# The Influence of EFQM on Performance of the Persian Cutting Industry

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#### Abstract

The aim of this study was to investigate the effect of applying EFQM on performance of the Persian cutting industry in 2015 using an integrated model and empirical study of the theoretical basis. This research was applied in goal. In this study, questionnaires were used to collect information and the reliabilities of the questionnaires were determined using the Cronbach's alpha method. Questionnaires used were "job satisfaction and organizational commitment (Moghimi) with reliability of 0/766", "Job dependence questionnaire (Thomas Ladahl and Kejner) with reliability of 0/84", "organizational climate questionnaire (Salsmn and Deep) with reliability of 0/96". The study population included a total of 105 employees in the Persian cutting industry. Questionnaires were distributed randomly among a group where finally 67 questionnaires were completed and the analysis was performed on 67 participants. The results showed that five factors of «job satisfaction, organizational commitment, job attachment, job attitude and organizational climate» showed significant difference before and after using the EFOM. Yet, for organizational climate by comparing the mean and standard deviation before and after use of EFQM it was noted that it decreased from (61/16) before running to (56/36) after implementation with a standard deviation of (11/63) before running and (9/66) after implementation of this method. Therefore, the relationship was reversed.

**Keywords:** EFQM, Job Satisfaction, Organizational Commitment, Job Attitude, Organizational Climate

## Introduction

In today's world considering the speed and volume of information and challenges faced by organizations, the necessity for having criteria for status determination and planning based on points of weakness and strength is sensed more than ever. Rewards for quality and its specific models have gained the attention of theoreticians of organizations for the recent few decades. The Deming and Malcom Baldridge prizes are among them. Europe particularly after summative movement of the countries of this continent towards complete political-economic unification and cohesion has sensed the necessity for agreement on assigning such prizes more than before. On this basis, the European quality foundation consisting of 14 industrial countries in this continent has proposed the European Foundation for Quality Management Excellence Model (EFQM). Considering the political challenges faced by our country and sanctions implemented by big powers, the necessity for adopting the EFQM is undeniable.

Organizational excellence models or leadership in business is used as a powerful tool for evaluation of how well established various organizations are. With application of these models, organizations can on the one hand evaluate their success in implementation of improvement

programs at various time points and on the other hand compare their performance with other organizations and particularly with the best in the business. Models for leadership in business are a response to the question of what kind of organization is a better one. What goals and concepts does it follow and what criteria govern over their competitors?

Now a day, most countries in the world with reliance on these models have created rewards and prizes at the national and regional level which are motivators for firms and businesses in reaching excellence, growth and creation of wealth. Excellence models by placing quality of production (product or services) and participation of all firm members axial can gain customer satisfaction and provide interests of benefactors and at the same time encourage and promote individual and organizational learning with emphasis on creativity and innovation (Ajitabh Ambastha, 2005).

Even though Iranian firms have followed the implementation of such methods with tremendous interest, yet, most improvement measures have been adopted in western countries and taken structure. Their implementation in Iran is not free of problems. Studies have shown that regularly most problems are expressed from the side of employees. The reason is that these systems have mostly emphasized continuous implementation and refinement of the system of process orientation and participation of employees. Yet, traditionally Iranian firms have been associated with duty oriented, hierarchal and hydraulic bureaucratic structures which can be rooted in causes of such deficiencies.

The necessity and importance of existence of a system of evaluation of performance in every organization is to the level that its lack is considered one of the signs of disease in the organization in various dimensions including evaluation of use of resources and facilities, goals and strategies and .... Therefore, every organization with the purpose of awareness of the level of desirability and value of its activities particularly in a complex and dynamic environment has extreme need for self-evaluation (Eghbal, 2008).

Self-evaluation which is used as a process for judgment of efficiency of predetermined programs requires use of special tools and modes (Eghbal, 2007). Up to now various kinds of leadership models have been introduced and used among which EFQM is the most well-known and has the most application in performance evaluation of organization

The EFQM model believes that betterment (for customers, employees and society) results from strategic leadership and policies for participation, resources and processes. Contrary to many accreditation frameworks that only pay attention to actions (processes), this model equally pays attention to both actions (enablers) and consequences (Naylor, 1999).

Therefore, the organizational betterment model EFQM helps the firm to take effective steps in the direction of all dimensions of improvement of efficiency and efficacy and as such provides for customer and benefactor satisfaction. This model with participation of personnel and involving them in matters provides equal opportunity for learning and creativity for all such that organizational success is guaranteed in the long term (Theol, 2002).

With implementation of this model in the Persian cutting company, the activities of this section occurs in the frame of a specific model which means creation of common language for

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<sup>&</sup>lt;sup>1</sup> Bureaucracy is a hidden organizational structure which is unofficial and resulting from Iran's social structure and the method of precipitation (involuntary historic) of ancient times that has formed from the influence of production technology (technology of producing and managing water) in dry and semi arid regions which was the most important source of power and has created a specific hydraulic system in social, cultural, political and legal life. Veet Fogel has noted that control of the water sector for irrigation based on the method of mill production is a powerful exploitation bureaucracy which has led to hydraulic monopoly and naturally hydraulic bureaucracy who forced their power as the reigning strata in hydraulic societies.

change of situation. Additionally, there will be a possibility for self-evaluation and comparison of activities of the mentioned company with similar firms and provision of feedback and ultimately realization of the company's mission and reaching excellence (Banyloohe, Bahram; 1382).

