

## **Total Quality Management; a New Approach to the Business Operation Improvement**

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**Abstract:** Being in the competitive world, organizations need operation improvement in order as to better qualification, because it is the fundamental responsibility for the managers to improve the operation. Performance management systems are a cornerstone of human resource management (HRM) practices and are the basis for developing a systems approach to organization management. Systems of controlling and evaluating the operation provide mechanism for arranging companies' strategies and activities implementation and it is considered that both quantitative and qualitative criteria's can guaranty the success in measurement. And also, there are variations in evaluating these organizations. Total quality management (TQM) is not only a culture and philosophy, but also a guidance outline for the basis of permanent development. Implementing this strategies guide the organizations in a way that enable them to have the best operation on the controllable environmental factors. Primary variables are detected by evaluating theories and based on the problem stated in this research. Then, the necessary information is achieved and intended factors are gathered. SPSS software is used for statistical analysis and at the end the hypothesis is examined. Research is a descriptive and applicable research. Descriptive research helps to better diagnosis of the environment and decision making. This essay deals with the relationship between soft Total Quality Management (Autonomy, Internal Communication, Consultation, Qualitative Flexibility, Supportive People Management Practices) and companies' business operation (Effectiveness of Firms, Financial Performance). Numerical Taxonomy is used to determine the dependent variables (business operation) in this research. All of the exchange member firms that have worked for at least 5 years are selected for the population of this research. Random sampling is applied in this research; consequently, 82 companies are chosen. Field study and questioners are used as the ways of gathering information. Furthermore, Pierson Coefficient of Correlation is selected in order to testing hypothesis and all of the hypotheses are accepted.

**Key words:** TQM, companies' business operation, operation improvement, operational evaluating

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### **INTRODUCTION**

This essay deals with the Iranian companies' operation. Companies' total operation is made up of its small units' business. The analysis, evaluation, and comparison among operation with the preceding ones', or revivals or moderate criteria of the same industry results in better decision making in future; consequently, one of the most significant aims of all of the companies is permanent betterment. (Simons, 2004) Total Quality Management is necessary as one of the strategies for the companies' permanent betterment. Total quality is a description of the culture, attitude and organization of a company that aims to provide and continue to provide its customers with products and services to satisfy their needs. Total Quality Management is an approach to the art of management (Dahar, 2010).

#### ***Statement of the Problem:***

In the last decade, evaluations of the companies illustrate the function in their operation; however, experts estimate higher potential for Iranian companies' business operation. Numerous strategies are proposed for operation improvement (Simons, 2004). Good standing research illustrate that the use of TQM in companies results in benefit, effectiveness, and efficiency (Kesmati, 2002). Variety of factors requisite the performance of TQM principles. TQM is a disciplined structure that focuses on the permanent improvement of all interior activities of the organization (Vice Chancellor for Research, 1999). In other word, TQM a continuous change toward betterment are two fundamental concepts directly dealing with continuous improvement of quality of processes and performance of an organization to achieve positive transformation in mindset and action of employees and management (Saleem,2012). The research is going to know whether there is relationship between soft TQM and companies' business operation or not.

## **Literature Review:**

### **1. Business Operation:**

Evaluating the operation means the process of operation measurement in organization in the framework of scientific concept for the organizations' objectives and duties in order to implementing in the executive programs structure (Dariani *et al*, 2005). Generally, a measure of business performance is not so simple. Large and dispersed organizations usually have different activities. They vary in purpose and come to different conclusion. To measure the companies' performance, several approaches have been proposed (Daft, 2004). Various researchers used a number of different components to measurement business operation and no fixed standard scheme in this area can be seen (sin *et al*, 2005). Much of the criticism is of its failure on multiple dimension of performance evaluation, so mach focus is on new systems of performance evaluation (Zali, 1999). Pelham categorize Operation companies in to three groups of effectiveness of firms, growth and profitability. In this research, according to the views scientists such as Pelham and Chiqvan, three components such as financial performance, market dominance and effectiveness of firms in the marketplace which suites more to the current conditions of companies in Iran are used for business performance measurement. The second factor that is the market dominance ignored due to the lack of access to the component of its constituent instruments and lack of information necessary to measuring them in Iran. There for, companies' financial performance and effectiveness of firms in the marketplace are selected as components of business performance (Bakhtiari, 2004). Moreover, financial performance is measured based on the number of finance professionals' viewpoints which are the following parameters:

The ratio of profit to assets, the ratio of stock price to the earnings per share, and ratio of the profit to sales. Also, effectiveness of the market means the degree of their goals in a competitive market. In this research, the effectiveness in the marketplace is measured due to components of market share, success of new products, costumers' retention, customer attraction and the product quality and depending on seven Likert Scale questions and viewpoint of corporate managers.

