The Reality of Application of Total Quality Management at Irbid National University from the Perspective of Academicians

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ABSTRACT: *The research aims to identify the reality of the application of total quality management in Irbid National University from the standpoint of academics, through requirements, organizational culture, academic situations, administrative and financial conditions, and also to achieve a high level of quality in the university and its applications in Irbid National University.*

The study population consisted of all academics in Irbid National University, the tool was questionnaire, using (SPSS) to analyses questionnaire as averages, standard deviations, and Cronbach's alpha coefficient to verify the stability of the areas of study and performance as a whole, , all hypotheses was test and the result indicated all hypotheses were rejected because there are appositive relationship and statistically significant between all variables. The researcher has put conclusion and recommendations.

Keywords: reality application, total quality management.

I. INTRODUCTION

Technological advances have led to increasing the realization of the demands of change and development, and keeping up with the developments of civilization, which resulted in an increase in the attention given to educational reforms in most countries all over the world, which led thinkers to describe this age as the age of quality, due to the fact that it is one of the basic elements of the modern management model which aims at keeping up with the international and local developments. The concept of total quality management (TQM) represents a modern administrative philosophy based on a number of managerial concepts, and which mixes modern managerial methods innovations and technical skills for the purposes of improving the levels of performance, and achieving continuous development[1].The federal institute of management defined it as performing appropriate work in an appropriate manner immediately in order to achieve the desired quality more effectively in a short period of time, while depending at the same time on the possibility of identifying the level of improvement in performance[2]. Total quality management began to attract the attention of researchers, and most studies found that applying total quality management has several advantages on the performance of the organization , which is reflected in the improvement of profitability , lowering costs, maximizing current performance , improving the relations between employees and increasing their job satisfaction. Due to the indicators which express the usefulness of total quality management, it was adopted quickly.

Applying total quality management requires an appropriate infrastructure in terms of organizational, managerial, and social conditions within and outside the organization, so that the appropriate atmosphere for implementation is provided. Persuasion about the importance of total quality management ought to exist, so that quality becomes one of the priorities of higher management. It is necessary also to find capable leaders who are able to guide individuals towards the achievement of their visions, and there are hardly any universities or organization which was capable of achieving total quality management without a leadership which is characterized by high administrative capabilities [3]. In order to be successful in campus, total quality management ought to be adapted to the academic setting [4]. Implementing TQM requires also a database containing accurate and comprehensive information about the organization, the services it provides, their users, the difficulties related to operations, which includes the assessment of the situation of the organization, the identification of the current and future problems as well as the reasons which urges the organization to adopt the TQM concept. Thus, this study seeks to explore the reality of implementation of TQM and its principles at Irbid National University for the purposes of providing high quality educational outcomes which enhance the competitive advantage of the university, and which improves and develops the educational process. Irbid National University is one of modern organizations which have adopted the principles of total quality as a goal which it seeks to achieve since the time of its establishment in order to provide educational outcomes which are

competitive locally, regionally and internationally. This paper aims at exploring the reality of implementing TQM from the perspective of academicians. In order to achieve the aims of the study, the researcher designed a questionnaire to be completed by participants from among the population of the study, which consists of the academicians at Irbid National University.

II. PROBLEM OF THE STUDY

The problem of the present study is related to exploring the reality of adopting Total Quality Management at Irbid National University, through examining the following questions which are related to the basic requirements of the success of TQM system:

1- What is the reality of the implementation of TQM at Irbid National University?
2- Are there statistically significant differences between the current organizational culture at Irbid National University and the culture required for the success of TQM?
3- Are there statistically significant differences between the current academic conditions available at Irbid National University and the conditions required for the success of TQM?
4- Are there statistically significant differences between the current administrative and financial conditions available at Irbid National University and the administrative and financial conditions required for the success of TQM?
5- Are there statistically significant differences between the current graduates' preparation and qualification levels at Irbid National University and the levels required for the graduates in the market?
6- Are there statistically significant differences between the current situation of applying TQM at Irbid National University and the level of implementation which is required for the success of TQM?

III. IMPORTANCE OF THE STUDY

The importance of the present study is related to the topic it explores and which is related to total quality management concept, which has been adopted recently at the universities in the developed countries. The importance of the current study is related also to exploring the concept of TQM at Irbid National University. This study is important for both the management of the university and the researchers, and it is expected that the results and recommendations of the study will assist the management of the university in understanding the issues related to the level of quality.

IV. AIMS OF THE STUDY

This study aims to exploring:
1- The concept of TQM and its implementation at Irbid National University.
2- Achieving a high level of quality in the outcomes of Irbid National University according to the requirements of the labor market.
3- Identifying the reality of TQM implementation at Irbid National University from the perspective of academicians, through a set of requirements including the organizational culture, academic conditions, administrative and financial conditions.
Table captions appear centered above the table in upper and lower case letters. When referring to a table in the text, no abbreviation is used and "Table" is capitalized.