## Research questions and hypotheses

## Main research question

1. Is there any significant difference between employee job satisfaction before and after implementation of EFQM?

## Minor research questions

- 1. Is there a significant difference between employee organizational commitment before and after implementation of EFQM?
- 2. Is there a significant difference between employee job attachment before and after implementation of EFQM?
- 3. Is there a significant difference between employee job outlook before and after implementation of EFOM?
- 4. Is there a significant difference between employee organizational climate before and after implementation of EFQM?

## **Research Hypotheses**

## Main research hypothesis

1. Significant difference exists between employee job satisfaction before and after implementation of EFQM.

## Minor research hypotheses

- 1. There is a significant difference between employee job commitment before and after implementation of EFQM.
- 2. There is a significant difference between employee job attachment before and after implementation of EFQM.
- 3. There is a significant difference between employee job outlook before and after implementation of EFQM.
- 4. There is a significant difference between employee job climate before and after implementation of EFQM.

## Theoretical background and previous research

## Theoretical background of the study

With referral to the nature, process, objectives and characteristics of EFQM it is evident that this technique is a managerial one and related to the domain of control and evaluation in the organization. To prove this claim, familiarity with control, its definition and process and also EFQM becomes necessary. In theories of management from the classical period up to now, control has been defined as one of the stages or principles of management. The first management theory POSDCOREB includes: planning, organizing, staffing, directing, coordinating, reporting and budgeting. Reporting and budgeting are placed in the control domain. Later, Henry Fayol in his fourteen principles has introduced control as part of management. Currently, among experts of the science of management, control is considered a principle, a stage or an important managerial duty. Some summarize the principles of management into five items planning, organizing, resource provision, directing and control. Others acknowledge the same principles under the titles of process of management and yet, some others know them as duties. With the assumption of acceptance of any of these theories, control is considered the final step in the process of management. In recent

decades, Mr Deming in his famous cycle has introduced control as evaluation or control which is also known as the PDCA cycle (Agustin, Ekadjaja, 2000).

Control known as control, check, evaluation or monitoring has been defined by almost all as understanding the present situation, comparing it with goals and indices, understanding deficiencies and lagging behind and its correction. Based on this definition, the process of control is:

- Understanding or determination of objectives and indices
- Comparison of the present situation with objectives and indices
- Understanding the present situation
- Understanding deficiencies, defects and lags
- Endeavor for revision

This process continuously persists in the process of management and it is the same principle that is known as "sustained improvement" in modern management theories, models and techniques. Now if we look at EFQM, we will notice that the role played by EFQM is sustained control, evaluation and revision. Based on the definition of Banyan, excellence model, namely EFQM, has nine main elements where five of its items are enablers (leadership, strategy, employees and resources) and four cases include consequences (employees, customers, and society and key results of performance). If we take a precise look at these elements and the process of implementation of this model, it is the same process of PDCA or control in nature as described before. In the European excellence model (EFQM), various techniques are applied where all in nature play a controlling role including in the logic of RADAR<sup>2</sup> and self-evaluation. In the RADAR logic, results are considered initially revolving around the axes of trend, goals, comparison and causes. Next is approach, application and evaluation and reevaluation and all these are nearly the same as the Deming cycle and the process of self-evaluation. The same applies to the process of self-evaluation (DOWN LISBURN TRUST, 2004).

The stages of self-evaluation begin with creation and commitment to self-evaluation and continue with establishment of communication and direction and end with determination of operational plans and implementation of programs and ultimately reevaluation and this cycle persists. Now if we compare the process of these three important techniques with the process of control in management, we will notice that all these models and techniques are placed in the domain of control (Dr Boulter, Professor Ben Dell, 2005).

Therefore, it can be concluded that in the model of leadership of an organization with reference to the European model, firms with evaluating themselves (self-control) while receiving appropriate feedback and identifying their points of strength and weakness will be able to present methods for sustained improvement and revision (identification of improvable points). This cycle is considered controlling initiative and sustained improvement in the Deming process. Therefore, it can be stated that: the mission of EFQM is based on understanding the present organizational situation and comparing it with performance goals, indices and standards and sustained improvement in performance.

## Key concepts of the European excellence model EFQM

This model that includes five main components has been shown in Figure (1) and the relationship between the constituents has been demonstrated with each other (Juhi H et al, 2004). Additionally, this model has been built based on fundamental values and concepts which include result orientation, customer orientation, leadership and persistence in goals, management based on

<sup>&</sup>lt;sup>2</sup> Results, Approach, Deployment, Assessment, Review
Openly accessible at http://www.european-science.com

realities and processes, employee development and participation, improvement, innovation and persistent learning, development of firms and their social responsibility.

