ORGANIZATIONAL CULTURE AND QUALITY MANAGEMENT.

AN EMPIRICAL APPROACH FROM THE EFQM EXCELLENCE MODEL.

Juan Antonio Giménez Espín¹, Micaela Martínez Costas², Daniel Jiménez Jiménez³.

¹Departamento de Organización de Empresas y Finanzas Universidad de Murcia, jagimenez@um.es
²Departamento de Organización de Empresas y Finanzas Universidad de Murcia, mili@um.es
³Departamento de Organización de Empresas y Finanzas Universidad de Murcia, danieljj@um.es

Abstract.
The European Foundation Quality Management (EFQM) Excellence Model is a non-prescriptive management framework that is widely used in the world. This model can be used to gain a holistic overview of any organization and helps managers to identify the main aspects to be improved for attaining excellence.

Organizational culture has also been an important topic research. Among its classifications, the typology of Cameron and Quinn is one of the most important. Besides, organizational culture is a key factor for organizational excellence and in the success or failure of quality management systems implementation, but there is not yet an integrated framework that links organizational culture and the EFQM Excellence Model.

According to literature revision, two main relationships are proposed: First, the implementation of the EFQM Excellence Model can improve the results. Second, only organizational cultures with a focus on the control (Market and Hierarchy cultures) allow to the implementation of EFQM enablers criteria.

The aim of this study is to analyst precisely what kind of culture is best suited to the EFQM Excellence Model, using an empirical study to demonstrate the links. To this end, it is proposed a model whose relationships have been tested using structural equations.

The results of the empirical analysis support the established relationships. So, this is very important for managers who want to implement EFQM Excellence Model, because they must develop an appropriate organizational culture for it (Market and Hierarchy cultures).

Keywords: Organizational culture, TQM, EFQM Excellence Model, Structural equation model.

1. Introduction.

Nowadays in the era of globalization, organizations develop their activity in a more and more competitive environment. In this regard organizational culture may allow companies to differentiate from competitors and help them to be competitive. Besides, companies are compelled to offer products and services of great quality and excellence. These facts have impelled the development of programs and models of quality management. However, their implementation is always not successful (Sila, 2007). Currently, the research about the EFQM model have been mainly focused on understanding the relationships between its elements, the weights of their criteria, or the differences in the implementation between private and public companies (Gómez-Gómez, Martínez-Costa, & Martínez-Lorente, 2010). On the other hand, organizational culture is one of the most important variables in the success or failure of quality management systems implementation (Metri, 2005). However,
in spite of this fact there are not studies on the relationship between this variable and the EFQM Excellence Model. This investigation seeks to fill this gap.

2. Literature review.

The literature review starts with the analysis of the EFQM Excellence Model. Then, it focuses in the organizational culture. Finally, it studies the relationship between both aspects.

2.1. EFQM Excellence Model.

This model was originated in the first EFQM forum on October 1990 in London and nowadays it has become one of the most influential instruments for creating quality awareness and a widely accepted model of performance excellence. It is built on nine criteria grouped into two sections, five criteria for enablers (Leadership, Policy & Strategy, People, Partnership & Resources, Processes) and four criteria for results (Customer results, People results, Society results, Key performance results) (See figure 1). While enablers criteria show how things are done in the organization, results criteria illustrate what is achieved by the enablers. In this model leadership drives people management, strategy and policy and partnerships and resources, and these three criteria influence the performance through processes (EFQM, 2010).

EFQM Excellent Model is a tool for structuring the management system of the organizations based on the self-assessment. According to the literature, self-evaluation has a positive relationship with organizational performance (Ahmed, Yang, & Dale, 2003). Several studies have demonstrated that a significant relationship exists between the enablers criteria and the results criteria (Gómez Gómez et al., 2010). Besides, Conti (2007) reviewed the EFQM Excellent Model and concluded that processes are a peculiar part of the system, since these are tangible and measurable, and have a direct relation with results.
Therefore:
H1: There is a positive relationship between enablers criteria and the results criteria.