V. HYPOTHESES OF THE STUDY:

First hypothesis: there are no statistically significant differences between the current organizational culture at Irbid National University and the organizational culture required for the success of TQM.

Second hypothesis: there are no statistically significant differences between the current academic conditions available at Irbid National University and the conditions required for the success of TQM.

Third hypothesis: there are no statistically significant differences between the current administrative and financial conditions available at Irbid National University and the administrative and financial conditions required for the success of TQM.

Fourth hypothesis: there are no statistically significant differences between the current graduates' preparation and qualification levels at Irbid National University and the levels required for the graduates in the labor market.

Fifth hypothesis: there are no statistically significant differences between the current situation of applying TQM at Irbid National University and the level of implementation which is required for the success of TQM.

VI. PROCEDURAL DEFINITIONS:

Total Quality Management: one of the main modern concepts in management, and which aims at making radical changes in the operation of the organization, its philosophy and goals in order to achieve comprehensive improvements in all stages of operation according to the wishes of customers, in order to satisfy customers and providing them with services and goods beyond their expectations [5].

Total quality in Education: a comprehensive method applied at all the levels of organization in order to provide the employees and work teams with opportunities for satisfying the needs of learners and users of the educational process, and the achievement of the best educational and research services effectively and with the least cost and with the highest quality [6].

The University: An autonomous educational institution with a certain organizational structure, regulations and academic norms whose main purpose is to provide education, scientific research and community service, and which consists of a number of specialized faculties and departments which provide various educational programs in different specializations, at the graduate level and higher education and provides students with scientific degrees[7].

Organizational culture : a set of values , beliefs and behavioral norms which dominate the organization , and which takes several forms including rules of operation , values of operation , daily procedures , focus on customer and respect of others[8]. Labor market: the setting in which individuals search for job opportunities, and in which employers seek employees for job vacancies

VII. THEORETICAL FRAMEWORK

Total quality management can be defined as " a strategic administrative process based on a set of values and a pool of information through which it employs the skills and talents of employees and employs their intellectual abilities at the various levels of organization in a creative manner in order to achieve continuous improvement at the organization"[9]. Total quality management in education can be defined as a comprehensive philosophy of operating and living at the educational organizations which defines the management methods in order to achieve continuous improvement in teaching and learning and the development of the educational outcomes based on group work, which guarantees the satisfaction of instructors, students and their parents as well as market " [10].

Principles of Total Quality management have a number of principles which ought to be applied and adhered to in order to achieve success, and which include (Awareness, effective leadership, clear and specified goals, commitment of the management, and others [11].
Aims of implementation of total quality management: Implementing total quality management at universities will result in [12]:

A-   Administratively : defining the aims , the message of the university and faculties clearly , documenting the administrative processes , analyzing and developing of administrative processes , clarifying the administrative processes and the different roles , improving communication and providing information , facilitating decision making and improving decisions.
B-   Academically: providing the environment which is suitable for teaching and learning, improving the quality and efficiency of the educational services, supervising educational processes, increasing the experience of instructors through supervision. Stages of the The process of TQM at universities passes through five stages as (stage of adopting, Planning Stage, Evaluation Stage, Evaluation Stage, and Sharing experiences stage) [13] and Understanding the elements of TQM is the first step in the process of their implementation, and these elements include the (Members of the teaching staff, The student, Educational Programs and Teaching Methods , Educational facilities and their equipment, Management of the university, The educational book, Funding and educational expenditure, Evaluating the educational performance [14].

VIII. REVIEW OF LITERATURE

According to [15] conducted a study under the title "the extent of the implementation of the principles of total quality management at the Arab American University from the perspective of its teaching staff members". The results of the study showed that the degree of implementation of TQM at the university is high , and the lack of statistically significant differences in the extent of implementation of TQM which are due to the variables of gender , academic qualification, years of experience , the university from which the member of the teaching staff graduated , his faculty and age. According to [16] conducted a study, under the following title "the extent of implementing total quality management at private higher education institutions in the sultanate of Oman

from the perspective of administrative employees and academicians". The results of the study showed that the degree of the implementation of TQM principles is low, and that the statistically significant differences related to the implementation of TQM at the private higher education institutions in the sultanate of Oman which are ascribed to faculty, and on behalf of the specialized faculties in comparison to general faculties. According to [17] conducted a study, under the following title "the extent of achieving the standards of total quality management at the Palestinian universities in the west bank from the perspective of the teaching staff members". The results of the study showed that the degree of the achievement of the standards of TQM is medium (65%), and the lack of statistically significant differences related to the achievement of the standards of TQM at the Palestinian universities in the governorates of the west bank which are ascribed to the variables of social status and age. According to [18] conducted a study, under the following title "the reality of the educational system at the Palestinian universities in the light of the standards of total quality management from the perspective of the teaching staff members ". The results of the study showed the lack of statistically significant differences related to the implementation of the standards of TQM which are ascribed to gender, faculty , experience , educational qualification and the university. the study recommended the participation of all the employees in decision making , and the evaluation of in-service training programs regularly as well as conducting more studies concerning TQM at Palestinian universities and the capabilities of its implementation at the different educational institutions.

