

Photographing the relationship between corporate culture and implementation of quality practices

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Abstract

This research paper investigates how different types of corporate culture have an influence upon the successful implementation of quality improvement methods, in particular Total Quality Management and Six Sigma practices. Starting from the definitions comprised by the specialized literature and Quinn's Competing Values Framework, we have illustrated the direct relationship that exists between organizational culture and quality practices and possible reasons for it. The conclusions drawn include some brief observations regarding the directions in which the topic of this paper can be extended in order to obtain more precise results with practical applicability as well as some limits of the premises assumed.

Keywords

Total Quality Management, Six Sigma, Corporate Culture

JEL classification: M14

1. Background

The literature of every field of activity contains terms which specialists have tried to explain and use in further researches. However, actual results arise from establishing connections between such terms and try to find practical implementations. The topic of this research paper is related to quality, and in particular to Total Quality Management and Six Sigma and how their practices are influenced by corporate culture. The paper will summarize the most frequent definitions of the terms used and an attempt to illustrate the link between the types of corporate culture and the successful implementation of Total Quality Management and Six Sigma practices towards building organizational excellence. To support the theoretic approach, a practical example consisting of an illustration upon a multinational company will be presented.

2. Foreground

Quality, apparently a common word, is actually rather confusing. If you select a sample of managers and ask them to define quality, several answers may occur such as: perfection, consistency, eliminating waste, speed of delivery, compliances with policies and procedures, providing a good, usable product, doing it right the first time, delighting or pleasing the customers or total customer service and satisfaction. As it seems, the larger is the number of respondents, the greater is the variety of answers. That is why, there are several perspectives from which quality can be viewed in order to completely understand its role and importance: judgmental, product-based, user-based, value-based and manufacturing-based (Evans & Lindsay, 2008). If we combine all these perspectives and extend this concept in the management field, the term of **quality management** is obtained. The latter is considered to have the following three dimensions: quality control, quality assurance and quality improvement. The third, quality improvement can be achieved by using several instruments. From these we can mention ISO standards, Kaizen (continuous improvement,

Six Sigma, PDAC (Plan-Do-Act-Check), lean manufacturing, Business Process Reengineering and Total Quality Management.

TQM as it is often abbreviated means that the organization's culture is defined and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques and training. This involves the continuous improvement of organizational processes, resulting in high quality products and services (Sashkin & Kiser, 1993). Seven of the most important tools and techniques are: top management support, customer relationship, supplier relationship, workforce management, quality information, product/service design and process management (Zu, Robbins et al, 2008). (Appendix a)

Six Sigma is a new approach to quality management (Kumar, Nowicki et al, 2008) and can be defined as "an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates" (Linderman, Schroeder et al, 2003). Zu et al (2008) has identified three distinct essential practices in order to implement Six Sigma principles and methods. These are: Six Sigma role structure, Six Sigma structured improvement procedure and Six Sigma focus on metrics. (Appendix b)

Another concept would be corporate culture which Schein (1985) defined as "a pattern of basic assumptions – invented, discovered or developed by a given group as it learns to cope with its problems of external adoption and internal integration – that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems". Quinn (1988) has developed the Competing Values Framework which explores the deep structures of organizational culture relating to compliance, motives, leadership, decision making, effectiveness and organizational forms in the organization.

Table 1			
		Flexibility & Spontaneity <i>Group culture</i>	<i>Developmental culture</i>
Internal focus & Integration		Participation	Creativity
		Teamwork	Flexibility
		Facilitator-type leader	Entrepreneurship-type leader
		People, commitment	Innovation, new resources
External focus & Competitiveness		Centralization	Efficiency
		Order	Task focus
		Administer-type leader	Achievement-type leader
		Regulation, control	Goal orientation, competition
		<i>Hierarchical culture</i> Control & Stability	<i>Rational culture</i>

Competing Values Framework (Quinn)

The vertical axe shows the extent to which an organization focuses on change and stability, whereas the horizontal axe reflects the interest for the internal organization and external environment. However, this model illustrates an ideal situation because organizations usually exhibit a combination of different culture types.

Researchers have widely agreed that organizational culture is an essential ingredient for a successful implementation of TQM and Six Sigma practices. Thus, having as a starting point the definitions presented above and Quinn's CVF model, we will further analyze the relationship between corporate culture and quality management.

The *group culture* comprises values such as belonging, trust and participation, orientating its strategies toward developing human relationships. It is characterized by teamwork and consensus, and the leaders tend to be supportive, encourage empowerment and show concern for employees' ideas.

With emphasis on commitment and cooperation, the group culture is related to seven of the ten practices. This is due to the fact that the implementation of all these practices requires an organizational environment that encourages open communication and employee involvement to facilitate changes and provide resources necessary for continuous improvement (Beer, 2003). In such supportive environments, employees are encouraged to participate in continuous improvement teams and are rewarded for their contribution to better quality.

