



## Studying Organizational Performance Excellence Using Excellence Award in Iranian Holding Organizations

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**Abstract:** *The excellence Model and Excellence Awards defines the guidelines and requirements which must be fulfilled in each area of functioning organization, by what it states the special example of the excellence to which one should aim. Simultaneously it is a tool for self-assessment of the organization giving the picture of its strong sides and potential to improvement. By attention to implement excellence Model in our organization that is a holding organization in four years, it is expected that lead to acceptable outputs and outcomes to the organization and lead to performance excellence. This research is conducted to study that how much excellence award has impact on performance excellence. Therefore it is studied by two factors; the rate of increase in the level of excellence of all subordinate units and the rate of increase in scores of excellence criteria for all subordinate business units. It was assessed and analyzed in 10 holding organizations (including 98 subordinate business units). The statistical analysis and qualitative results demonstrate effectiveness of implementing business excellence model and its effects on the progress and improvement of performances in holding organizations.*

**Keywords:** *Assessment, Excellence, Holding organizations, Organizational Excellence Awards*

### I. Introduction

In the current era, wonderful developments of knowledge management, has led organizations to use the assessment system. Performance assessment is a series of actions and information in order to increase optimal use of resources to achieve economic goals with efficiency and effectiveness. [1], [2]

In the current decade, assessment and organizational excellence models<sup>1</sup> have become popular in comparison with other performance assessment<sup>2</sup> models. The main reason could be the lack of need to design and implementation of complex systems for performance measurement. These models are flexible and suitable models for assessment by according to inside and outside environment changes of an organization. In these models, a set of assessment criteria and guidelines have been provided for assessment.

Although in many organizations scores and results of assessment are used for comparative studies or excellence awards, but the final achievement of assessment identifies opportunities and areas for improvement and Scores are only minor achievements. In fact if assessment is implemented properly, it presents a true picture of the current state for organization. Then implementation of improvement projects leads the organization to growth and excellence. Therefore, naming the models to excellence models and quality awards is appropriate and reasonable. The world's most prestigious excellence models include: Deming Quality Award [3] Malcolm Baldrige National Quality Award [4], [5], EFQM Excellence Award [6], [7]. These models are based on TQM concepts and on this basis; certain basic concepts for them are defined. Then based on them several criteria with specific weight are defined. These criteria help to achieve the basic concepts. They have some criteria parts with specific weight and these models have a tool for scoring too.

Iranian national productivity and excellence award (INPE) based on EFQM excellence model was founded in 2003. Implementation of it since the year, it made many Iranian organizations got familiar with the excellence model and it has acted as a tool for modern management techniques to use in their organization (IPHRD, 2013)[8]. Some organizations use EFQM\National excellence model for domestic awards or applying in the process of national productivity and excellence award. This indicates that top Iranian organizations are planning to compare themselves with other organizations. Thus they increase their competitive power and stability to achieve greater success.

But so far, practical effects of excellence models on all management aspects of organizations have not been studied. This has caused embed values in the model remain unknown. Therefore To institutionalize culture excellence and In order to stimulate organizations to participate in excellence process effectively, it is necessary the results of the model will explain to managers and other stakeholders.

<sup>1</sup> Organizational excellence models (OEM) are also called Business excellence model (BEM).

<sup>2</sup> Types of performance assessment are as: first party assessment, second party assessment, third party assessment

On this basis in 2008 we used EFQM excellence model in our sectorial organizations and in subsequent years, we did extensive studies and with help of an expert's team and survey of stakeholders we conducted customization of criteria, criteria part, guidelines of EFQM Excellence Model as ODEA<sup>3</sup>. Despite this assessment has been done a decade in our organization but the following questions have been proposed by stakeholders:

1. Do run organizational excellence model has significantly given rise in 9 criteria in the subordinate units?
2. Do run organizational excellence model has significantly improved quality of products and services, customers' satisfaction, innovation, productivity, financial results and individual and organizational learning in our organization and the subordinate units

The purpose of this study is evaluating the effectiveness of business excellence model in 98 subordinate business units and clarification of values caused by deployment of excellence award.

