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Total Quality Management Application in Alzaytoonah University: Opinion of Teachers in Faculty of Economics and Administrative Sciences

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Abstract

Quality management is becoming an important part of any organization if it is to maintain competitive advantage in the market. In order to maintain a strong educational environment, high quality standards, and properly manage and support programs, Al Zaytoonah University; located in Jordan/Amman, began an extensive restructuring of its departments based on total quality benchmarks assigned by the Ministry of Higher Education. This research aims to shed light on the effort Alzaytoonah University, is doing on implementing a Total Quality Management (TQM) System through applying a quality assurance system proposed by the Ministry of Education. Using the Quality Assurance System, the university hopes to achieve a system enabling it to properly manage its departments, improve its relationship with both faculty and students, and give it an advantage over other educational institutions. The research also explores the opinion of teachers about the effects of applying the (TQM) System. To measure the opinion of teachers about the (TQM) applications, a questionnaire was built and evaluated by peers. The research builds on data collected from teachers in Faculty of Economics and Administrative Sciences and researches faculty opinion on tracking the effects of applying the total quality system. The results of study will help the university to know the range of the success of its efforts to build and apply the total quality system. Finally, the research provides several suggestions on improving the total quality system application.

Keywords: Total Quality, Management, Evaluation, Performance

1. Introduction

Researchers since the 80's looked for factors and aspects of improving quality and operational performance (Subedi & Maheshwari, 2007). Due to the rapid increase in information and communication technologies, organizations are now able to efficiently collect, store and organize at low costs; never the less, many organizations still suffer from questionable state of information quality due to large amount of data collected with minimal quality assurance procedures to govern it (Baškarada, Koronios & Gao, 2007).

Because of the increase in collected data, as well as the increase in competition, organizations started looking for a way to "standardize" processes and compete in the market. Japanese management which focuses on commitment to make incremental but continuous improvement was the main reason for placing them a head of American competition (Grant, 1985), forcing US managers to move away from the short-term goals, fast profits, to long term goals such as reduction of customers' complaints, machine breakdowns, defects produced etc (Subedi & Maheshwari, 2007). Many companies saw TQM as a strategic advantage over competition and a way to distinguish their products and services. Furthermore, many researchers and consultants persuaded organizations to focus on total quality management in order to complete in a volatile market place where customer service is considered an competitive advantage (Knights and McCabe, 2002).

2. Literature

Total Quality Management (TQM) started with Shewhart in 1925. Since then, many researchers contributed to it by adding to its definition, importance and application in all fields. Some viewed TQM as a fundamental part of any organization if it to succeed and improve customer satisfaction (see Juran, 1974; Crosby, 1979; Deming, 1982).

The educational field is also filled with research supporting the role of Total Quality Management systems to improve student education and university performance. Developed countries, such as the United States, the UK, and Japan have successfully implemented TQM principles. Some researchers believe TQM principles should be implemented in all colleges and universities, regardless of their accreditation status (Agarwal, Kumar, Swati, & Tyagi, 2011).

Many researchers explored the role of TQM in the education sector. Agarwal et al. (2011) pointed to increasing teaching efficiency, reducing education costs, and strengthening the bond between institutions and their students. The researchers also focused on four dimensions they believed support successful TQM in the

educational field: students, faculty, employers, and community. Furthermore, researchers explored the use of TQM principles in schools in Yemen (Al-Qashairi, 2007), UAE (Madbouli, 2001), and India (Agarwal et al., 2011).

The education field, just like the industrial field, jumped on the TQM concepts in hopes to improve the educational quality, beat competition and maintain high standards. Developed countries, such as USA, UK, and Japan have successfully implemented TQM principles. Some researchers believe TQM principles should be implemented in all colleges and universities regardless of their accreditation status (Agarwal, P.K., Kumar, et al., 2011)

In Jordan, (Al-Zboon & Hasan, 2012) explored the degree of implementation of one of TQM principles (strategic planning) governmental high schools in the Hashemite Kingdom of Jordan. Al-Basi (2004) noted to the importance and the need of education managers, including school principles, in strategic planning. The Ministry of Education in the Hashemite Kingdom of Jordan, for example, has adopted and is enforcing the adoption of strategic planning in the period from (2009-2013). Furthermore, in an effort to direction attention to proper strategic planning, the Hashimite Kingdom of Jordan created the "Queen Rania Award for the Distinguished Principal", which considers principles that practice strategic planning as a key attribute for winning the award (part of Queen Rania Al AbduUa Award for Excellence in Education 2011) (Al-Zboon & Hasan, 2012).