The *developmental culture* can be seen in strategies such as innovation, resource acquisition and the development of a new market. In organizations which display such a culture, the belief in external adaptation and development of flexibility and diversity leads to understanding customer needs and market requirements.

This type of culture is related to the implementation of Six Sigma role structure due to the individuality value promoted. Depending on each task, different roles and responsibilities are assigned to the Six Sigma specialists based on their expertise (Linderman, Schroeder et al, 2003). The tolerance for flexibility can be illustrated by the tendency to shift power among teams in function of the problem addressed. Hence, it is easier to organize Six Sigma teams based on tasks (Schroeder, Linderman et al, 2008).

The *rational culture* emphasizes competitiveness and goal orientation. Leaders are tough and demanding and tend to develop clear objectives and aggressive strategies in order to drive practices and behavior to productivity and profitability.

This type of culture has an influence upon nine of the ten practices due to the fact that, on the one hand, the emphasis on productivity and achievement, with clearly defined objectives is compatible with Six Sigma practices, and on the other hand, efficiency and profit orientation are conducive to TQM practices that focus on achieving superior quality and competitiveness (Dean & Bowen, 1994).

The *hierarchical culture* is characterized by uniformity, internal efficiency and a close adherence to rules and regulations. It is an environment in which pursues stability, error detection and management. This type of culture does not have any kind of influence upon the successful implementation of TQM/Six Sigma practices due to its internal focus and emphasis on control and stability.

3. Frame

The current analysis had as a premise the fact that the corporate culture of an organization must support the implementation of TQM/Six Sigma practices. Starting from this point, the four ideal types of organizational culture identified by Quinn have been reviewed and connected to the seven Total Quality Management practices and respectively, three Six Sigma practices (Appendices a, b). There have been noticed that three of them (group, rational and developmental culture) influence to a certain extent the successful implementation of these practices. However, several aspects have to be taken into consideration.

Firstly, it may happen that attempting to implement these quality practices will alter the existing organizational culture. In this case, the research question is reversed and the subject of analysis becomes totally different.

Secondly, reality can differ from theory. This perspective proves the fact that organizations do not have a pure type of corporate culture, but a mix of the four. This is why, any research which establishes a strict boundary between the four categories of cultures is purely theoretical and hence, its results cannot be implemented as such.

Thirdly, in order to obtain precise results with practical applicability, a study of larger proportions should be conducted, using both quantitative and qualitative data from a representative sample of organizations.

In my opinion, precise proportions in which the four different types of corporate culture can be combined in order to guarantee success do not exist. However, I believe that a successful implementation of such practices requires the involvement and the commitment of all the people from the organization, accompanied by leadership from the factors of decision. If I were to take an example, I would say that from the experience I have gained working in a FMCG company, the corporate culture should be a combination between group, developmental and rational cultures. A strong emphasis on people, flexibility, innovation and efficiency should not be absent when transforming an idea into reality. This parent company of the one in question is Japanese and I believe this aspect has to be taken into consideration when assessing the type of corporate culture. Moreover, the input nationals in each country, in this case Romania, bring blends within the culture factor.

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5. Appendices

Quality practices	Description
a. TQM	
Top management support	Top management accepts responsibility for quality and is evaluated based on quality performance. Top management participates in quality improvement efforts and makes strategies and goals for quality improvement.
Customer Relationship	Customer needs and expectations are assessed. Customers are involved in quality improvement projects. Customer satisfaction is measured. There is a close contact with key customers.
Supplier relationship	A small number of suppliers are used. Suppliers are involved in product development and quality improvement projects. Suppliers are evaluated based on quality. The organization provides suppliers training and technical assistance.
Workforce management	Employees are involved in quality decisions. Employees are evaluated based on their quality performance and their contributions to quality are recognized and rewarded. Managers encourage team work. There is training on Quality Management for both managers and employees.
Quality information	Quality data are available to managers and employees. There is an effort to collect timely quality data which are used for improvement.
Product/service design	There is thorough review before production. Design teams involve people from different functions.
Process management	There is an emphasis on mistake-proof process design. There is consistent use of statistical process control and preventive maintenance. Managers and employees make efforts to meet schedules.
b. Six Sigma	
Six Sigma role structure	The organization uses a group of improvement specialists who are developed through Six Sigma training and certification programs. The improvement specialists are classified with different ranks based on their expertise. The specialists are assigned with specific leadership roles and responsibilities in improvement teams.
Six Sigma structured improvement procedure	There is an emphasis on following a standardized procedure in planning and conducting improvement projects. Teams apply the appropriate Quality Management tools and techniques as prescribed in each step of the structured procedure.
Six Sigma focus on metrics	Quantitative metrics are used to measure process performance and product quality performance and to set improvement goals. Business-

level performance measures and customer expectations are integrated with process-level performance measures.