### **2. Total Quality Management:**

TOTAL Quality Management was first espoused by Dr. W. Edwards Deming in the late 1950's. His ideas were not accepted by US industry but were heartily endorsed by Japan in their recovery from World War II (Winn, 1998). Making a product right the first time is one of the principal objective TQM. Implementing a successful TQM program will, in fact, reduce cost rather them increase them (Shim and Siegel, 1999). TQM is not only a culture and philosophy, but also a guidance outline for the basis of permanent betterment. In fact, it is the application of quantitative methods and human resource to improve all the process within the organization and outgo and surpassed the client's need, both now and in the future (Ahmadvand *et al*, 2002). In general, companies that implement TQM philosophy should ensure the quality of the efforts that are underway in all parts of the organization. Often moving towards an ongoing process begins by adopting one of the philosophies of quality management, such as the principles of Deming, Juran and Crosby. These well-know individuals have developed the basis and guidelines for changing organization's environment and creating quality oriented organization due to approaches to human resource (Vice Chancellor for Research, 1999). TQM measurement is achieved by the following factors: (Abrunhosa *et al*, 2008)

Autonomy: It relates to the degree to which employees have some discretion and control over job-related decisions. The following Items are used for measurement: 1- Authority to take immediate corrective actions once problems arise. 2- Support from the supervisors to the decisions made. 3- Active role in task planning and scheduling. 4- Control over the quality of the work.

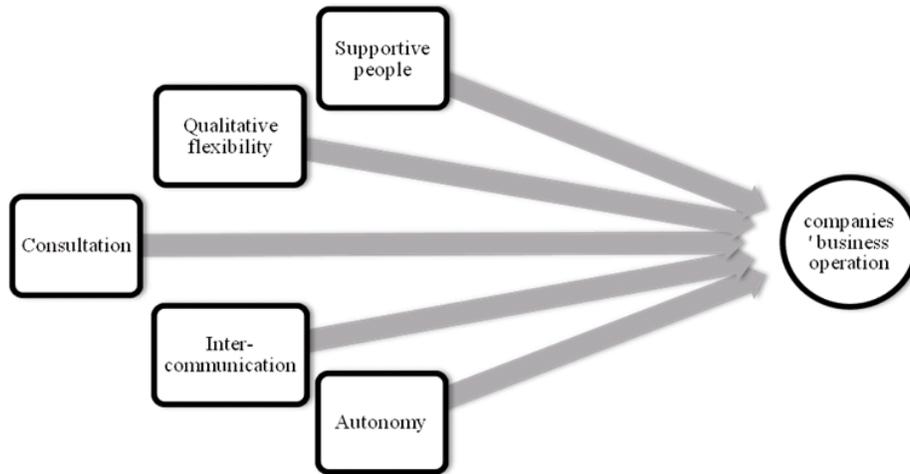
Internal communication: It reflects the extent of communication among organizational units or groups. The following Items are used for measurement: 1- Degree of vertical (hierarchical) communication 2- Degree of intradepartmental communication (among co-workers that belong to the same area) 3- Degree of transversal (interdepartmental) communication 4- Accessibility of upper manager to workers.

Consultation: It relates to the degree to which the organization listens to its employees. The following Items are used for measurement: 1- Employees' feedback collection through the use of questionnaires 2- Existence of a system to collect Employees' suggestions 3- Disclosure of the results of the questionnaires 4- Workers' involvement in strategy decision making.

Qualitative flexibility: It concerns the firm's ability to adjust and deploy the skills of its employees to match the tasks required by its changing workload, production methods and/or technology. The following Items are used for measurement: 1- Use of job rotation schemes 2- Development of competencies for workers to perform a wide variety of tasks 3- Implementation of the "cell manufacture" concept 4- Development of the workers' abilities to perform in "cells" 5- Specific vocational training (Reversed) 6- Selection of workers based on generic abilities (internal education and training gives them the competencies to perform specific asks)

Supportive people management practices: It relates to people management practices that are supportive of the introduction of TQM principles. The following Items are used for measurement: 1- Continuous education and training 2- Performance appraisal schemes. [Abrunhosa *et al*, 2008]

Finally, the offered model in this research is:



**Fig. 1:**

**Hypothesis:**

Primary:

There is a relationship between TQM and companies' business operation.

