Evaluation of Readiness for Implementation of Total Quality Management (TQM) At Islamic Azad University, Rasht

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ABSTRACT

In this study has been studied level of implement Readiness of total quality management (TQM) at Islamic Azad University, Rasht. The overall objective of this study was to determine the field and conditions to implement of TQM. Study method has been descriptive and type of survey. Statistical population of it is all administrators, faculty and empolyees, Azad University, Rasht, and the sample size is 112. Measurement instruments used in this research is made questionnaire that its test validity obtained by five judges from university professors and specialists in science administration. For reliability of questionnaire is used also test of Cronbach's alpha coefficient that obtained Alpha coefficient is equal to 76% that show the reliability of a questionnaire. The results of the hypothesis test show that policy of leadership has provided areas for to implement TQM at the University.

KEYWORDS: Total Quality Management, University, Participation, Continuous Improvement.

1. INTRODUCTION

Knowledge is national valuable source and contrary other scarce resources cannot replace. If knowledge in any discipline will be supplied with a quality education system, will have more capabilities. Quality training is true if it be managed based on national needs and to develop a quality culture of knowledge and learning. Necessary changes in the quality for the use of rich and valuable resource of human in universities to enhance national capabilities to respond to needs in today's competitive environment are inevitable. Goal of society is to prepare conditions that ensure the health of community members (Gilaninia, Amoupour & et al, 2011). This question is now posed for many managers and leaders of universities that "is there a better way to management for higher education". The answer is yes. Academic leaders with clear qualitative approaches know the mission of their university and its objectives are properly designed (Gholami,2003).University that know their applicants very well, They will gain the trust and eliminate their needs, employees and members comment about method of way to do the work and improve their activities and university that continually measure its performance and itself adapt with development of time and has innovation, ways of management higher education spends better (Alavi,2001). In fact, today universities have found that poor quality has followed many costs and endangers their competitiveness. Result in universities that don't has serious and rapid movement in their quality improvement, not only go towards the positive entropy, but also take irreparable damage to society of young and needs developing country (Ishakav,1997). Total quality management is one of applied theories that in improving Industry quality is effective training services after the implementation has obtained beneficial results. This management has able to the most appropriate learning opportunities provide for organizations (Tahan, 2000). Already TQM as a quality-oriented approach created a fundamental transformation in the universities and its deep effects put in establishment of approaches and methods of improving quality. Implementation of TQM and its culture development has requires effort and time. Static training versus changes in extreme conditions of today's competitive is led to failure. Mayra Patrocinia and Francisco Diniz(2004) has showed that for all government departments is necessary and crucial being dynamic, integrity and as well as strength in teamwork regardless from the heavy role office managers for increasing efficiency. Mohammad Reza Asad in study in relation to determine fields and conditions TQM showed that in sport organization has been no effort to establishment of this type of management. Also other study was conducted; indicating that in some centers (Teacher Training University in Tehran and Shiraz University) has been provided relative readiness for acceptance and implementation of TQM. But the question is raised with regard to these results; it is: why is more in some organizations readiness for this type of management? Obtained result show that creates the necessary conditions in implementation of TQM is the role of top managers and middle for accepting this type of management and acceptable overall philosophy of TQM (Kakoei, 2000).

For the operation of TQM in organization, especially the training organization must emphasize first to management commitment to change and after discussed to the other processes. In other words cause of this

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problem indicate that reluctance to top level executives about this type of management is caused less readiness to accept TQM in employees of some service organizations. To conduct TQM process, managers must understand reasons for reluctance of employees relative to create change the quality (Aghaei, 2000). Leading and being committed leaders and senior managers in action to the principles of TQM are considered basic requirements towards improving favorable situation. Coordinating in parts for implementation of this management is not possible without top managers from a comprehensive attitude. Therefore, understanding, approval and commitment of officials and administrators in implementing such a comprehensive qualitative perspective, the possibility university change and reform are possible. Considering that implementation of TQM based on culture, customs, norms, attitudes and different behavior in each countries, organizations, and universities will be different. So having the correct understanding from realities of society will draw precision and accuracy image that is caused Goals and interests of people considered properly (Jafari,2000)

2. Theoretical Framework

TQM was introduced in many industrialized countries of the world in the 80s. After a decade, some governments realized the importance of TQM in service sectors. Today, development and production, thinking, thoughts and ideas is the highest goal that any system of thought and education in head of every tribe and nation (Amoupour,Gilaninia& Et Al, 2011, Gilaninia, 2011) Studies show that loyalty is a behavioral or an attitudinal that in statistical language is also very valuable (Monsef & et al,2012). Lack of funds and increasing demand citizens for acceptable services, governments is speed acceptance of overall process of quality management as a miraculous solution to solve problems in all provinces and local governments (Rosenhoover and Kuhn).