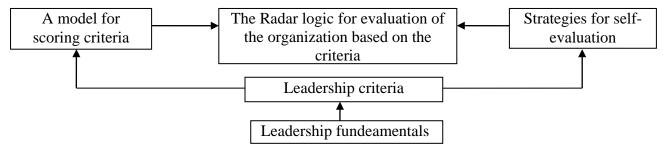


Figure 1: Components of the EFQM model and their relationship with each other

Position of the EFQM model as a tool for default finding in the organization:

- 1. The regular methods of evaluation based on the EFQM model are questionnaire, workshop, proforma, matrix or simulation of reward.
- 2. In summation of results and identification of indices, generally methods of decision making are by questionnaire, workshop, proforma, and matrix or reward simulation.
- 3. Determination of the causes of occurrence of the problem is the most important default finding section and in practice with beginning of this stage, default finding goes to the side.
  - 4. Prioritization of causes should be based on scientifically accepted method.
- 5. In determination and identification of strategies, the level of their influence on other indices and causes should be considered.
- 6. Prioritization of strategies should be performed at least based on indices such as cost, time, influence, effectiveness and etc.

The most important pillar of the EFQM model is the discussion related to its self-evaluation. In fact, the self-evaluation process where various methods have been proposed for it in the organization is a guarantee for confidence in the propagation of the model in the organization.

In this method, the model initially suggests primary and simpler ways of self-evaluation and in fact examines the organization relative to the model and when the risk of rejection of the model implementation is resolved, methods are presented that involve most of the organization.

## Methods of self-evaluation in the EFQM model

In total, 4 main stages as follows exist for establishment of the process of self-evaluation in the interested company:

- 1. Achieving complete understanding of the existing situation of the interested company
- 2. Organization of executive structure (executive pillars for establishment of the process of self-evaluation)
- 3. Selection of appropriate method for self-evaluation with attention to advantages and disadvantages of each of the approaches
  - 4. Systematic implementation of the self-evaluation process

It should be noted that these 4 stages are the main steps for establishment of the process of self-evaluation in the interested company. Each of these stages also has more detailed steps which will be described in the following.

## A) Achieving complete understanding of the existing situation of the company

Effective implementation of the process of self-evaluation before anything needs reaching a comprehensive understanding of the organization, its activities, customers, and in principle the level

of the organization's trade and ultimately what the firm seeks from implementation of the self-evaluation process. The most important tool for realization of this understanding is completion of the following form (Bou-Llusar J Carlos, 2005):

Table 1: Instrument for the stage of recognition SIPOC<sup>3</sup>

Supplier	Input	Process	Out put	Customer
A) Who are the	What are the key	What happens in	What are the key	A) Who are the
key providers in	inputs in your	your organization?	outputs in your	key benefactors of
your organization?	organization?	(What are the	organization?	your organization?
B) What are the	A) Primary	activities and key		B) Who are the key
constituents of	material	processes in your		customers (internal
your organization's	B) Data	organization?)		and external) of
external	C) Orders			your organization?
environment?	D) Information and			
	•••			

## B) Organization, executive structure (executive pillars) for establishment of the process of self-evaluation

One of the necessities of effective implementation of the process of self-evaluation where lack of correct planning can lead to lack of realization of desired results from this implementation is explanation and formulation of a necessary executive structure for its establishment.

For this purpose, design of human substructures as executive pillars of the process should be performed precisely. There is need that the movement towards excellence is an inclusive and broad movement in organizations and it is realized only by interaction between the executive pillars and levels of the interested company and participation of all senior directors (Charles Aubery, 2005).

## C) Selection of an appropriate method of self-evaluation with consideration of advantages and disadvantages of each of the approaches

In the EFQM model, four non prescribed approaches are used for implementation of the process of self-evaluation. These four are: 1) questionnaire 2) workshop 3) proforma and 4) matrix or reward simulation approaches. Every organization with consideration of some parameters such as prevalent organizational culture selects from the approaches and subsequently implements it. It should be noted that each approach used for self-evaluation should ultimately be responsive to items and expectations of the interested firm and help with:

- Determination of points of strength that have the most influence on the organization's trade with the purpose of directing towards precise focus and goal setting for the definition of improvement programs.
  - Precise determination of parts of the organization that need improvement.
- Precise determination of revisionary programs and their application in the organization with attention to improvable areas.
- Effectiveness of the process for the organization or in other words realization of movement towards sustained improvement in the organization.

With attention to the characteristics of each approach according to the following table or with the help of a diagram, appropriate decision making basis for selection of the appropriate approach is available for each collection.