## II. Literature Review

Business excellence models are suitable frameworks for total quality management in organizations. A research by Mr. Liusar and colleagues shows that the EFQM Excellence Model is a suitable framework for total quality management [9]. A research conducted by scientists shows that optimal management of the TQM core concepts will lead to better organizational performance

This argument is correct theoretically but the experimental results also confirm that? About the effectiveness of Excellence Awards little research has been done. But so far, many studies on the effectiveness of quality management have been done. Because the models and Excellence Awards are essentially a framework for implementing TQM, These researches can be used. Studies generally show the effectiveness of TQM in various companies across the world. A study conducted in 2003 by Hal Kaynak shows relationship between TQM and organization performance. This study was carried out on 214 manufacturing company in America. The results show the positive impact of TQM on financial performance and market activities through operational functions.[10] Another study carried out in 1997 by Lemak hereof. [11]

Based on studies carried out in 60 organizations that have been committed to TQM, good financial results were acquired at a minimum of 5 years.

Chong and Rundus did a study based on questionnaires of 89 managers of manufacturing companies based on a questionnaire in Australia in 2004. The results show the impact of TQM on customer orientation and organizational performance. It also confirms that the degree of competitiveness in the market [12].

A comprehensive study on the effectiveness of TQM and organizational Excellence Model has been done by Mr. Syng-hal and Hendricks. The study was carried out in 10-years and 600 companies have been studied that were award winners. They found that these companies have experienced significant progress in their stock value, operating income, sales, employment, asset growth and return on investment. They compared financial performance of the companies with award quality winners [13], [14]. These companies were similar in terms of size and type of operation in same industry. Award quality winners had a significantly higher average growth in several criteria measures of financial performance.

Based on research approved by the European Foundation for Quality Management (EFQM) and British Quality Foundation (BQF), effective implementation of the EFQM Excellence Model has favorable effects on business results. [15] The study has been conducted by an international team of leading academics including;

Dr Louise Boulter (Project Director and Deputy Director), Professor Tony Bendell, (Director) and Hanida Abas (Research Associate), the Centre of Quality Excellence, The University of Leicester, UK, Professor Jens Dahlgaard (Professor of Quality Technology and Management), Linkoping University, Sweden and Professor Vinod Singhal (Professor of Operations Management), at the Georgia Institute of Technology, US.

Two sets of performance measures have been used for the study; these are share value and accounting based measures. The accounting based measures include; revenue/sales, costs, operating income, and capital expenditure. After extensive study of award winners, the team compared the financial performance of 120 award winning companies that met specific criteria against comparison companies similar in size and operating in the same industries. The financial performance of the companies was tracked over an 11 year period.

The study found that compared to the comparison companies award winning companies experience higher increases in share value, sales, capital expenditure over assets and capital expenditure over sales, higher growth in assets and further reduction in costs over sales within a short period of time after having received a first award. In summary, the results of this study indicate that the effective implementation of the principles of Business Excellence do make good economic sense.

## III. ODEA model

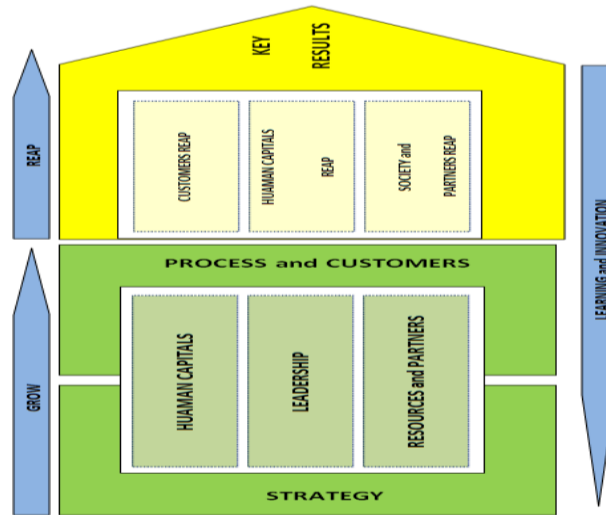
In 2007, we established the excellence award secretariat. The Secretariat with the aim of development and growth of holding organizations and their subordinate business units, designed an excellence model based on EFQM (figure4) and the needs of our stakeholders as ODEA, we customized criteria, criteria parts and excellence level and related scores. Implementation of it since the year, it made many organizations got familiar with the

