

Assess Causal Relationships of EFQM Model Criteria Using Fuzzy Dematel (Case Study: Tovseeh Taavon Bank)

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Abstract: Organizations to remain competitive, be obliged to enter routes have been called sublimation. That's why, the larger effort undertaken by quality experts, various patterns as models of excellence established. And as one of the most commonly used method is the breakthrough organizations. An example of this model, models in Asia deming, Malcolm Baldrige model EFQM model in America and in Europe. EFQM Excellence model was developed in 1991 by the Foundation for Quality Europe and in the years, it has been in review. The model in collaboration with 14 European companies using their experience and excellence models developed earlier. The main objective of this study was to evaluate the relationship between the criteria of EFQM, effective benchmarking, benchmarking the relative effectiveness and criteria are determined by the interaction between. The purpose of this research, applied research and development and the gathering of data from the survey and from a variety of descriptive survey research. This research was conducted at the headquarters of the cooperative development and collected comments related to the end of the year is 1994.

Key words: EFQM, fuzzy dematel, Tovseeh Taavon Bank, criteria, development

INTRODUCTION

Organizations to achieve their goals and to remain competitive with organizational excellence is obliged to enter routes. And, try to align their activities based on these models. They are aware of the fact that excellence is not a static target due to changing circumstances. That's why, the quality and efficiency of the larger effort undertaken by experts in various patterns as models of excellence or established national quality awards. And as one of the most common ways to achieve this goal is being used. In this respect, excellence patterns, organizations can help in order to move towards excellence. These models are comprehensive and appropriate tools for measuring performance are considered to facilitate control and improve performance. The tool according to the categories simmons of control lever, control systems are not recognized in categories that-be (Simons, 1995). Encourage the highest national quality awards or organization for a breakthrough in the field of quality management are considered. More quality awards scheme to enhance quality awareness, understanding and information sharing requirements in the field of quality excellence is successful strategies and benefits. This annual award and is awarded only to the

most qualified and best organizations. Studies show excellence model has been effective in improving the performance of organizations. (Kristensen and Juhl, 1999). An example of this model, models in Asia deming, Malcolm Baldrige model EFQM model in America and in Europe.

Many quality awards from around the world have been inspired by the model developed and promoted. In this study, we intend to intensity of the relationship between one of the most important criteria of the Excellence Model (EFQM), standards take effect, measures the relative effectiveness and interaction between criteria using the cooperative development bank check dymtl techniques and better results in the implementation of this model we use in these banks and similar organizations.

Literature review: Over the years, many changes have occurred in the area of quality and management. Most companies as defensive quality look and sound quality to the minimum rates or match the product specifications are limited. To compete in quality, companies must not only as a way to avoid problems of quality or reduce the cost of rework but also as an opportunity to consider customer satisfaction. Also, if viewed from the perspective of

human resources in the field of quality, we see that leadership and strategy is of particular importance. Organizational behavior Robbins and Judge (2013) in his book says: “we have the leadership ability to influence a group toward a vision or set of goals defined. This impact may or may not have legal authority. So, please not every leader and every leader is not a leader”.

As well as, other important issues in the field of quality, corporate culture. When, the employees in an organization My-Ynd together with their own set of values and beliefs that have in mind to bring. Often, these values ??and beliefs is not enough for success in an organization. Staff must learn how to participate in the organization (Luthans, 2011).

One of the patterns of organizational excellence, European award for quality by the European Foundation for Quality Management is a pattern. EFQM Excellence Model Quality Foundation Europe was created in 1991 and over the years it has been in review. The model in collaboration with 14 European companies and using their experience as well as former Elite model was developed (Conti, 2007). The mission of the foundation is the driving force for maintaining excellence in Europe and the prospect of European organizations in the world's shine with the belief that any independent organization of the scope, size, structure and degree of maturity, needs a framework suitable for achieving success was introduced. This generic model for the organization with the evaluation criteria and the excellence of their orientation are measured. In 1999, the first major reassessment of the model and in 2003, significant changes were imposed on it. Last edited version before the revision of 2013 due to change in 2010, the fundamental concepts, standards and it is rational. Since 1992, every year the EFQM excellence award based on this model is implemented worldwide and over the years this combination of experiences and learning organizations to fundamentally change the model Bkargyrndh model is managed. Excellence model, a model and a detailed description of the quality of implementation and management of organizational processes described in most areas without having to prioritize their actions and determine any superiority in their implementation. This model more focused self-assessment processes and the continuous improvement of processes. The EFQM approach on how to manage processes across the organization anatomical and comprehensive. And, the Excellence model is based on objective evidence and because the evidence and data collected from organizations is very much welcome.

