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IMPLEMENTATION OF TQM IN PUBLIC UNIVERSITIES OF SAUDI ARABIA: CHALLENGES AND RESOLUTIONS

BY

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ABSTRACT

Recent developments in Total Quality Management (TQM) have underscored the need for more studies on this topic. Many Saudi universities have implemented TQM programs, but they are still struggling to reap the desired benefits. So, this work aims to analyze the current situation of public universities in Saudi Arabia, in view of the implementation of TQM, and to explore the challenges and resolutions of TQM implementation in Saudi public universities in order to achieve higher academic excellence. Questionnaires survey and interviews were adopted in this research for data collection. Subsequently, Quality Function Deployment (QFD) was applied in order to identify the challenges of implementing TQM in public universities of Saudi Arabia and to assess and select the critical resolutions to overcome those challenges. This research contributes to the existing body of knowledge in the field of TQM, as well as providing insight to public universities of Saudi Arabia in order to achieve higher academic excellence. Thus, Saudi universities will be able to produce effective and skillful graduates who can contribute in improving the productivity and the economy of Saudi Arabia.

Keywords: Higher education in Saudi Arabia, Total Quality Management, Quality Function Deployment.

ملخص البحث

تبعا للتطورات الأخيرة في مجال إدارة الجودة الشاملة (TQM)، ازدادت الحاجة إلى مزيد من الدراسات في هذا الموضوع. هناك العديد من الجامعات السعودية طبقت برامج إدارة الجودة الشاملة ولكنها لا تزال تكافح من أجل جني الفوائد المرجوة. لذلك، تهدف هذه الورقة إلى استكشاف التحديات التي تواجه الجامعات الحكومية في المملكة العربية السعودية في تطبيقها لإدارة الجودة الشاملة وكذلك الحلول والقرارات للتغلب على تلك التحديات، من أجل تحقيق التفوق الأكاديمي. اعتمدت الدراسة على الاستبانات والمقابلات الشخصية كوسائل لجمع البيانات من عينة الدراسة. وقد تم استخدام Quality والمقابلات الشخصية كوسائل لجمع البيانات وذلك لتقييم التحديات والحلول التي تواجه الجامعات السعودية في تطبيق إدارة الجودة الشاملة، وكذلك العربية والمقابلات الشخصية كوسائل لجمع البيانات وذلك لتقييم التحديات والحلول التي تواجه والمتعابلات المعودية في تطبيق إدارة الجودة الشاملة، وكذلك لمعرفة قوة العلاقة بينهما الجامعات السعودية في تطبيق إدارة الجودة الشاملة، وكذلك لمعرفة قوة العلاقة بينهما الجامعات السعودية في تطبيق إدارة الجودة الشاملة، وكذلك لمعرفة قوة العلاقة بينهما الجامعات السعودية في تطبيق إدارة الجودة الشاملة، وكذلك لمعرفة قوة العلاقة بينهما الجامعات السعودية في تطبيق إدارة المودة الماملة، وكذلك لمعرفة والي التي تواجه المتخدام برنامج SPSS الإحصائي لمعرفة العلاقة بين عدد من العناصر ودراستها. تساهم هذه الدراسة في إثراء المعرفة في مجال إدارة الجودة الشاملة وكذلك تساعد الجامعات استخدام برنامج SPS الوحسائي لمعرفة العلاقة بين عدد من العناصر ودراستها. تساهم المومية في الملكة العربية السعودية لتحقيق التفوق الأكاديمي، وتخريج طلاب فاعلين، الديهم القدرة والمهارة للمنافسة وملائمة سوق العمل، والذي يؤدي بالتالي إلى تحسين

كلمات البحث: التعليم العالي في المملكة العربية السعودية، إدارة الجودة الشاملة.