3. The Study

This research aims at shedding the light on the effort Alzaytoonah University, one of the Universities located in the Amman, the capital city of Jordan, is working on implementing a Total Quality Management System through applying a quality assurance system proposed by the Ministry of Education. Using the Quality Assurance System, the university hopes to achieve a system enabling it to properly manage its departments, improve its relationship with both faculty and students, and give it an advantage over other educational institutions.

Following a methodology suggested by some researchers, including (Al-Zboon & Hasan, 2012), the school followed a six-phase plan: Planning, Analyzing, Direction appointing, Formulation, Implementation, and Control. During these phases, the quality assurance office, part of the University's hierarchy, acts as the team leader and forms the proper teams entrusting them with the proper authorizations to help support the process. The first half of the year 2012, the university focused on setting up the proper paper work for employees to follow. The main idea behind the system is to keep track of everything in order to be able to measure performance. Hundreds of forms were evaluated, modified, and approved by the Ministry of education to help creating a measuring tool to measure university performance. Some of the paper work (forms) included:

- Student attendance/absence forms
- Faculty activities (publications and seminars) forms
- Travel reimbursement and expenses forms

Other than forms, the school placed certain guidelines and processes for faculty to follow. Committees were formed to do the following:

- Determine the book(s) and references used for each course.
- Determine the time and location of tests for each course.

Committees consisted of existing faculty selected by the head department who was also placed in each committee as a leader. The committee structure consisted of:

- 1. Committee leader
- 2. Committee supervisor
- 3. Committee member(s).

3.1 Study Variables

The study sample consisted of 40 teachers from Faculty of Economics and Administrative Sciences The sample was given 40 questionnaires; 30 were recovered from which none were rejected for errors. The final total of questionnaires in the study was 30, a total of 75% of the study population.

3.2 Tools & Analysis

To achieve the objectives of the study a questionnaire was designed. To ensure the questionnaire meets the research requirements and focused on our objectives, it was evaluated by five experienced employees working in the same field. Their recommendations to modify certain aspects of the questionnaire were followed and implemented. The tool used for this research was a questionnaire consisting of 39 statements. The questionnaire was divided into five sections, the first focused on the Quality Culture; the second focused on Managerial Climate, the third focused on Beneficiaries, the fourth focused on Employees and the fifth focused on Academic Dimension.

The questionnaire was analyzed by using weights following (Strongly Agree 5, Agree 4, Neutral 3,

Disagree 2, and Strongly Disagree 1) after that the mean and standard was calculated for each statement. To evaluate every dimension, the following scale was used:

- A- Low if average is less than 2
- B- Medium if average is between 2.5 3.5
- C- High if average is above 3.5

3.3 Study Results

Individual results per question in the questionnaire can be seen in Appendix A tables 1 through 5. Table 6 below summarizes the total results for all 5 dimensions.

Table 6. Summary of the questionnaire results for all 5 dimensions

Dimensions of Total Quality Management	Average	Standard Deviation
Quality Culture	3.60	0.75
Management: Managerial Climate	3.55	0.67
Beneficiaries	3.20	0.58
Employees: Human Resources	3.30	0.60
Academic Dimension	3.65	0.71
General Mean	3.47	0.66

4. Discussion

Looking at table 6, we notice that the highest degree of agreement was under the Academic Dimension. Faculty agreed that quality measures taken will improve education and will yield to better faculty development, course development and better appraisal strategies. Having that said, and looking closer at the results, we notice that faculty scored the least in "I think that the application of total quality system in the university will work to develop of teaching and learning in the university ". This is mostly due to the fact that quality measurement at that stage was focused on administrative procedures rather than changes in the classroom itself.

The next highest ranking dimension was Quality Culture. Faculty agreed that the quality measurements taken by the university will strengthen relationships between administration and faculty but with limitations. A low score is seen when it comes to part asking about academic development, hence faculty do not believe that quality measurements will result in a lot of academic improvement yet will definitely increase administrative efficiency.