According to the foundation Europe of quality, excellence “create and deploy successful management practices and achieve sustainable positive results” is defined. The EFQM model self-assessment approach based on logic Radar (RADAR) is this means that in all criteria model, organizations must properly targeted and reasonable and appropriate approach to define the orientation of macro-organization and for the establishment of a mechanism to provide systematic and mechanism to evaluate and improve its approach to development. This model (EFQM) has three integrated components: the fundamental concepts of excellence, standards and radar (Official site Excellence model EFQM). The fundamental concepts of the EFQM, including eight concept ensures that this model should implement it organizations will achieve these concepts. EFQM model the eight concepts are therefore fundamental concepts, models have been named. The purpose of the standard model, EFQM, descriptive and prescriptive set of requirements that will be placed at the disposal of organizations. To make a commitment to them and implement them with the tools to achieve excellence. These criteria are based on the experiences and results of evaluation of the quality of Europe's fundamental analysis. And may also be reviewed. This model has nine criteria. Enablers includes five factors and four operating results. The empowerment model critical role in moving organizations toward excellence and prioritize them for staff satisfaction is of great value. Innovation and learning help to improve enablers and improved capabilities, improved results will follow. Each of the nine criteria of the EFQM Excellence model consists of several components that highlight different aspects of benchmark. The following summary is provided in the table below enablers criteria. The relationship between fundamental concepts and criteria model is one of the most important issues in this area. You know organizations overseeing the implementation of each requirement is one of the fundamental concepts, models to understand and implement the optimal model will help.

So far, relatively extensive research in the field of evaluating the performance of organizations by using organizational excellence cup has referred to some of them:

One study in 1998, at Oxford University as a business excellence assessment, porter and thinner model as a tool to develop long-term planning were discussed.

In 2001, Ezequiel age and colleagues in their studies have concluded that weight EFQM criteria from country to country is different and what in practice, the company

Table 1: Results linear relationship between each of the criteria

Processes	Resources and partnerships (management)	Staff	Strategy	Leadership
Design and process management	Stakeholder	Drawing staff	The analysis of the external environment	Vision, values and mission
Design and create new products	Funds	Staff development	Analysis of the internal environment	Management system
Marketing products	Physical asset	Empowerment and participation of employees	Strategy	Engaging external stakeholders
Production and delivery of products	Technology	Staff communication with the organization	Implementing strategy	Develop a culture of excellence staff
Voice of the customer	Knowledge	Encourage employees		Change management

is happening with model does not match and have the necessary stability and weight over the years various criteria changes. For example, the weight of their results in 2001 were significantly lower than in 1998 by 1999. Kalvmvra and colleagues in 2006 in order to review EFQM enablers. Analyze the relationship between measures for improving quality in higher education management framework. Using literature review and experimental methods at universities in Spain have shown that there is a connection between the enablers criteria.

And emphasize the role of empowerment in achieving excellence. In another study, in 84 year as a designer of excellence project based on the EFQM model as a master's thesis at the University of Imam Sadeq (AS) has been done, tailors the importance of each of the criteria of the model tested and implies It is a measure of leadership is of paramount importance.

Sharma and the chamber of research in 2007 using a combination of questionnaires and analysis have been shown to philosophy. The Excellence Model EFQM, the main emphasis of leadership should be based on values-based leadership for sustainable growth.

And, the key to excellence, values and processes flow. The president and his colleagues in their study in 1388 on the subject of performance evaluation management model of quality in hospitals have identified the social security organization of Tehran Province that hospitals using a comprehensive management model have achieved positive results in improving organizational processes.

But, the successes achieved are lower than desired and is necessary to achieve greater success, continuous improvement processes in the field of finance and marketing organizations and the relationship with the supplier companies contracted to seriously follow.