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<sup>3</sup> Organizational Development & Excellence Award: ODEA

excellence model and it has acted as a tool for modern management techniques to use in the organization. So after the excellence model was expanded within different organizations, they have the ability to use it for the following purposes [16].

- Assess where they are on the path to excellence; helping them to understand their key strengths and potential gaps in relation to their stated vision and mission.
- Provide a common vocabulary and way of thinking about the organization that facilitates the effective communication of ideas, both within and outside the organization.
- Integrate existing and planned initiatives, removing duplication and identifying gaps provide a basic structure for the organization's management system.
- It can also be used by organizations carrying out self-assessment and wishing to use a score for benchmarking or other purposes.
- Create a competitive



**Figure 1: ODEA model**

To evaluate growth rate and maturity of the applicant unit have begun the journey to excellence, seven levels of excellence is defined in three categories:

- a) Interested (start up)
- b) Enthusiastic (on the way) and
- c) Mature

The categories are divided to some levels. The levels of excellence in ODEA are on right side of the pyramid and, the minimum required scores for that level are on the left side (Figure 2). The "Interested" has two levels are named "tends to excellence" and "commitment to excellence"; the "Enthusiastic" has two levels too. They are named "recognized for excellence – three stars" and "recognized for excellence – four stars" and the "mature" has three levels are named "crystal trophy", "silver trophy" and "gold trophy".



**Figure 2: Excellence categories & Levels in ODEA**

#### IV. Research method

The method used in this study is descriptive and survey research. This research is conducted to study that how much excellence award has impact on performance excellence. It is studied by two factors; the rate of increase in the level of excellence of all subordinate units and the rate of increase in scores of excellence criteria for all subordinate business units. It was assessed and analyzed in 10 holding organizations (including 98 subordinate business units). Thus, two indicators, score of excellence and score of criteria, were defined as performance indicators.

We assessed 98 subordinate business units in three periods and we analyzed the effectiveness of organizational excellence award on them. Table 1 shows the number of applicants at different levels of excellence in three periods.

periods \ Levels	Crystal trophy	R4E (****)	R4E (***)	C2E	T2E	total
1	0	0	20	28	50	98
2	1	9	31	46	11	98
3	5	15	59	19	0	98

**Table 1: Number of applicants per each period and related level**

#### V. Data analysis

After the validity and reliability of data collection was proved, to perform statistical tests and data analysis parametric and nonparametric methods were used. In order to use parametric methods, the data must be normally distributed. For studying normal distribution of data, initially, the Q-Q Plot graphs and Chi-squared test and Kolmogorov - Smirnov test were used. Total scores, which are organizational excellence criteria and four desired dimensions, have been studied. In this section, the SPSS15 was used. The results are as follows:

**Hypothesis a:** Using the excellence model has a significant effect in improving scores of criteria.

Normality of data: We used the Q-Q plot chart and Kolmogorov - Smirnov.

- 1st round: According to p-value, all nine criteria adherence a normal distribution. The values for the 9 criteria are 0.24, 0.22, 0.9, 0.34, 0.98, 0.97, 0.2, 0.99, 0.56.
- 2nd round: The obtained probability values for all nine criteria indicate normal distribution. The values for the 9 criteria are 0.24, 0.46, 0.8, 0.53, 0.76, 0.24, 0.81, 0.74, 0.7.
- 3rd round: Also in the third round, normality of the data for all 9 criteria was obtained.