"If the manager wants to create change in organizations must have certain features that some of these features include:

1- Manager finds the organization as a system of dependent components together that trying to achieve a single goal. 2- Manager tries for each individual to create challenge, the joy, pride and honor. So it is trying to improve training, skills and abilities of each individual.

3- Manager training and trained and does not pay to criticize and punish and are created an environment full of trust and security, freedom and innovation. Manager is an active listener and does not judge Unilateral about what he/she hear.

4- Manager has the legal power, which comes from knowledge and his/her personality.

5- Manager will understand advantages and loss of unhealthy competition and collaboration between employees.

6 - Manager does not have always expectation.

7- Manager knows that experience without science cannot facilitate prediction of future events. Manager to predict methods of individual performance in his/her new career has need to Theoretical Foundations.

8- Manager for planning activities needed to achieve organizational goals is able to predict future (Gholami, 2003).

Also effective factors in the realization of TQM can indicate to careful planning and implementation of TQM management process, in engaging middle management from beginning, aimed to achieve tangible goals, ongoing communication with employees, employee involvement and respect to them, the emphasis on evaluation of performance and emphasize on tangible results of activities.

For the implementation of TQM in service organizations are given the following cases that these cases are consistent with plan of respect to customer. These include:

- All tasks done correct.
- All of tasks done speed or at least determine time.
- To solve the problem contact with place or there has be a contact point for solving the problem.
- When problems occur, they know where to refer.
- They Know Way and place to provide services.
- Information be available.
- Forms, publications, consultations and correspondence must be clear.
- When refer are facing with people who respected, reliable and hearer and have been polite behavior.
- Name of people and phone numbers are provided that directly answer to questions received (Rajabbeige, Salami, 1995).

Alaghehband expressed six basic principles for the implementation of TQM: (Alagheband, 2004, p108).

1- Focus on Customer
2- Focus on process and results
3- Prevention instead of inspection
4- Mobilize the workforce skills and expertise
5- Decision making based on information
6- Feedback

So important and fundamental issue is:

Do managers believe to TQM?

Do managers create Executive field for TQM?

What is employees' idea of organization about implementation of TQM?

How can provide better service to customer?

Has administrative conditions and needed field been provided to achieve TQM in higher education?

3. Research Questions

1- How much has leadership policy in Islamic Azad University, Rasht provided field for TQM implementation?

2- How much has being customer-oriented field in Islamic Azad University, Rasht?

3- How much has with participative management style provided the field of TQM implementation in Islamic Azad University, Rasht?

4- How much has by using information and their analysis provided the field of TQM implementation in Islamic Azad University, Rasht?

5- How much has with Strategic Quality Planning provided the field of TQM implementation in the Islamic Azad University, Rasht?

6- How much has with teamwork provided the field of TQM implementation in the Islamic Azad University, Rasht?

7- Is there significant different in level of Readiness for the adoption TQM in among employees with different service records?

8- Is there significant different in level of Readiness for the adoption TQM and employees gender?

9- Is there relation in level of Readiness for the adoption TQM and employees' education?

4. RESEARCH METHOD

Study population of this study consisted all of directors, assistants and administrators, professors and empoyees of Islamic Azad University of Rasht. Type of research is field study and library and in terms of goals is applied research.

5. Research Instruments

In this research scholars by using made questionnaire and available information be collected answers and comments of directors, professors and employees of higher education.

The questionnaire consisted of two parts:

A) Information about personal characteristics: including gender, age, education, degree of specialist courses and in-service training.

B) Closed questions on the type of multiple choice that are included components considered in the research hypotheses.

the questionnaire has 5Question in the first part to collect personal information and 42 question for the second part that Questions 1 to 7 relate to leadership policy, questions 8 to 14 related to management style, questions 15 to 21 customer-oriented and focus on the customer, questions 21 to 28 relating to the use of information and their results, questions 29 to 35 relating to strategic planning and 36 to 42 questions related to teamwork. In this study used questionnaires likert scale.

Determination of estimation method of reliability and validity of research instruments:

To determine the validity of questionnaire were performed provided five members of the faculty as a referee and management expertise and were applied proposed changes to the reform. For reliability and internal consistency of questionnaire that is measured with a Likert scale was used Cronbach's alpha coefficient. This questionnaire on a small group (= 30) was implementation twice and in two weeks and then calculated the correlation coefficient between score twice test performance and was considered as the reliability coefficient.