<sup>&</sup>lt;sup>3</sup> Supplier, Input, Process, Output, Customer (SIPOC)

**Table 2: Designing the self-evaluation approach** 

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	Points of	Precision in	Necessity for	Attention to	Need for a	Level of
	strength and	scoring	familiarity	visiting the	trained	advantage
	improvable		with the	location	evaluator	taking from
	areas		model			resources
Questionnaire	No	Low	Low	No	No	Low
Workshop	Yes	Moderate	Yes	No	Yes	Moderate
Proforma	Yes	Moderate	Yes	No	Yes	Moderate
Matrix/reward	Yes	High	Yes	Yes	Yes	High
simulation						

Proportionate to promotion of level of leadership and organizational maturity, the firm gradually attains the preparedness for use of more complex models for the process of self-evaluation and excellence model.

To be able to effectively and with open eyes plan for our organization and imagine the position of our firm with confidence in the future, we should know where we stand and what our position is. For this purpose, one of the methods that can be very useful, efficient and effective is implementation of the process of self-evaluation. Self-evaluation is an organized, systematic and inclusive process at an organizational level that helps leaders like a full view mirror in reaching a comprehensive and inclusive understanding of the firm (Bacidore et al, 1997).

- Questionnaire
- Workshop
- Matrix
- Proforma

It is suggested that in organizations that have the goal of self-evaluating for the first time, the questionnaire and workshop methods are used in combination. Considering that most firms inside of Iran have such conditions, the method of specialized questionnaire along side with method of workshop is suggested.

## Reasons and advantages of establishment of self-evaluation

Definitely every organization seeks specific objectives and goals from applying and establishing a model with various applications. Use of the process of self-evaluation in the frame of prevalent models such as the organizational excellence model EFQM also has advantages the most important of which are:

- This model can precisely identify and determine the points of strengths and improvable areas of the organization.
- This model is an efficient and completely precise process for identifying and evaluating points of strength and improvable areas and measuring level of progress and leadership of an organization in comparison with other competitive firms.
- This model with consideration of its executive consequences can be a basis for macro organizational goal setting and planning for movement towards evolution and sustained improvement in the firm (AMS Operation, 2005).

### Previous research

Review and objectives of organizational excellence models which include encouragement of systematic self-evaluation, close collaboration between organizations, encouragement of exchange of information, promotion of awareness of necessity to achieve quality and encouragement of firm to use the process of improvement of quality management, clarifies the importance of use of such a

model for the Persian cutting company in achievement of these objectives and realization of its mission.

- Among few researches in this country up to now, research by Pour Samimi and Akhavan and studies by the institute of standard and industrial research in Iran in 2002 have more scientifically evaluated the effects of establishment of quality management systems (Standard Series ISO<sup>4</sup>-9000). The most important results of this research are as follows:
  - Senior management has played the main role in attention to ISO-9000 standards.
- Systematization of tasks has been mentioned as the most important reason for acquisition of certification.
- Training of personnel is the most acute problem in the path of standard establishment. Interest of company directors in acquisition of certification solely with the purpose of advertisement and not the goal of improving firm situation has been among mentioned factors.
- Jelodari Mameghani in his article titled "Economy, management and quality in 2006" after mentioning the advantages of establishment of a comprehensive system of quality management in firms and the necessity for commitment of senior managers and employee to implementation of all fundamental items and belief in value creation states that: if we accept the assumption and establishment of systems of quality management is not solely for acquisition of a certificate and document, this establishment should be able to advance organizational processes in the direction of increased profitability and economization and in other words, the processes under consideration in quality management systems will be effective when they are able to create added value in the organization and processes. If organizational operations are successfully managed with a procedural approach, the following financial effects will result for the company (Jelodari Mameghani, 2006):
  - Improvement in the process of return of capital.
  - Improvement in the process of allocation of resources.
  - Decreased costs impinging upon the organization.
  - Accessibility to high values and decreased costs of processes.
  - Decreased time of delivery of the product to the market.
  - Decreased time of production halts and product finalization time.
  - Increased effectiveness of internal and external communications.
- Asar GM and Lang Boutom authored an article in 2002 which describes the findings in a case study evaluating the situation of comprehensive quality management in a Higher Education Institute (HEI) in Britain using self-evaluation of the European quality management method (EFQM). The strategy used in this case study includes 6 colleges in the same institute (HEI). This strategy includes implementation (application) of principles of employee development such as training of university executives, deputies and all active personnel in quality and institutional function development based on the EFQM model and combining it with the institute of quality improvement of Britain. In this study, evaluation of resulting models for development, improvement, implementation and quality in a stage prior to selection and application is emphasized. This study identifies the difference of methodology between EFQM and educational (institutional) criteria for the Malcom Baldrige national quality prize as a key domain (Ernest, Osseo-Asare, 2002).

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<sup>&</sup>lt;sup>4</sup> The International Organization for Standard was founded with the purpose of unification and formulation of international standards in 1926 in Geneva. The objective of this organization was creation of laws, regulations and criteria based upon which matters relevant to the organization and firms can be evaluated, studied and compared. This organization in Iran is the Organization of Standard and Industrial Research of Iran.