APPROVAL PAGE

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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This thesis is dedicated to my beloved family

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LIST OF ABBREVIATIONS

CR: Customers Requirements

DR: Design Requirements

HOQ: House of Quality

QFD: Quality Function Deployment

TQM: Total Quality Management

LIST OF DEFINITIONS & TERMS

Continuous Improvement: An ongoing effort to improve products, services, or processes.

Customer Satisfaction: A measure of how products or services meet or surpass customer expectation.

Employees' Involvement: Creating an environment in which people have an impact on decisions and actions that affect their jobs.

House of Quality (HOQ): A diagram resembling a house used for defining the relationship between customer requirements and the firm/product capabilities. It utilizes a planning matrix to relate what the customer wants to how a firm, that produces the products, is going to meet those wants.

Quality: A predictable degree of uniformity and dependability at low cost and suited to the market.

Quality Function Deployment (QFD): A method commonly used for structured product planning and development that enables a development team to specify clearly the customer's wants and needs, and then to evaluate each proposed product or service capability systematically in terms of its impact on meeting those needs.

Total Quality Management (TQM): A management philosophy that builds a customer-driven, learning organization dedicated to total customer satisfaction through continuous improvement in the effectiveness and efficiency of the organization and its processes.

CHAPTER ONE

INTRODUCTION

1.1 HISTORY OF EDUCATION IN THE ARABIAN PENINSULA

The roots of education can be traced back to as early as the revelation descended to Prophet Mohammed (pbuh) when Allah (swt) revealed the following verse:

"Read! In the Name of Your Lord, Who has created (all that exists), has created man from a clot (a piece of thick coagulated blood), Read! and Your Lord is the Most Generous, Who has taught (the writing) by the pen, has taught man that which he knew not". (Surah Al-Alaq, verse 1 to 5)

The Hira' pothole served as the first school of education in Islam where the Prophet Mohammed (pbuh) was psychologically prepared and his soul was purified before he could bear the Noble Message of Allah (swt) at the age of forty. The Prophet (pbuh) then moved to *Al Arqam* house which would soon become the second school for education in Islam, where the saying of the Prophet, "Indeed, I was sent as a teacher" is put into practice. When the house was deemed too small to accommodate the growing number of believers -after they were bothered and tortured by the non-Muslims- the Prophet (pbuh) departed to Medina and established the third school inside the Prophet's Mosque. The first teacher in that school was Mohammed (pbuh) himself and the students were his noble companions – may Allah be pleased with them all. The syllabus used was the Qur'an and *Sunnah*. Its objective was summed up to take man away from darkness to light (Al-Mubarakfouri, 1994).

Muslims came to this school to learn literacy since some companions volunteered to teach them, like Abd Bin Sa'eed Bin Al 'Aas, Sa'ad Bin Al Khazraji, Basheer Bin Sa'ad Bin Tha'labah, and Iban Bin Sa'eed Bin al 'Aas. The number of writers had grown and, at this time, there were forty writers who could write the Revelation. After they have learned in the Prophet's Mosque, the Prophet (pbuh) sent them to villages and rural areas to spread the knowledge and to call for practice.

Mus'ab Bin Umair was one of such people who graduated early. He was the first to establish a school near Quba' Mosque in Medina. Years passed by and mosques became common in Medina, which later was known to be a place for both worship and education. Medina was the place where the word of *Tawheed* (Monotheism) was spoken out loud by calling people for surrender and submission to Allah (swt). Muslims gathered in Medina to study their religious and worldly affairs. Also, they learned the principles of reading and writing. Then, most of these learners moved to the various regions of the Arabian Peninsula as well as external regions during the first Islamic century so as to be the bearers of knowledge and leaders of thoughts in a first Islamic superpower (Al-Mubarakfouri, 1994).

Mosques were built in every place the Muslims conquered and, therefore, were the leading establishments of Islamic thoughts and the calling for knowledge and learning had become the means to open up Muslims' hearts and minds to understand their rights and obligations toward themselves, families, and greater societies.