Looking at the other end of the spectrum, the Beneficiaries dimension scored low points in some sensitive areas. Very few faculty members believed that quality measurements will enhance student chances to getting a job, improve their educational quality or improve their academic situation! This is dangerous because faculty seem to be only focused on applying quality assurance on administrative levels without taking advantage of it to improve student chances of getting a job or at least improving their academic status.

There are several factors causing faculty to have mixed feelings about quality measurements taken by administration in the university. Some of these factors are:

- Administrative Level Only. Quality management is only executed at the top level. No lower level implementation was placed to monitor, improve or change teaching styles.
- Administrative workers only. Quality measurements were placed to affect only administrative workers. Very little work is done to affect faculty. In other words, faculty has little to do with policies and regulations placed in the university making him/her detached from the process
- More Bureaucracy. Quality management was all conducted on paper, adding more paper work on all levels but without actual implementation. The number of forms to complete a small task increased making it harder for administrators, faculty or even students to voice their opinions due to all the increased bureaucracy. Even though quality management is paper based due to the importance of tracing all actions taken, adding more bureaucracy seems to have made others lose faith in the importance of quality management.

5. Recommendations

The education field, just like the industrial field, jumped on the TQM concepts in hopes to improve the educational quality, beat competition and maintain high standards. Developed countries, such as USA, UK, and Japan have successfully implemented TQM principles (Agarwal, P.K., Kumar, et al., 2011). In light of the above

findings, we find some kind of disconnect between Total Quality Measurements and faculty, as well as Total Quality Measurements and students. In order for the university to gain the most from this process, total quality procedures and implementations need to reach all levels, from top to down. Students need to feel the changes as well, including modifications made to their course syllabi for example, or focusing on Course Learning Outcomes throughout the semester rather than just focus on book chapters. For Faculty, it's recommend that they have more say in the procedures and policies implemented. Faculty has tens if not hundreds of collective educational and experience knowledge and can add a lot to the system. If faculty doesn't believe strongly in the process, it's doomed to fail.

Appendix A

Table 1: Quality Culture Dir			nension		1		
Quality Culture	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Average	STD DEV
I think that the workers are trying to develop their knowledge about the total quality system of education.	7	15	5	2	1	3.8	0.82
I give more attention to develop my academic work.	0	12	12	6	0	3.2	0.72
I think that the quality is one of major criteria in evaluate the achievements of workers.	7	16	7	0	0	4	0.89
I always have a strong desire to see everything new in the subject of the quality of education.	5	10	10	5	0	3.5	0.53
I think that the attention of the quality of education in line with the challenges which faced it	5	14	10	1	0	3.8	0.76
I think that the dissemination of a quality culture between the employees from the university administrative is necessary and important.	3	16	8	3	0	3.6	0.84
				Total		3.6	0.75

Table 1: Quality Culture Dimension

Table 2. Managerial Climate Dimension							
Management: Managerial Climate	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Average	STD DEV
I believe that effective leadership is the optimal model for the employees in the field of application of total quality system in the university.	10	10	3	7	0	3.8	0.71
I see that the focus on work teams in the university is a positive indicator about the adoption of the quality system in it.	6	14	4	6	0	3.7	0.72
I feel worried about the future of education in the university if do not go their administration about to using total quality system.	4	15	8	3	0	3.7	0.78
I think that the flexibility and effect planning is the main factor to provide the university a suitable environment for the application total quality system.	3	15	9	3	0	3.6	0.79
Using of the scientific method in the decision-making process is the main requirements for the application of total quality system in the university.	6	14	6	4	0	3.7	0.73
The participation of employees in decision-making process give him more flexibility to do their work as a main indicator for applied the quality system in the university.	6	9	9	4	2	3.4	0.49
I think that the development of laws and regulations in the university is a positive step about the application of the quality system.	2	8	14	2	4	3.1	0.58
I feel that the application of total quality management system will reduce the problems, which the university faced it.	4	9	8	8	1	3.2	0.42
Using the total quality system in the university contributing to providing a comprehensive database for the university, which support the employees in their work.	4	13	8	4	1	3.5	0.65
Put the right man in the right place is contributing to support the application of total quality system in the university.	6	16	6	0	2	3.8	0.87
I think that the application of total quality system in the university need to make many changes in their systems, procedures and policies.	4	11	12	3	0	3.5	0.62
I see that the development of the incentives and promotions system is a positive step for the application of total quality system in the university.	5	12	10	2	1	3.6	0.64
				Total		3.55	0.67