Table 3: Results of past research

Researcher name	Year of	Topic of research	Results of evaluation
	research		
Engineer Poursamimi, Majid Akhayan and	2002	Effects of establishment of quality management systems (Standards Series	Senior management has the main role in attention to ISO-9000 standards.  Systematization of tasks has been
research performed by Institute of Standard and Industirial Research in Iran		ISO-9000)	mentioned as the most important reason for acquisition of certification.
Jelodari Mameghani	2006	Economy and management and quality	capital. Improvement in the process of resources allocation. Decreased costs impinging on the organization
Asar GM & Lang Boutom	2002	Evaluation of the situation of comprehensive quality management in a Higher Education Institute in Britain	This study identifies the difference between EFQM methodology with educational (institutional) criteria of the Malcom Baldrige National Quality Prize.
Saizarbitoria & Casadesu	2006	Delphi study regarding motivation in ISO 9000 and EFQM	Various specialists agree on the point that external factors force companies to implement the ISO 9000 standard and on the other hand, for implementation of the TQM systems, various reasons are mentioned
Joyce	2006	Self-evaluation of the EFQM model in a Spanish public university (evaluation of quality in the services section)	Using these processes obtained in this research points of strength and domains needing revision can be identified so an action plan can be designed and related to a strategic design and functioning evaluation
McCarthy & Greatbanks	2006	Effect of the EFQM excellence model on leadership in German and British organizations	German and British organizations are different regarding leadership activities and concepts related to appropriate leadership application

<sup>-</sup> Saizarbitoria and Casadesu (2006) in their article titled "Delphi method regarding motivation in ISO-9000 and EFQM" had the goal of analyzing the motivations for implementation of QM2 (quality management) among Spanish companies with attention to models newly popularized (ISO 9000 and EFQM) using a new methodology, namely the Delphi method. This article in addition to using the Delphi method also takes advantage of other previous evaluations and information from precise interviews by specialists in the Delphi panel. This article shows that various specialists agree on the point that external factors force companies to implement the ISO

9000 standards. On the other hand for implementation of TQM<sup>5</sup> systems, it mentions various reasons. The conclusion of this article presents a deeper understanding of reasons for implementing ISO 9000 and EFQM based on opinion of directors, consultants, specialists and members of institutes (Saizarbitoria H & Casadesu M 2006).

- Joyce (2006) authored an article with the purpose of analysis of the complete process of self-evaluation of the EFQM model in a public university in Spain. Universities can be specifically evaluated in three sections: education, research and services. This article evaluates quality in the services section. With an analysis of the process of self-evaluation and its benefits and problems and also key factors, we can gain insight into the reason for its success. In this case study, primary and secondary data related to five major service sections in this university that have been successful in the process of self-evaluation are analyzed. The article begins with evaluation of texts related to self-evaluation in HEI and next discusses the methodology section. This case study describes the stages of creation of a self-evaluation model, problems in the way, benefits gained and main factors involved. Using this process, points of strength and domains needing revision can be identified so an action plan can be designed and related to a strategic design and evaluation of functioning (Jose J, 2006).

- McCarthy and Greatbanks (2006) have authored an article titled "Effect of the excellence model EFQM in leading German and British organizations." The purpose of this study was to see if difference existed between German and British companies regarding leadership activities and concepts related to appropriate leadership application with each other or not. The design of the research was survey study with analysis of documents related to self-evaluation distributed among the European Quality Award organization or its equivalent in Germany and Britain which included 300 firms. Response rate was 20 percent. The survey was assessed by 20 evaluators and the results showed that German and British organizations are different regarding leadership activities and also concepts related to appropriate leadership application (McCarthy G, 2006).

## Hypothesis development and conceptual model

It should be noted that the cases mentioned and evaluated in this article agrees with the researh by Marta Zarraga-Rodrigueza and M Jesus Alvarez in 2013 with the topic of "Does the EFQM model help in identification and strengthening capability for information and employee performation?" Additionally, the conceptual model presented has been diagramed with consideration of the view points in this research (Marta Zarraga-Rodrigueza & M Jesus Alvarez, 2013).

In recent years, organizations have increasingly become interested in the topic of commitment and job satisfaction of employees (Lew T, 2011) and this attention is due to various advantages related to this topic such as improvement of employee performance and decreased turnover and etc (Yew L, 2013).

Employee job satisfaction is positive feelings that they have towards their occupation. Job satisfaction is a kind of positive psychological feeling individuals have relative to their work and is born from factors such as conditions of the work environment, organizational system of the occupation, relationships dominating over the work environment and cultural factors.