According to data normality, initially for each of the periods mean was determined separately then difference between the first and third round were studied. In the first round of excellence award, 46 units were studied. About the total score variable, it can be seen that mean of this variable is 167 and standard deviation of it is 46. According to the standard deviation and range of the data that it is 215, from the perspective of scoring, there is variation in the organization. About Scores in the second and third excellence award, we can be referred in descriptive tables. Then study of hypotheses by using the parametric methods - analysis of variance – was performed. The reason for using analysis of variance is study equality or non-equality of means in the three periods and if the equality or non-equality between two periods is less than the mean, t-test is used.

The results are analyzed in the following way for criteria:

- In first criterion, according to the amount of probability 0.002 and test statistic 6.62, it is observed that there are significant differences between periods and assumption of the equality for mean of scores in three periods is rejected. So the Duncan comparison test was used to compare the mean of the last three periods.
- According to the averages, in the first criterion, it is observed that there are significant differences between the first and third round and excelled in organizational units are clearly visible in the criteria.
- In second criterion according to the amount of probability 0.13 and test statistic 2.08, assumption of the equal for variances is accepted and it is observed that there are not significant differences.
- In third criterion according to the amount of probability 0.37 and test statistic 3.4, it is observed that there are significant differences that it represents excellence in this criterion.
- In fourth criterion according to the amount of probability 0.01 and test statistic 4.9, it is observed that there are significant differences that it represents excellence in this criterion.
- In fifth criterion according to the amount of probability 0.00 and test statistic 8.6, it is observed that there are significant differences. According to Duncan multiple comparison test, significant differences between the first and third round is observed and it represents excellence in this criterion.
- In sixth criterion according to the amount of probability 0.002 and test statistic 4.5, it is observed that there are significant differences too; According to Duncan multiple comparison test, significant differences between the first and third round is observed and it represents excellence in this criterion.

- In seventh criterion according to the amount of probability 0.56 and test statistic 0.58, it is observed that there are not significant differences and almost all units participated in all three round of excellence award have the same score in this criterion.
- In eighth criterion according to the amount of probability 0.00 and test statistic 8.4, it is observed that there are significant differences; According to Duncan multiple comparison test, significant differences between the first and third round is observed and it represents excellence in this criterion.
- In ninth criterion according to the amount of probability 0.024 and test statistic 3.9, it is observed that there are significant differences; According to Duncan multiple comparison test, significant differences between the first and third round is observed and it represents excellence in this criterion.
- In the end, Duncan multiple comparison test indicates there are significant differences between total scores of first and third round; it represents excellence in Subordinate units.

## VI. Conclusion

To evaluate the effectiveness for Implementation of business excellence model in organizations, First change of scores were calculated for units participating in all periods of Excellence Award. Distribution of data in hypothesis A is normal, so parametric analyzes were used. Analysis of data on different criteria showed significant difference in score of following criteria: leadership, human capital, resources and capacities, systems and processes, customer results, society results and key results. In other words, in these criteria excellence is observed, but in strategy criterion and human capital result criterion more effort is needed. In general, according to total score of the 9 criteria, there is a significant difference between the scores of the first and third rounds. This reflects the excellence of the units participating in the award. More strategies and policies for human capitals are rules and orders that developed by the upstream organizations. Perhaps it is one of the main reasons for the lack of development at strategy and human capital result criteria.

Results show organizational excellence award has been effective relatively and have been growth in enablers and results due to many of the activities are systematic. Some of these systems include: customers' satisfaction measurement, employee satisfaction measurement, strategic management, quality management, supply chain management, project management and .... Organization at lower levels of the excellence award can be gained some scores by using these systems but at higher levels, systematic implementation and the sustainability of these systems is important and this will not attainable by simply and it requires more effort on behalf of the organization. So we will not expect growth of scores in the coming years with the same slope for the higher levels as same as lower levels, unless those subordinate business units that selecting appropriate approach to reinforced their management systems and increase the effectiveness and efficiency of their actions.

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