There was no specific system for education, but it was rather conducted in the form of sessions where participants were allowed to choose according to their convenience. These sessions included the following:

- 1. Corner sessions: People with intensive knowledge
- 2. Al Asateen Session: People of Fatwa (Advisory opinion)

3. As Hab Al Karasi: Al Qassas (Story teller)

Moreover, there was no specific syllabus to which the sessions were meant to be confined. Most subjects included Islamic studies, literature, historical and political indoctrination. The sessions varied in terms of levels to meet participants' inquisitiveness and it was according to the participants' level of knowledge and preferred time slot.

Scientific life had flourished at the time of the Prophet (pbuh) and the time of the four Caliphs, followed by the time of the Umayyad and the Abbasid when it spread to the rest of the world. This expansion had its effects on the European renaissance after the Dark Age in Europe. In the sixth Islamic century, many schools were established in the Arabian Peninsula, especially in Saudi Arabia. However, the educational revolution faced times of consecutive stagnation due to foreign invasion in the region and internal pressure (Attabari, 2000).

1.2 EDUCATION IN SAUDI ARABIA

The root of the current system of education in the Kingdom of Saudi Arabia can be traced back to the time when the revelation was delivered to the Messenger of Allah (pbuh). Educational activities were mainly carried out in mosques and Quranic schools or in small gatherings for the purpose of teaching, reading, writing and reciting the Qur'an. Education went through three stages just before the start of formal education in the Kingdom, as follows:

 A classical and inherited education represented by Quranic schools and workshops, with lessons in mosques and boards held by scholars all over the country.

- Public education (that was also considered as a formal education) was carried out in Turkish language in Mecca and Medina.
- 3. Education that was classical in nature but attempted to improve through the inclusion of new sciences in its syllabus. This education is represented by some private schools, which were more common in the Eastern and Western region (Assallum, 1991).

1.2.1 Establishment Phase

The beginning of the current educational system in Saudi Arabia was in 1925, when the General Directorate of Knowledge was established since King Abdul Aziz strongly believed that there would be no development without education. In 1346 A.H, the Education Council was founded, which, in cooperation with the General Directorate of Knowledge, set the first educational system in the country to change the manner of education that heavily relied on Quranic schools and incomplete scripts of the Turkish and Hashemite schools.

In 1926, the Scientific Institute of Saudi Arabia and the preparation of Missions School were launched. In 1950, the General Administration of Scientific Institutes was established. The number of schools that were established at the time of King Abdul Aziz increased rapidly and amounted to 312 government primary schools, 14 private primary schools, 11 government secondary schools, 4 private secondary schools, one vocational school, 8 institutes (that provide training to teachers, one college for Islamic studies) and 6 schools for English language learning. It is to be noted that the common attribute in this phase is the establishment and identification of the educational system and determining its policies (Assallum, 1991).

1.2.2 Growth and Expansion Phase

In 1953, the General Directorate of Knowledge was turned into a Ministry of Education chaired by King Fahd Bin Abdul Aziz, the first Minister of it. Following the event, he formed the first organizational structure of the Ministry and established new bureaus and departments. This phase experienced a great expansion in establishing schools and institutes in various types and categories, and the budget of this Ministry continued to grow until it became one of the most important ministries in the country with extraordinary performance.

In this phase also, the General Presidency of Girls Education, was established in 1960. Then, the Ministry of Higher Education came in 1975, and followed by the General Organization for Teaching and Vocational Training that was established in 1980. This phase has also been unique for its horizontal growth for all types of education, both general and higher education. In addition, objectives were clearly stated by national developmental plans which simultaneously came with the second part of this phase (Al-Ashaikh, 1992).

1.2.3 Linkages with Various Ministries

In this particular phase, other ministries and some other government and private organizations began to contribute to the supervision of certain types of education such as the Ministry of Defense and Aviation, Ministry of Interior, Health Ministry, Ministry of Labor and Social Affairs, Ministry of Municipal and Rural Affairs, National Guard, Ministry of Post Telegraph and Telephone, and Ministry of Foreign Affairs. All these ministries subscribed to the educational policy drawn by the Higher Committee of Education in the Kingdom.