Secondary:

There is a relationship between autonomy and companies' business operation.

There is a relationship between inter-communication and companies' business operation.

There is a relationship between consultation and companies' business operation.

There is a relationship between qualitative flexibility and companies' business operation.

There is a relationship between supportive people management practices and companies' business operation.

**Research Background:**

Robert Owen for the first time proposed the operation evaluation system in Textile industry in Scotland in 1800. Consequently, the products that were made up of various colored woods were degraded that this was a kind of quality evaluation (Vice Chancellor for Research, 1999). Edward Deming emphasis that all business processes should be with the feedback cycle (Pakpour, 2006). The history of business evaluation in Iran goes back to 7th century. It was first proposed by khaje Rashid Aldin Fazelollah. Permanent operation improvement provides the huge synergy force which can support the development program. The main issue in all organizations analysis is operation and its improvement requires evaluations; therefore, no organization can be imagined without operation evaluating system (Pakpour, 2006). The first step in operation evaluating system is the recognition of the scientific basis including theories and concepts (Rostami, 1999). Mainly the companies' operation evaluation can be viewed from two perspectives:

The first one is the concept that is concerned with the performance similar to their competitors. The next one is the objective view that is concerned with the absolute measure of performance (Sin *et al*, 2005). However, despite the various usages for business performance evaluation by different researchers, a team of scientists categorized the components that are more relevant and named them. For instance, Pelham categorize performance components in three groups of organizations' effectiveness growth and profitability. In the present study, structures such as financial performance and effectiveness of the companies on the market from Pelham and Chiqvan fit more with the conditions governing the companies in Iran are used. Organizations worldwide are trying to improve their performance by implementing of programs such as TQM, Malcolm Baldrige and EFQM models and re-engineering business process (Bayazi *et al*, 2007). Wick refers to the quality as diffused and multifaceted structure and points out that TQM is management philosophy that promotes an organizational culture that is committed to customer satisfaction through continuous improvement (Abrunhosa *et al*, 2008). Juran stated that quality is a never ending process. Quality improvement is an ongoing process, not a one's shot program. Hashmi describes that total quality management is a management that approaches that originated in the 1950's and has steadily become more popular since the early 1980's. TQM is a method by which management and employees can become involved in the continuous improvement of the production of goods and services (Dahar, 2010). According to Spencer, TQM itself does not constitute a new paradigm, but it gather features from separate organizational models (mechanical, organizational and cultural) and provide them with a way to expand (Abrunhosa *et al*, 2008). Hendricks and signal did a study in which they proved that TQM can improve and enhance organization's performance. GAO study analyses the effect of TQM on corporate

performance of twenty companies that participated in the Malcolm Baldrige award and concluded that TQM effect organizational performance (Kesmati, 2002). The model used in this study for evaluating TQM is the same as the one that Prajogo and Sohal had used in 2001. TQM is a complex management philosophy that involves a set of rules that tend to have different effects depending on the intended innovations. The reason for selecting this model is to prove the relationship between innovation strategies and soft principles of TQM. Generally, it is stated that some of the elements of TQM that are part of soft components cause an increase in innovation. Evaluating the model helps the debate on the relationship between specific types of innovations. So TQM and innovation have a look at some of the effects of soft TQM practices on the impact of technology's innovation in Portugal's shoe industry. Results indicate that the soft elements of TQM have generally a positive relationship with the adoption of technological innovations (Abrunhosa *et al*, 2008).

As shown in figure 1, TQM principles are effective to technologies' innovation. The current research is trying to prove that there is a relationship between the application of TQM's soft principles (Autonomy, Internal communication, Consultation, Qualitative flexibility, Supportive people management practices) and companies' business operation.