Hersey and Blanchard in their research have stated that effective managers agree in a set consisting of the following commitments:

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<sup>&</sup>lt;sup>5</sup> Total Quality Management (TQM) is a process focused on customers, quality oriented, based on facts, dependent on teams for achieving strategic goals of the organization by way of sustained promotion of processes led by senior management. (Deming Prize Committee)

- 1. Commitment towards customers. A successful director or employee can show commitment to their job by way of provision of services for customers and considering them important.
- 2. Commitment towards the organization. Effective directors or employees take pride in their organization and emanate this pride in their behavior. They perform their commitment in various ways and endeavor with creation of appropriate organizational climate, support of higher managers and observance of fundamental organizational values to achieve this important matter.
- 3. Commitment towards oneself. Directors and employees persistently present a strong and positive image to others and act as a positive force in all situations. Yet, this matter should not be confused with selfishness or self-orientation. Commitment is identified by showing independent initiatives, acquisition of necessary skills for implementation of management and acceptance of constructive criticism.
- 4. Commitment towards individuals and working group. Successful managers or employees are committed to individuals in their working group and show special peace of mind relative to them.
- 5. Commitment towards work. Effective directors or employees endeavor with maintenance of correct focus on work, being action oriented and clarifying the importance of work give meaning to the work of others and themselves and by helping the focus of other employees on work and presentation of necessary guidance, they try to gain confidence in successful completion of tasks (Sadeghifar J, 2007).

Job attachment refers to a state of determination of psychological identity or the degree to which a job is a center for an individual's identity. High job attachment means that the individual relates to the specific job and is represented by it. Having employees with high job attachment can benefit the organization. The reason is that when individuals are submerged in their occupation, their motivation increases and this can positively influence their job performance. In other words, job attachment is an important outlook and variable in maximization of the effectiveness of the organization (Mostabseri & Nejabi, 2008).

Outlook is a physiologic tendency that forces the person to seek a specific goal with good intention and without interest. Therefore, the individual's previous experiences from a particular policy has important role in his or her current beliefs regarding the value and efficiency of the policy. If the past experiences are positive, it is logical to expect that the individual's outlook towards the policy in the future will be positive (Mc Nemar Q, 1946).

Outlook is an opinion about individuals, things or events and represents the kind of a person's feeling about them (Parsaian A & Arabi M, 2008).

Dunham and colleagues (1989) have stated that three outlooks towards changes exist which are emotional, cognitive and behavioral.

- Cognitive component of outlook includes information that an individual has regarding someone or something else which in the opinion of the individual should be correct.
- Emotional component includes the feelings of a person towards an object. This outlook frequently includes evaluation of emotions and as an example when a person does not like something, he or she has expressed his or her outlook towards it.
- Behavioral tendency is related to the method an individual has in mind to behave with respect to a particular matter.

Clarity of role means the degree to which employees have a precise perception of their duties and performance in specific conditions (Mayer J & Herscovitch L, 2001).

Organizational climate is a relatively stable set of perceptions of company members about the characteristics of the firm's culture and this perception influences the feeling, outlook and behavior of members in the work place (French W L, Kats FE; 1985). Organizational climate refers to a collection of measurable characteristics of the work environment that is perceived directly or indirectly by individuals that work or live in that environment and influences their motivation and behavior (Litwin GH, 1968).

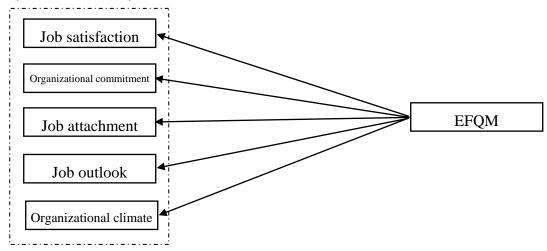


Figure 2: Research conceptual model

## Methodology

In this research questionnaire has been used for collection of information and the reliability of the questionnaires were calculated using the Cronbach's alpha method and questionnaires used were « job satisfaction and organizational commitment (Moghimi) with reliability of 0/766», «Job dependence questionnaire (Thomas Ladahl and Kejner) with reliability of 0/846», and «organizational climate questionnaire (Salsmn and Deep) with reliability of 0/960 » (Seyed Mohammad Moghimi, 2006).

Among a total of 105 staff occupied at the Persian cutting company, questionnaires were randomly distributed among a group. Ultimately 67 questionnaires were completed and relevant analysis was performed on them. It should be noted that in this research correlation tests of Chisquare and the Wilcoxon rank sign and coupled t-tests were used.

## **Data Analysis**

*Main research hypothesis:* There is a significant difference between employee job satisfaction before and after implementation of EFQM.

Table 4: Results of the first hypothesis

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Results		Number	Mean	Standard	Correlation	Wilcoxon test	p-value		
				deviation	coefficient	statistics			
Job	Before	67	40/67	13/18	0/75	-5/453	0/000		
satisfaction	implementation								
	After	67	48/61	14/57					
	implementation								

Considering Table (4), the value for correlation obtained is 0/75 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between job

satisfactions of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

## **Minor research hypotheses**

H1: There is a significant difference between employee organizational commitment before and after implementation of EFQM.

**Table 5: Results of the second hypothesis** 

		<u> </u>					
Results		Number	Mean	Standard	Correlation	Wilcoxon test	p-value
				deviation	coefficient	statistics	
Organizational	Before	67	61/57	13/27	0/49	-4/440	0/000
commitment	implementation						
	After	67	68/16	16/27			
	implementation						

Considering Table (5), the value for correlation obtained is 0/49 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between organizational commitments of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H2: There is a significant difference between employee job attachment before and after implementation of EFQM.