Kladvray in their study showed that the implementation of organizational development model, a perfect solution for creating organizational trust between managers and employees is considered.

Zafari findings born and Abbas-Zadeh showed that between organizational trust and organizational development of high school in the city of Shahr-related.

As well as between organizational trust and leadership criteria, the criteria for employees, the partnerships and resources, criteria customer results, people results criteria and the criteria for community benefits there is a correlation. Studies Powell and Carlos showed that the standard policy and strategy is needed to implement the organizational trust exists among experts they will support each other in performing their duties well. Also Safari and colleagues in 2011 in the company tavanir relationship between empowerment and results discussed in the EFQM model. They use the technique of Canonical Correlation Analysis (CAA) at the level of acceptable error of 5% to the conclusion that the cumulative enablers redundancy factor in the outcome of 79.41% against 75.17 and the coefficient of redundancy results in empowerment is. And, this represents the communication and information is very similar in the two sets. They also enabling a linear relationship between each of the criteria on any of the results were announced separately calculated and vice versa (Table 1).

MATERIALS AND METHODS

The purpose of this research, applied research and development and the gathering of data from the survey and from a variety of survey research, descriptive. The scope of this research in three areas subject domain, location and time can be defined. The scope of this case is related to the evaluation of the severity of the benchmarks and benchmarking of impact and effectiveness of the EFQM model is. Territory where research is related to the headquarters of the cooperative development. About the time span of the study, the data collected is related to the end of 94. In this study, population cooperative development bank are senior managers and experts. In this study of 30 experts cooperative development bank has been used to survey (Table 2).

Table 2: Analysis of the research model

Brevity	Criterion	Row
Leadership	C1	1
Strategy	C2	2
Staff	C3	3
Company information/resources	C4	4
Products/services/processes	C5	5
Customer results	C6	6
Society results	C7	7
Employee outcomes	C8	8
Business results	C9	9

Table 3: Matrix phase average normalized views of 30 experts in the direct relations between the criteria

Criteria	C1			C2			C3			C4		
	a	b	c	a	b	c	a	b	c	a	b	c
C1	0.000	0.000	0.000	0.098	0.134	0.143	0.080	0.116	0.143	0.063	0.098	0.125
C2	0.036	0.054	0.089	0.000	0.000	0.000	0.054	0.098	0.125	0.630	0.098	0.134
C3	0.027	0.045	0.08	0.018	0.036	0.071	0.000	0.000	0.000	0.027	0.063	0.098
C4	0.036	0.063	0.098	0.027	0.054	0.089	0.027	0.054	0.098	0.000	0.000	0.000
C5	0.009	0.036	0.071	0.036	0.054	0.080	0.027	0.045	0.080	0.018	0.045	0.080
C6	0.027	0.054	0.089	0.018	0.036	0.071	0.027	0.045	0.080	0.036	0.054	0.028
C7	0.018	0.045	0.08	0.027	0.054	0.089	0.018	0.054	0.089	0.009	0.045	0.080
C8	0.054	0.089	0.116	0.036	0.063	0.098	0.018	0.045	0.080	0.027	0.054	0.089
C9	0.036	0.063	0.098	0.009	0.045	0.080	0.018	0.054	0.089	0.036	0.063	0.098

Criteria	C5			C6			C7			C8			C9		
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c
C1	0.071	0.107	0.125	0.089	0.125	0.135	0.080	0.116	0.143	0.071	0.107	0.134	0.089	0.107	0.143
C2	0.089	0.125	0.143	0.071	0.107	0.134	0.045	0.080	0.107	0.063	0.098	0.134	0.08	0.116	0.134
C3	0.045	0.080	0.116	0.063	0.098	0.125	0.071	0.107	0.125	0.045	0.08	0.116	0.054	0.089	0.116
C4	0.063	0.098	0.125	0.018	0.054	0.098	0.027	0.063	0.098	0.063	0.098	0.116	0.08	0.116	0.143
C5	0.000	0.000	0.000	0.045	0.080	0.116	0.540	0.089	0.125	0.036	0.071	0.107	0.071	0.107	0.134
C6	0.027	0.063	0.098	0.000	0.000	0.000	0.045	0.080	0.116	0.045	0.071	0.107	0.063	0.098	0.134
C7	0.036	0.063	0.098	0.018	0.036	0.071	0.000	0.000	0.000	0.045	0.080	0.116	0.054	0.089	0.125
C8	0.027	0.045	0.080	0.071	0.107	0.125	0.009	0.036	0.071	0.000	0.000	0.000	0.540	0.089	0.125
C9	0.045	0.080	0.116	0.054	0.089	0.116	0.027	0.054	0.089	0.027	0.063	0.098	0.000	0.000	0.000