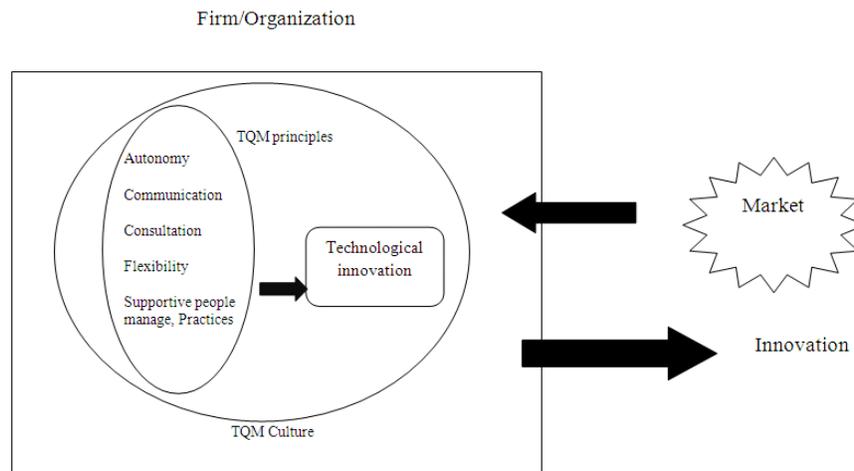


Fig. 2:

### MATERIALS AND METHODS

All of the exchange member firms that have worked for at least five years and their fiscal year ended in February are selected for the population of this research. Random sampling is applied in this research, consequently 82 companies are chosen. Questioner is used as a way of gathering information. Furthermore, Pierson coefficient of correlation is used in order to testing the hypothesis. Similarly to measure the content validity of the questioners, the Delphi method has been used. The Cronbach Alpha coefficient is used to calculating the reliability coefficient for internal consistency of the questioners, which is equal to 89/1.

#### Data Analysis:

In the main hypothesis examined by Pierson's correlation coefficient, it was concluded that there is a relationship between the principles of TQM in Tehran stock exchange member firms and business operation, so the intensity of the relation is about 71.9 percent. It is illustrated in table 1.

Table 1:

		Business operation	TQM Principles
Business operation	Pearson Correlation	1	.719
	Sig. (2-tailed)		.000
	N	82	82
TQM Principles	Person Correlation	.719	1
	Sig. (2-tailed)	.000	
	N	82	107

The first hypothesis examined by Pierson's correlation coefficient, it was concluded that significant relationship exists between delegation and business operation, so the intensity of the relation is about 56.3 percent. It is illustrated in table 2.

**Table 2:**

		Business operation	Autonomy
Business operation	Pearson Correlation	1	.563
	Sig. (2-tailed)		.000
	N	82	82
Autonomy	Person Correlation	.563	1
	Sig. (2-tailed)	.000	
	N	82	107

And also it is about 79.1 percent for communication and business operation. It is illustrated in table 3.

**Table 3:**

		Business operation	Communication
Business operation	Pearson Correlation	1	.791
	Sig. (2-tailed)		.000
	N	82	82
Communication	Person Correlation	.791	1
	Sig. (2-tailed)	.000	
	N	82	107

Consultation and business operation is 65.9 percent. It is illustrated in table 4.

**Table 4:**

		Business operation	Consultation
Business operation	Pearson Correlation	1	.659
	Sig. (2-tailed)		.000
	N	82	82
Consultation	Person Correlation	.659	1
	Sig. (2-tailed)	.000	
	N	82	107

Flexibility and business operation is 63.7 percent. It is illustrated in table 5.

**Table 5:**

		Business operation	Flexibility
Business operation	Pearson Correlation	1	.637
	Sig. (2-tailed)		.000
	N	82	82
Flexibility	Person Correlation	.637	1
	Sig. (2-tailed)	.000	
	N	82	107

And finally, there is a relationship between supportive people management practices and business operation that the intensity is 51 percent. It is illustrated in table 6.

**Table 6:**

		Business operation	supportive people management practices
Business operation	Pearson Correlation	1	.510
	Sig. (2-tailed)		.000
	N	82	82
supportive people management practices	Person Correlation	.510	1
	Sig. (2-tailed)	.000	
	N	82	107

**Conclusion:**

Evaluating the operation means the process of operation measurement in organization in the framework of scientific concept of management for the organizations' objectives and duties in order to implementing in the executive programs structure. Researching the factors effecting performance illustrates that how an executive program with various aspects can affect companies' performance. Different companies compete for survival and they need constant evaluation and improvement for a greater effectiveness. And it can be a standard for increasing the business improvement and it also requires an understanding of strategies such as TQM. Total Quality Management is not only a culture and philosophy, but also a guidance outline for the basis of permanent betterment. In fact, it is the application of quantitative methods and human resource to improve all the process within the organization and outgo and surpassed the client's need, both now and in the future. Understanding the principles of TQM help companies while getting familiar with these principles, find their place and to achieve high performance. Iranian companies in this process might be better to improvement TQM in order to increase performance.

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