**Table 6: Results of the third hypothesis** 

Results		Number	Mean	Standard	Correlation	Wilcoxon	p-value
				deviation	coefficient	test statistics	
Job	Before	67	58/39	10/09	0/84	-1/894	0/058
attachment	implementation						
	After	67	59/83	12/70			
	implementation						

Considering Table (6), the value for correlation obtained is 0/84 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between job attachments of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H3: There is a significant difference between employee job outlook before and after implementation of EFOM.

**Table 7: Results of the fourth hypothesis** 

Tubic / ti	tuble 11 liebuith of the four in hypothesis							
Results		Number	Mean	Standard	Correlation	Wilcoxon test	p-value	
				deviation	coefficient	statistics		
Job	Before	67	50/75	8/000	0/59	-5/107	0/000	
outlook	implementation							
	After	67	56/64	10/774				
	implementation							

Considering Table (7), the value for correlation obtained is 0/59 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between job outlooks of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H4: There is a significant difference exists between employee job climate before and after implementation of EFQM.

Table 8: Results of the fifth hypothesis

Results		Number	Mean	Standard	Correlation	Wilcoxon test	p-value
				deviation	coefficient	statistics	
Organizational	Before	67	61/16	11/63	0/75	-4/434	0/000
climate	implementation						
	After	67	56/36	9/66			
	implementation						

Considering Table (8), the value for correlation obtained is 0/75 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between organizational climates of employees before and after implementing EFQM. Yet, with comparison of the mean and standard deviation before and after application of EFQM it is noted that the mean decreases from (61/16) before to (56/36) after implementation and standard deviation decreases from (11/63) before to (9/66) after implementation of this method. Therefore, the correlation is reverse.

### **Discussion and Conclusion**

In summary, the results of the research hypotheses are as follows:

H1: There is a significant difference between employee job satisfaction before and after implementation of EFQM.

The value for the correlation obtained is 0/75 which is higher than 0/05. Therefore, the above hypothesis is accepted at a 0/000 significance level and meaningful difference exists between job satisfactions of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H2: There is a significant difference between employee organizational commitment before and after implementation of EFQM.

The value for correlation obtained is 0/49 which is higher than 0/05. Therefore, the above hypothesis is accepted at a 0/000 significance level and meaningful difference exists between organizational commitments of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H3: There is a significant difference between employee job attachment before and after implementation of EFQM.

The value for the correlation obtained is 0/84 which is higher than 0/05. Therefore, the above hypothesis is accepted at a 0/058 significance level and meaningful difference exists between job attachments of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H4: There is a significant difference between employee job outlook before and after implementation of EFQM.

The value for the correlation obtained is 0/59 which is higher than 0/05. Therefore, the above hypothesis is accepted at a 0/000 significance level and meaningful difference exists between job outlooks of employees before and after implementing EFQM and considering the positivity of the correlation coefficient, this effectiveness is positive.

H5: There is a significant difference between employee job climate before and after implementation of EFQM.

Considering Table (8), the value for correlation obtained is 0/75 which is higher than 0/05. Therefore, the above hypothesis is accepted and meaningful difference exists between organizational climates of employees before and after implementing EFQM. Yet, with comparison of the mean and standard deviation before and after application of EFQM it is noted that the mean decreases from (61/16) before to (56/36) after implementation and standard deviation decreases from (11/63) before to (9/66) after implementation of this method. Therefore, the correlation is reverse.

## **Recommendations of the study**

Implementation of the organizational excellence model leads to creation of competitive atmosphere for excellence of active firms and as a result encourages them in performance of self-evaluation operations and understanding of their points of strength and improvable contexts and creation of the necessary atmosphere for exchange of successful experiences between active organizations and strengthening of the process of sustained improvement in active organizations in the relevant industry and empowerment of active firms in the domain of the industry in line with provision of services with better quality.

With self-evaluation based on the EFQM excellence model which is a key process for improvement, identification of points of strength and opportunities for improvement can be achieved which in turn help modeling activities to be focused on domains which have the highest benefits for the company. With implementation of this model in the Persian cutting company and execution of the suggested approaches and follow up of results of implementation of these approaches, many challenges can be resolved and steps can be taken in the path to excellence. In this line, it is suggested that the system of evaluation of performance be created for identification and encouragement of effective individuals so employee job outlook is improved and for enhancement of organizational climate, necessary context building for creation of opportunity for participation of employees with the purpose of identification of points of strength and weakness of the organization by senior management is supported.

Based on the information from this evaluation, the following actions are suggested for provision of the interests of the Persian cutting company:

- Design and establishment of an evaluation system for leadership style;
- Re-engineering of the company structure with procedural outlook;
- Establishment of a system of opinion surveys from benefactors (employees, customers, society, stock holders, contractors);
- Establishment of a system of evaluating employee performance and reevaluation of the system of encouragement;
  - Establishment of a comprehensive system for training employees and directors;
  - Establishment of a comprehensive plan for communications management;
  - Establishment of a comprehensive system for evaluation of contractors;
  - Establishment of a system of management and energy audit;
  - Establishment of a system of repair and preventive maintenance;
- Development of approaches for improvement of process and problem solving with emphasis on employee creativity.

