Total Quality Management or other trends, it is imperative that there is a link between the principles of Total Quality Management on one hand, and organizational culture of your organization on the other. Not coming to this workshop to take root successfully, but Total Quality Management of the leader in the organization is important for the Total Quality Management to be successful. Within the campus, the university presidents have to cling to the possibility of its application, and not idiomatic meaning, but they should also, work on the preparation of the implementation of TQM management brilliant setting to take place in the appropriate academic environment (*Badah*, 2003).

The researcher felt that the interest in the study of Total Quality Management (TQM) by previous researchers focused only on the organization of commodity production, while service organizations, especially educational institutions such as university, has not received adequate attention. From here, it could be conceived, that this study to induce the importance of conducting studies on the subject in higher education institutions generally in the Arab peninsula, and Yemeni universities in particular.

#### **Problem Statement**

The achievement of Total Quality Management in institutions of higher education meant the organization's ability to provide a high level of service quality excellence, and through which it can meet the needs of students, faculty members, parents, employers, and society and others, and in a form which is consistent with their expectations and requirements of the times and the environment of scientific and technological resources, including achieving satisfaction and happiness to them. This is done through pre-established standards to assess the output, and check the status of excellence (*Al-Saoud*, 2002).

Seeking higher education institutions in Yemen for the development of inputs and operations requires continuous work to improve the performance of its functions and to link them to their societies, in order to obtain the best output, in a shorter time, and less cost.

Since the entrance of Total Quality Management an important step and the entrance are essential in the development of performance in Yemeni universities and brings them to the desired level, especially in light of the continuous fast paced and interactive world in which we live these days. This has resulted in challenges, which calls for a greater willingness to face the fears, apprehensions, competitiveness, and international conflicts.

The problem for the study mentioned in the following:

What is the reality of the practice and application of total quality management in the

Yemeni universities as perceived by faculty members?

# 1.2 Questions of the Study

To address the Listed below objectives and provide solutions to the research problem, two research questions were identified and formulated as follows:

**RQ**<sub>1</sub>: What is the practice and application of total quality management in the Yemeni universities as perceived by faculty members?

**RQ**<sub>2</sub>: What is the impact of demographic variables (gender, age, college, experience, academic degree, job Position, qualifications and university where he/she worked) on the responses of faculty members to total quality management?

# 1.4 Objectives of the Study

This research has the following objectives:

O1: The aim of this study is to qualify and quantify the extent of total quality management practices in Yemeni public universities.

**O2:** To Identify the impact of demographic variables (gender, age, college, experience, academic degree, job Position, qualifications and university where he/she worked) on the responses of faculty members to total quality management?

# 1.5 Hypotheses of the Study

Through the questions of the study the following null hypotheses have proposed:

 $\mathbf{H_1}$ : There is no significant differences at the level of significance ( = 0.05) for the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of gender.

**H<sub>2</sub>:** There is no significant differences at the level of significance (= 0.05) for the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of age.

 $\mathbf{H_{3}}$ : There is no significant differences at the level of significance ( = 0.05) for the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of college.

H<sub>4</sub>: There is no significant differences at the level of significance (=0.05)the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of qualification.

There is no significant differences at the level of significance (=0.05) for H<sub>5</sub>: the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of experience.

There is no significant differences at the level of significance (=0.05) for H<sub>6</sub>: the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable academic degree

H<sub>7</sub>: There is no significant differences at the level of significance (=0.05) for the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of job Position.

H<sub>8</sub>: There is no significant differences at the level of significance (=0.05) for AAN TUNKU TUN AMINA! the respondents about their perceived of the principle of the total quality management in Yemeni universities according to the variable of the university.

# 1.6 Importance of the study



The important of this study derived from the importance of the implementation of the principles of total quality management. Total Quality management considered as one of the most important tools in measuring the effectiveness of the universities work. Through using of a total quality management, the university can produce a product student- that performs according to its stated promises. Using of total quality management to improve the quality of the outputs of the universities and to improve the quality of the output and to design a new programs and requirements that feeding the marketplace with suitable workforce. Furthermore, the implementation of the total quality management principles provides a methodology to create the type of product- i.e., Student- that the workplace needed. Therefore, this study aims to measure to what extent Yemenis' universities have applied the total quality management principles, and how this implementation will affect the output of these

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