2.2. Organizational culture.

Organizational culture is usually defined as a "the set of norms, beliefs and values shared by members of the organization" (Yu, 2007). For our study, we use the "Competing Values framework (CVF)" of Cameron and Quinn (2005). The authors define four types of organizational cultures departing from two dimensions (clan, adhocracy, market and hierarchy). One dimension shows how far the organization has a focus on control, stability and order. The second dimension shows the tendency towards the internal (integration) or external (differentiation and rivalry). From these two dimensions establish four types of organizational cultures, which reflect different values about dominant attributes, leadership, human resource management, etc.

2.3. Organizational culture and EFQM Excellence Model.

Although the literature indicates that organizational culture is the key to organizational excellence (Schein, 1984), there are not studies that analyze what culture type is the most appropriated to the implementation of the EFQM Excellence Model. To get the excellence in the EFQM model organizations should foster enablers criteria that possess certain characteristics: market orientation and control of the processes management (Russell, 2000). Not all organizational cultures have these characteristics. For these reasons we proposed that:
H2a: Clan culture does not condition the implementation of the EFQM Excellent Model.
H2b: Adhocracy culture does not condition the implementation of the EFQM Excellent Model.
H2c: Market culture conditions the implementation of the EFQM Excellent Model.
H2d: Hierarchy culture conditions the implementation of the EFQM Excellent Model.

3. Research methodology.

3.1. Sample and data collection.

The population used in this study includes Spanish manufacturing organizations with more than 100 employees according to SABI database. 3814 companies, from the SABI database, were located. We randomly contracted with 871 companies in order to get 200 questionnaires.

The information was collected with a structured questionnaire via a webpage. In this case, we have directed our research focus to operation, project or innovation managers. We got 200 valid questionnaires that were answered by 4 managers of each of the 200 organizations. In this data resides the stronghold of this research.

3.2. Measures.

For all the measures a Likert scale of 5 points has been used (1="strongly disagree"; 5="strongly agree"). We modelled each type organizational culture as a formative constructs, while EFQM enablers and results as reflective constructs.
EFQM criterion and result were measured as a second order factor made up by five dimensions related to the EFQM enablers (leadership, strategy, people, alliances and processes) and four for EFQM results (customers, employees, society and key results). We have grouped the enablers and results criteria and these were measured as a second order factor because in this way, we can more easily study the relationships established in this paper.

3.3. Data analysis.

Hypotheses were tested simultaneously using partial least squares (PLS), a structural equation modeling technique employing a principal component-based estimation approach. PLS was selected because of the characteristics of our model and sample. Our model uses formative indicators and our data is non-normal. For hypothesis testing, we used the bootstrapping procedure recommended by Chin (1998).

4. Results and discussion.

The structural model resulting from the PLS analysis is summarized in Figure 2, where the explained variance of endogenous variables (R²) and the standardized path coefficients (β) are shown. As it can be seen, some of the hypothesized relationships are significant, and therefore, the hypotheses are supported.

The results support H1 indicating that enablers of the EFQM model have a positive effect on performance, with a path coefficient (β) of 0.671 (t-value = 12.521). In this case, EFQM Excellence Model facilitates the improvement of results in different areas of the company. The relationship between organizational culture and EFQM criteria (H2) is supported. Clan (β = 0.187, t-value = 1.231) and adhocracy (β = 0.073, t-value = 0.895) cultures do not
have a positive effect on EFQM criteria, what reinforces H2a and H2b. This may be due to lack of external orientation, in the case of the clan culture, and the absence of a management system based on the control, in the case of both cultures.

Finally, both market ($\beta = 0.269$, t-value = 3.548) and hierarchical ($\beta = 0.306$, t-value = 4.195) cultures have a positive effect on EFQM criteria supporting H2c and H2d. The market culture has two main values that the EFQM Excellence Model requires, while the hierarchy culture exerts only the control required by the model, but in these organizations train their employees to improve the attention to their customers and to know their needs and expectations (Cameron & Quinn, 2005).

5. Conclusions, limitations and future research.

The main contribution of this paper is that organizational culture conditions the implementation of the EFQM Excellent Model. However, only hierarchy and market culture are crucial for this purpose. This is especially relevant for managers who will try to adopt the EFQM Excellence Model in order to increase their performance. This may be due to the characteristics required by the model, exterior orientation and systematic process management. Therefore, managers who wish to implement this model should guide their company to the consumer and make an adequate control of processes.

In addition, this paper confirms that the implementation of the EFQM Excellence model improves business results.

6. References.