Table 2. Managerial Climate Dimension

Beneficiaries (Customers)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Average	STD DEV
I see that getting the trust of parents, students and business sector is the most important objectives of the total quality management system.	9	17	2	0	2	4.0	1.02
I think that the application of total quality system in the university will reduce the problems of students.	3	14	11	2	0	3.6	0.77
I think that the application of total quality system in the university will support the students' attitudes toward continuing education.	3	8	8	10	1	3.1	0.38
I think that the application of total quality system in the university will be reduce the rates of students whom fail to develop their abilities and their academic study.	3	8	8	11	0	3.1	0.40
I see that the application of total quality system in the university will support the student's chance to get a job.	0	6	9	15	0	2.7	0.50
I think that the application of total quality system will effect on the levels of graduates.	2	4	10	14	0	2.8	0.42
				Total		3.2	0.58

Table 3. Beneficiaries Dimension

	Table 4.	Human R	esources Di	imension			
Employees: Human	Strongly	Agree	Neutral	Disagree	Strongly	Average	STD
Resources	Agree	Agree	Inculai	Disagree	Disagree	Average	DEV
I feel that the application of total quality system in the university will support the individual and collective responsibility for their employees.	6	10	12	2	0	3.7	0.62
The application of total quality system in the university contribute to respect the efforts of their employees.	6	6	14	2	2	3.4	0.57
I think that the future directions for the application of total quality system in the University will influence the willingness of employees to develop the quality of their work.	2	13	10	5	0	3.4	0.69
I feel that the application of total quality system in the university will reduce the sources of employees worried.	3	10	13	4	0	3.4	0.61
I think that the application of total quality management system in the University will enhance the professional development of their employees.	2	5	17	6	0	3.1	0.65
I see that the application of total quality management system will contribute to increase the self-confidence of their employees.	2	8	17	3	0	3.3	0.71
I think that the application of total quality system in the university will support the efforts of employees about the scientific research.	3	4	16	5	2	3.0	0.59
The application of total quality system in the university consistent with the future ambitions for their employees.	0	11	7	11	1	2.9	0.60
I think that the application of total quality system will bring justice to all employees.	5	5	10	10	0	3.2	0.38
				Total		3.3	0.60

Table 4. Human Resources Dimension

Ithink that the quality of university education linked with the quality of faculty members.12142024.11.01Isee that the application of total quality system in the university will improve the educational facilities in it.7127223.70.66The application of the total quality system to improve the input of the educational system in the university6128403.70.63Ithink that the application of total quality system to improve the university6128403.70.63Ithink that the application of total quality system in the university will work to develop of teaching and learning in the university will improve the appraisal strategies in it.5618103.50.73Isee that the application of total quality system in the university will improve the appraisal strategies in it.5618103.50.61	Academic Dimension	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Average	STD DEV
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quality system to improve the input of the educational system in the university6128403.70.63I think that the application of total quality system in the 	total quality system in the university will improve the educational facilities in it.	7	12	7	2	2	3.7	0.66
total quality system in the university will work to develop of teaching and learning in the university5715213.40.61I see that the application of total quality system in the university will improve the appraisal strategies in it.5618103.50.73The application of total quality 	quality system to improve the input of the educational system in the university	6	12	8	4	0	3.7	0.63
total quality system in the university will improve the appraisal strategies in it.5618103.50.73The application of total quality system in the University contribute to developing and investment the educational41013303.50.61	total quality system in the university will work to develop of teaching and learning in the	5	7	15	2	1	3.4	0.61
system in the University contribute to developing and 4 10 13 3 0 3.5 0.61 investment the educational	total quality system in the university will improve the	5	6	18	1	0	3.5	0.73
Total 3.65 0.71	system in the University contribute to developing and	4	10	13		0		

Table 5. Academic Dime	nsion
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