According to [19] conducted a study, under the following title "the impact of applying total quality management on the achievement of competitive advantage at Jordanian public universities of higher education ". The results of the study showed a correlation between the commitment of the leadership and the competitiveness strategy through excellence and variety, as well as a correlation between strategic planning and the strategies of competitive advantage, as well as the correlation between the satisfaction of customers and the cost competitiveness strategy and the quick responsiveness strategy. According to [20] conducted a study which is called "total quality management in higher education", which aimed at exploring the capabilities of implementation of total quality management at the public northwestern university. The researcher employed the interview and the class records, observation as tools in the study for data collection. The results of the study showed that the faculties at the university implement the concept of TQM. According to [21] conducted a study which is called "leadership for effective total quality management", which aimed at exploring the relation between the dominant educational leadership, and the possibility of implementing total quality management at higher education management. The study incorporated the academic leaderships at the University of Missouri which received the quality award in 1995. In order to achieve the purposes of the study, the researcher a questionnaire which investigates leadership pattern and total quality management? The results of the study showed a strong relation between the dominant leadership pattern at the educational institutions and the capability of applying TQM, and that each leadership pattern is related to TQM.

IX. PROCEDURES OF THE STUDY

This study aims at exploring the reality of the implementation of the total quality management at Irbid National University, and the researcher used the descriptive analytical method, which included the hypotheses of the study, population and sample of the study, tool of the study as well as its validity and reliability, sources of data, and the statistical analyses used. The researcher depended on the demands of evaluating total quality management at Irbid National University which are considered as indicators for the assessment of the reality of the implementation of TQM at Irbid National University, which include four elements (The organizational culture. The academic conditions, the financial and administrative conditions and The coordination between Irbid National University and the labor market through the implementation of TQM).

Population and sample of the study The population of the present study includes all the academicians at Irbid National University, whose number is (101), from which a random sample was chosen and 91 questionnaires were retrieved (90%) of the questionnaires which were distributed. The researcher used two data sources, which included the primary sources of data, were collected through the questionnaire which was developed in order to achieve the purposes of the study and secondary sources, Design of the Study:This study aims at exploring the reality of the implementation of the total quality management at Irbid National University, and the researcher used the descriptive analytical method, which included the hypotheses of the study, population and sample of the study, tool of the study as well as its validity and reliability, sources of data, and the statistical analyses used. The researcher depended on the demands of evaluating total quality management at Irbid National University which are considered as indicators for the assessment of the reality of the implementation of TQM at Irbid National University, which include four elements (The organizational culture. The academic conditions, the financial and administrative conditions and The coordination between Irbid National University and the labor market through the implementation of TQM).

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Reliability of the Tool: The reliability coefficient for the tool as a whole was (0.941), which is high and suitable for the purposes of the present study , which is illustrated by table 1 below:

Table (1) Reliability coefficients of the subscales and the whole scale:

Scale	Number of items	Reliability coefficient
Organizational culture	17	**0.936**
Academic conditions	15	**0.924**
Administrative and financial conditions	18	**.831**
Coordination between the university and labor market	18	**.879**
The scale as a whole	**68**	**0.941**

Statistical Analyses Methods: Data was classified and inserted into the computer application, and the descriptive analytical statistics were used through SPSS software .based on the nature of the study, its aims, questions, and hypotheses, the means, standard deviations and one sample t-test were used, in which a hypothetical test value of 3.5 was used which is higher than the mean of Likert scale value which was 3, in order to increase the level of confidence in testing the hypotheses of the study. In order to test the hypotheses of the study in terms of accepting or rejecting them , one sample t-test was used in order to test the demands of TQM at Irbid National University through the comparison between the reality of implementation and what is required for the success of the implementation of TQM at Irbid National University

X. . TESTING THE HYPOTHESES OF THE STUDY:

First hypothesis: there are no statistically significant differences between the current organizational culture at Irbid National University and the organizational culture required for the success of TQM. In order to test this hypothesis, t-test was used as it is illustrated in the table (2) there are statistically significant differences between the current organizational culture at Irbid National University and the organizational culture required for the success of TQM and the hypothesis rejected.