6. DATA ANALYSIS

First question: How much has leadership policy in Islamic Azad University, Rasht provided field for TQM implementation?

Table 1) T-test to evaluate the readiness of the leadership for TQM implementation

variables	Mean	Standard deviation	Standard error	t	df	Sig
leadership policy	24/6	4/35	0/43	8/44	105	0/001

As can be seen in the above table that mean of providing field for TQM implementation in university in idea of professors and employees of the University(x=24/6) with Standard deviation (S=4/35) that Were

compared with constant or Assumed mean[1](21). Given above data, calculated value of T (8/44) is statistically significant (<0/001). So it can be conclude that in idea of professors and employees, policy leadership has provided more than the average field for the implementation of TQM in Islamic Azad University of Rasht.

Second question- How much has being customer-oriented field in Islamic Azad University, Rasht؟

Table 2) t-test with Assumed mean for rate of being customer-oriented in university

Variables	Mean	Standard error	Standard deviation	t	df	Sig
customer-oriented	23/26	4/75	0/46	4/9	105	0/001

As can be seen in the above table that mean of providing customer-oriented field for TQM implementation in university in idea of Professors and employees of the University(x=23/26) with standard deviation (S=4/75) that Were compared with constant or assumed mean (21). Given above data, calculated value of T (4/9) is statistically significant (<0/001). So it can be conclude that in idea of professors and employees, being customer-oriented field have provided more than the average for the implementation of TQM in Islamic Azad University of Rasht.

Third question: How much has with participative management style provided the field of TQM implementation in Islamic Azad University, Rasht?

Table 3) t-test with assumed mean for providing the field of TQM implementation with participative management

Variables	Mean	Standard deviation	Standard error	t	df	sig
participative management	22/55	4/55	0/44	3/5	105	0/001

As can be seen in the above table that mean of providing participative management style for TQM implementation in university in idea of professors and employees of the University(x=22/55) with Standard deviation (S=4/55) that were compared with constant or assumed mean (21). Given above data, calculated value of T (3/5) is statistically significant (<0/001). So it can be conclude that in idea of professors and employees, leadership policy has provided more than the average for the implementation of TQM in Islamic Azad University of Rasht.

Fourth question: How much has by using information and their analysis provided the field of TQM implementation in Islamic Azad University, Rasht?

Table 4) t-test with assumed mean for providing the field for TQM implementation by using information and their analysis

Variables	Mean	Standard deviation	Standard error	t	df	Sig
using information and their analysis	21/91	4/75	0/46	1/96	105	0/052

As can be seen in the above table that mean of providing using information and their analysis for TQM implementation in university in idea of professors and employees of the University(x=21/91) with standard deviation (S=4/75) that were compared with constant or assumed mean (21). Given above data, calculated value of T (1/96) isn't statistically significant (<0/052). Using data analysis, for TQM implementation in in Islamic Azad University of Rasht is average.

Fifth question: How much has with strategic quality planning provided the field of TQM implementation in the Islamic Azad University, Rasht?

Table 5) t-test with Assumed mean for providing the field for TQM implementation with Strategic Quality Planning

Variables	Mean	Standard deviation	Standard error	t	df	sig
Strategic Quality Planning	23/34	4/06	0/4	5/91	105	0/001

As can be seen in the above table that mean of providing strategic quality planning for TQM implementation in university in idea of professors and employees of the University(x=23/34) with Standard

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[1] Assumed mean are obtained Multiplying median of Likert scale (3) in number for each sub-scale measurements.

deviation (S=4/06) that were compared with constant or assumed mean (21). Given above data, calculated value of T (5/91) is statistically significant (<0/001). So it can be conclude that strategic quality planning has provided for the implementation of TQM in Islamic Azad University of Rasht.

Sixth question: How much has with teamwork provided the field of TQM implementation in the Islamic Azad University, Rasht?

Table 6) t-test with Assumed mean for providing the field for TQM implementation with teamwork

Variables	Mean	Standard deviation	Standard error	t	df	Sig
teamwork	15/61	3/6	0/35	1/74	105	0/09

As can be seen in the above table that mean of providing teamwork for TQM implementation in (x=15/61) with Standard deviation (S=3/6) that were compared with constant or assumed mean (21). Given above data, calculated value of T (1/74) isn't statistically significant (<0/09). So it can be conclude that teamwork has provided in average for the implementation of TQM in Islamic Azad University of Rasht.