This phase has been known for its complexity of horizontal and vertical expansion in establishing schools, institutes, colleges, and specialized universities in various dimensions, including the general, higher and technical education as well as vocational training. As a result of this expansion in this particular manner, some organizational problems surfaced that necessitated the creation of an integrated reference for these various organizations. Despite the reference of ministries to the Cabinet, coordination among these organizations to attain harmony between development requirements and the qualified manpower and their output provoked the need for establishing some regulatory boards like manpower, higher education board, and higher authority of educational policy (Aldosary & Garba, 1998).

1.2.4 Development and Follow-up Phase

After the emergence of the main government system in 1412 A.H and at the time when the government began to review all governmental activities and tasks, instructions were issued to ministries (educational organizations in particular) to bring about the required changes as to adhere to the new system. This had a positive impact on the syllabus and the general philosophy of education for teaching individuals. This coincided with the globalization and information revolution, which required a careful review of the mechanisms in handling students' acquisition of knowledge and ways of benefiting from it, as well as enabling them to differentiate between the Islamic values and the one that contradicted them.

Based on the above issue, the structural compositions of the Ministry of Education and the Ministry of Higher Education have been particularly reviewed and a number of new higher leadership positions have been created to carry out their respective tasks. In this phase, specialized departments for development were formed in those ministries that were mainly concerned with the development and continuous assessment.

The two ministries had undergone a great deal of development, and specialized units were built within the ministries to monitor the development process and to carry out the required amendments on the educational policy through a serious of collaboration with the higher education board and the Cabinet. Additionally, the actual needs for reviewing the educational policies were addressed as to harmonize between the outputs of education and training in the Kingdom, as well as synchronizing the requirements of growth for the specialized manpower in the Saudi labor market (Al-Ashaikh, 1992).

1.2.5 Efforts and Developmental Plans in Saudi Arabia

Due to the accumulations of income from sales of petroleum, which continued to rise since the early 1970, the government of the Kingdom of Saudi Arabia decided to utilize these incomes to develop a more natural, economical and human resources within a framework of a five year plans. As of now, seven plans have been implemented in the past thirty five years (Al-Ashaikh, 1992).

A comprehensive planning with its various dimensions namely the economical, social and organizational dimensions was put forward to invigorate the growth in various industries of the national economy. These sectors used to suffer because of several reasons such as the dominance of the petroleum sector as a single source of income, the lack of diversity at the infrastructural level, the weakness of the institutional and managerial structures, as well as the lack of qualified local manpower.

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As of late, the aforementioned scenario has been dramatically changed. The Saudi economy enjoys diversity in economic-based and income resources. Moreover, the infrastructure has been completed, as well as the public and educational services, the human resources have been enhanced and government posts have been "Saudized". Consequently, the private sector is experiencing a form of Saudization too. Moreover, the national economy is prepared to endure the influx of local and global trends, especially the World Trade Organization (WTO), which Saudi Arabia has joined since December 2005 (Al-Ashaikh, 1992).

From the very beginning, consecutive plans were set to improve the potentials of Saudi individuals so as to allow them to meet their needs and improve their living and to enhance the growth to include all economical and social sectors in the Kingdom. The Kingdom relied on Islamic principles and values, economic freedom, and the open economic policy to implement its developmental plan. The plan devised between 1994 and 1999 also stressed the importance of attainment of the following three objectives:

- Developing manpower by expanding capacities of universities and other educational institutes, training and vocational institutes, and technical colleges to accommodate the growing number of students, with emphasis being given to the quality and developing syllabus for all levels so as to meet the needs of the private sector.
- Attaining economic competency in both government and private sectors since it is the key requirement for the success of diversifying the strategy of economic base and reducing government spending.
- Supporting and motivating the private sector to invest as means to increase its contribution to the development process through organizational

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