#### References

Ajitabh, A. (2005). Excellence in Select Indian Organisations: An Analyses of CII-Exim Bank Award Applicants. Councellor, TQM, CII Institute of Quality, India,

- Akhavan, M. (2002). Evaluation of effectiveness of establishment of systems for quality management based on standard series ISO-9000 in Iran, focus on trade and operational processes. MS Dissertation, Technical College of University of Tehran.
- Aubrey, Ch. (2005). The ecomomic impact of applying EFQM. Asia Pacific Quality Organization & American Society for Quality, USA.
- Bacidore, J.M. Boquist, J.A., Todd, T.M., & Anjan, V.T. (1997). The Search for the Best Financial Performance Measure. Financial Analysts Journal, May/June, 11-20.
- Banyloohe, B. (1382). The study of comparative patterns utilization and pattern presentation for Iran. Thesis for PHD health services of management college and Iran medical science data college.
- Bou-Llusar. J. C. (2005). To what extent do enablers explain results in the EFQM excellence model?, An empirical study. International Journal of Quality & Reliability Management, 22 (4).
- Eghbal F. (2007). To be familiar with the model of Utilization of EFQM. Master thesis, Esfahan: Teacher training college and psychology, Summary of articles of weeks' project [In Persian].
- Eghbal F. (2008). Assessment of human resource management performance at Isfahan Medical Science based on European Foundation for Quality Management. Master Thesis, Isfahan: Education University, Faculty of Education and Psychology [In Persian].
- Ekadjaja, A.(2000). Economic value added how it become an effective management control tool. Klipping Journal Riser & Journal Akuntansi.
- Ernest, Osseo-Asare Jr, A. & Longbottom, D. (2002). The need for education and training in the use of the EFQM model for quality management in UK higher education institutions. Quality Assurance in Education, 10 (1), 26-36.
- French, W.L., Kats, F. E., & Rosenzweig, J.E. (1985). Understanding Human Behavior in Organization. Harper and Row.
- Jelodari Mameghani, B. (2006). Organizational excellence EFQM. Tehran: Center for Industrial Training and Research of Iran Publications, 2nd edition, p. 15-18.
- Jose, J. (2006). An EFQM model self-assessment exercise at a Spanish university, Journal of Educational Administration, 44 (2), 170-188.
- Juhi, H., Eskildsen, J. K., & Kristensen, K. (2004). Conflict or Congruence: The Case of Danish Hospital. International Journal of Quality & Reliability Management, 21(7),747-762.
- Lew, T. (2011). Affective organizational commitment and turnover intention of academics in Malaysia. Proceedings of the International Conference on Business and Economics Research, Kuala Lumpur, Malaysia.
- Litwin, G. H., & Stringer, R.A. (1968). Motivation and Organizational Climate, Harvard University.
- Marta Zárraga-Rodríguez, & M. Jesús Álvarez. (2014). Does the EFQM model identify and reinforce information capability?. Procedia Social and Behavioral Sciences, 109, 716 -721.
- Mayer J, & Herscovitch L. (2001). Commitment in the Workplace, Tpward A general Model. Human Resource Management Review, 11.
- Mc Nemar, Q. (1946). Opinion-attitude methodology. Psychological Bulletin, 43, 289–374.
- McCarthy, G. & Greatbanks, R. (2006). Impact of EFQM Excellence Model on leadership German and UK organizations. International Journal of Quality & Reliability Management, 23 (9), 1068-1091.
- Moghimi, S.M. (2006). Organization and research approach management. Tehran: Termeh Publications, 4th edition.

- Mostabseri, M., & Nejabi, A. (2008). Job burnout mediating factor of OCB in organization. Journal of Management Culture, 10(12): 31-53.
- Naylor, G. (1999) Using the Business Excellence Model to Development a Strategy for a Health Care Organization. International Journal of Health care Quality Assurance, 12, 33-44.
- Parsaian A, & Arabi M. (2008). Principles of Organizational Behavior. Cultural Research Bureau.
- Sadeghifar, J. (2007). Individual values and organizational commitment. Shiraz Navid, 1, 43.
- Saizarbitoria, H. & Casadesu, M. (2006). A Delphi study on motivation for ISO 9000 and EFQM. International Journal of Quality & Reliability Management, 23 (7), 807-827.
- Theol, M. (2002) Utilization of EFQM in the Promoting Hospital Rudersdorf. World Health Organization, Regional office for Europe.
- Yew L. (2013). The influence of Human Resources Management (HRM) practices on organizational commitment and turnover intention of academics in Malaysia: The organizational support perspective. Paper presented at the International Conference of Business and Information, Bali, Indonesia.