Seventh question: Is there significant different in level of readiness for the adoption TQM in among employees with different service records?

Table7) mean of employees' service records

Variables	Mean	Standard deviation	Standard error
To 5 years	134/43	2/31	0/31
6 t0 10 years	141/67	2/66	0/17
11 to 15 years	127/96	1/06	0/04
More 15 years	132/57	7/24	0/6

As can be seen in the above table that there is significant different in mean of Readiness university for the adoption and implement TQM in among professors and employees with different service records. To investigate of significant of these differences was performed from analysis of variance. The same condition of variances is considered before analysis of variance.

Table 8) Levene's Test for equal of variances

Levene's Test	Df1	Df2	sig
1/56	3	99	0/21

As can be seen in the above table that Levene's Test value (1/56) is not statistically significant (p>0/21). Therefore, difference between the variance is not significant and equal condition of the variance is satisfied.

Table 9) Results of analysis of variance test with regard to service record

Source of changes	Sum of squares	Df	Mean square	F	Sig
Between group	1373/47	3	457/82	0/9	0/44
Within the group	50325/25	99	508/34		

As can be seen in the table amount of f(99,3)=0/9 is not statistically significant (p>0/44). So we can say with 99 percent confidence that there isn't significant different among amount of Readiness for TQM implementation in terms of employees with different service record in Islamic Azad University of Rasht.

Eighth question: Is there significant different in level of Readiness for the adoption TQM and employees gender?

Table 10) Results of Independent T with regard to gender

gender	Mean	Standard deviation	Standard error	t	df	Sig
female	129/11	3/2	0/54	0/67	101	0/47
Male	132/28	2/4	0/29			

As can be seen in the above table mean providing for the implementation of TQM in female employees (129/11) and male employees (132/28) obtained observed independent T test was performed to examine differences. As the results of the table shows the calculated value of T (0/67) is not statistically significant. So

we can conclude that there isn't significant different in level of Readiness for the adoption TQM and employees gender.

Ninth question: Is there relation in level of Readiness for the adoption TQM and employees' education?

Table 11) means of employees' education

Variables	Number	Mean	Standard deviation	Standard error
diploma	5	126/6	2/62	1/17
Bachelor	28	133/57	4/96	0/94
master	34	134/54	2/81	0/48
PHD	36	126/86	2/69	0/45

As can be seen in the above table Mean readiness for acceptance and implementation of TQM in terms of employees and professors together with various documents has significantly different. To investigate of significant of these differences was performed from analysis of variance. The same condition of Variances is considered before analysis of variance.

Table 12) Levene's Test for equal of variances

Levene's Test	Df1	Df2	sig
1/48	3	99	0/22

As can be seen in the above table that Levene's Test value (1/48) is not statistically significant (p>0/22). Therefore, difference between the variance is not significant and equal condition of the variance is satisfied.

Table 16 - Results of analysis of variance with regard to degree test

Source of changes	Sum of squares	Df	Mean square	F	Sig
Between group	1317/89	9	439/9	0/86	0/46
In group	50380/83	99	508/9		

As can be seen in the table amount of f(99,3)=0/86 is not statistically significant (p>0/46). So we can say with 99 percent confidence that there isn't significant different among amount of Readiness for TQM implementation in terms of employees with different degrees in Islamic Azad University of Rasht.

7. DISCUSSION AND CONCLUSION

Implementation of TQM will be increases productivity, efficiency of employees and effectiveness of the management. Undoubtedly, with implementation of TQM is provided psychological environment conducive to employees. Also with regard to continuous improvement employees to share their creativity and the work environment will become a live, dynamic and lovely environment that people are valued and their opinions and activities will excellence organization.

The results of this research can used to increase the quality of services to employees, including training, research and university students, professors, students and their parents, planners of universities, coaches and officials and all interested in research.

With regard to results obtained following suggestions are offered:

- Continuous support and clear all levels from university management run the program: For review and implementation of total quality management, strong commitment by the chairman, board of directors and executive senior management of university with regard to the program should be in accordance with each unit of culture done, is essential.

- Necessity total quality management training for all faculty and employees: by teaching employees and professors and administrators will provide readiness and field necessary for the implementation of total quality management in all levels. Because this program is not applicable with circulars and instructions, management and academic employees can be encouraged in this way and be willing to implementation and operate this program.

- Implementation of programs after training in section educational services and classrooms.

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