Table (2)T-test results for exploring the significance of the differences between the Actual and required organizational culture

Scale	Mean	Standard deviation	t-value	Sig. level
Organizational culture	2.56	0.75	23.41	0.000

Second hypothesis: there are no statistically significant differences between the current academic conditions available at Irbid National University and the conditions required for the success of TQM. In order to test this hypothesis, t-test was used as it is illustrated in the table (3) there are statistically significant differences between the current academic conditions available at Irbid National University and the conditions required for the success of TQM and the hypothesis rejected.

Table (3) T-test results for exploring the significance of the differences between the Actual and required academic conditions:

Scale	Mean	Standard deviation	t-value	Sig. level
Organizational culture	2.56	0.75	23.41	0.000

Third hypothesis: there are no statistically significant differences between the current administrative and financial conditions available at Irbid National University and the administrative and financial conditions required for the success of TQM.

In order to test this hypothesis, t-test was used as it is illustrated in the table (4) there are statistically significant differences between the current administrative and financial conditions available at Irbid National University and the administrative and financial conditions required for the success of TQM and the hypothesis rejected.

Table 4 T-test results for exploring the significance of the differences between the actual and required administrative and financial conditions:

Scale	Mean	Standard deviation	t-value	Sig. level
Administrative and financial conditions	3.27	0.50	-8.47	0.000

Fourth hypothesis: there are no statistically significant differences between the current graduates' preparation and qualification levels at Irbid National University and the levels required for the graduates in the labor market.

In order to test this hypothesis, t-test was used as it is illustrated in the table (5) there are statistically significant differences between the current graduates' preparation and qualification levels at Irbid National University and the levels required for the graduates in the labor market and the hypothesis rejected.

Table 5 T-test results for exploring the significance of the differences related to the actual and required coordination between Irbid National University and Labor Market:

Scale	Mean	Standard deviation	t-value	Sig. level
Coordination between the university and the demands of the labor market	2.85	0.65	-18.69	0.000

Fifth hypothesis: there are no statistically significant differences between the current situation of applying TQM at Irbid National University and the level of implementation which is required for the success of TQM.

In order to test this hypothesis, t-test was used as it is illustrated in the table (6) there are statistically significant differences between the current situation of applying TQM at Irbid National University and the level of implementation which is required for the success of TQM and the hypothesis rejected

Table (6) T-test results for exploring the significance of the differences related to the actual and required implementation of TQM at Irbid National University

Scale	Mean	Standard deviation	t-value	Sig. level
Reality of the implementation of total quality management	2.94	0.48	-21.49	0.000

XI. RESULTS AND RECOMMENDATIONS:

Based on the analysis of the data of the study, and testing the hypotheses of the study, the following results are provided:

1- The degree of implementing the organizational culture within the framework of TQM from the perspective of academicians at Irbid National University is low, which indicates the lack of knowledge about the concept of organizational culture which is required for the successful implementation of TQM at all the administrative levels at Irbid national university.

2- The reality of implementing the academic conditions at Irbid national university from the perspective of academicians was low to medium for the various dimensions studied which indicates the need for changing the

actual academic conditions at the university so that they comply with the demands of the implementation of TQM.

3- The level of the administrative and financial conditions at Irbid National University from the perspective of the academicians was above the medium for some of the dimensions, and low for other dimensions, which indicates that some elements require radical changes in order to comply with the demands of TQM.

4- The level of coordination between Irbid national university and the requirements and demands of the labor market from the perspective of academicians was implemented to a low degree, which indicates the lack of coordination between the outcomes of the university and the demands of the labor market and the requirements of comprehensive development.

5- The level of the actual implementation of TQM at Irbid national university from the perspective of academicians was applied to a low degree (58.8%), despite the administrative and financial conditions which were applied to a medium degree (65.4%) , followed by the academic conditions , and the coordination between Irbid national university and the demands of the labor market , and finally the organizational culture which was applied to a low degree(51.2%) , which indicates that the university lacks the main requirements for the successful implementation of TQM.

Based on the results of the study, the researcher recommends the following:

1- Increasing the level of coordination between Irbid national university and the directorates of education in order to identify the amount and quality of the students admitted at the university.

2- Making deep changes to the dominant academic conditions at the university, so that they become compatible with the demands for the implementation of TQM.

3- Reconsidering the administrative and financial conditions at the university so that they comply with the demands of TQM, through widening the resources of funding by establishing centers which market its scientific products.

4- Deepening the degree of coordination and correlation between Irbid National University and Business sector which attracts the undergraduates through acquaintance at the demands of the labor market and finding a mechanism for sharing knowledge and experiences.

5- Creating an organizational atmosphere which encourages the adoption of TQM philosophy as a method of management at the university through the culture of total quality and the conferences and workshops aimed at deepening the understanding of the employees of the TQM.

6- Increasing the studies about TQM and the scope of its application and implementation.

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