Table 4: Definite matrix of relationships (direct and indirect)

Matrix	C1	C2	C3	C4	C5	C6	C7	C8	C9
C1	0.424	0.779	0.745	0.716	0.856	1.197	1.157	1.185	1.315
C2	0.515	0.353	0.601	0.648	0.821	1.065	0.947	1.058	1.174
C3	0.419	0.381	0.292	0.466	0.593	0.898	0.875	0.869	0.957
C4	0.471	0.437	0.444	0.320	0.660	0.810	0.796	0.900	1.048
C5	0.366	0.414	0.397	0.404	0.360	0.829	0.822	0.807	0.963
C6	0.401	0.349	0.381	0.420	0.496	0.484	0.763	0.772	0.914
C7	0.362	0.378	0.377	0.365	0.486	0.646	0.426	0.767	0.856
C8	0.507	0.434	0.392	0.432	0.483	0.862	0.666	0.512	0.917
C9	0.426	0.361	0.394	0.441	0.550	0.805	0.696	0.751	0.561

Table 5: The influence and effectiveness of each of the standards and criteria specified amount of interaction

Criteria	D+R	D-R
C1	12.26	4.48
C2	11.07	3.30
C3	9.77	1.73
C4	10.10	1.67
C5	10.67	0.06
C6	12.57	-2.61
C7	11.81	-2.49
C8	12.82	-2.41
C9	13.69	-3.72

RESULTS AND DISCUSSION

The following table matrix phase average normalized views of 30 experts in the direct relations between the

criteria to be observed (Table 3 and 4): the following table is a definite matrix of relationships (direct and indirect) can be seen.

In the following table the influence and effectiveness of each of the standards and criteria specified amount of interaction (Table 5).

CONCLUSION

As the results showed enabling of (leadership, strategy, employees, partnerships/resources and products/services/processes) as a measure of the impact and results (Customer results, society results, people results, business results) were introduced as benchmarks affected.

But, the impact and effectiveness of each of the criteria is different. The results of the multi-criteria decision-making technique Dymtl showed that the criteria and strategies as the most impressive benchmark leadership and business results as selection criteria have been affected the most. EFQM model that has the greatest influence in the leadership criterion measures on other factors and in fact one of the key drivers and pillars of successful implementation of the EFQM model is. Detects appropriate leadership style is one of the factors that ensure successful implementation of the EFQM. In fact, a well-formulated strategy and operational execution steps EFQM model for employees with simple language and optimum performance of this model will keep employees on track. It is suggested a relationship between strategies and EFQM model for all employees of the company explained. After leading benchmarks and strategies to influence staff have a lot on other criteria.

In fact, human resources as the key forces and strategic organizations have an important role in the implementation of the EFQM.

SUGGESTIONS

Applications for this research offered the following suggestions: use of the study to implement the EFQM model in organizations so that measures are most effective, first implemented. Localizing the research and application of its achievements in Iranian organizations to implement organizational excellence model. The use of standards for organizations that have the most influence on the ability to implement the model in their organization. Including suggestions for future

research are discussed can be mentioned the following: use of the method used in this research to other organizations including the organization, production and increased during the review period in order to achieve a number of different ideas at different levels of the organizational structure because the issue of organizational excellence at all levels of the organizational structure is discussed. Increase the number of companies surveyed separately so that the analysis can be found on the National productivity awards and excellence and quality-Persia and results obtained as a scientific basis for the EFQM Business Excellence model presented. Other criteria such as excellence models to investigate causal relationships between metrics to detect them.

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