ANALYSIS OF FACTORS INFLUENCING QUALITY CULTURE AND THEIR IMPACT ON ORGANIZATIONAL DEVELOPMENT

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Abstract. Total quality management is an approach geared towards the organization’s efforts to continuously improve its ability to provide its customers with high quality products and services. In order for the organization to be able to ensure efficient use of resources, increase productivity and maintain excellent quality, it is necessary to develop quality culture. The aim of the research is to study and analyse the quality culture factors that might influence the continuous improvement and development of the organization’s activities. The research is based on the study of quality culture factors using literature review, qualitative content analysis and the “Organizational Culture Assessment Instrument” developed by Cameron and Quinn. On the basis of the results of a qualitative content analysis, the frequency of the categories of quality culture parameters in the literature was determined; with the help of the method of logical analysis and comparative analysis, the factors of quality culture corresponding to the parameters – dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria – were identified. An organizational culture based on quality culture principles is a significant factor for utilization of organizational competencies, creating an effective management and resource-oriented approach that is implemented focusing on the organization’s long-term interests and goals. By adopting a total quality management philosophy in the organization’s operations, the company can become more competitive, creating a working environment in which every employee can contribute, as well as facilitating cooperation between team members.

Keywords: performance improvement, quality culture, total quality management.

Introduction

Total quality management is a way of thinking about the organization’s goals, processes and employees; it can change the attitudes and behaviour of the whole organisation and its staff, improving the organizational performance. An organizational culture that is based on the principles of total quality management is an essential factor in the continuous improvement, efficiency, development and sustainability of the organization.
The aim of the research is to study and analyse the quality culture factors that might influence the continuous improvement and development of the organization.

The research is based on the study of quality culture factors using scientific methods – literature review, qualitative content analysis, and the “Organizational Culture Assessment Instrument” – a method to assess types of organizational culture developed by Cameron and Quinn (Cameron & Quinn, 2011). As a result, the frequency of the categories of quality culture parameters in the literature was determined; the factors of quality culture corresponding to the parameters – dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria – were identified.

The results of a quality culture parameter analysis were used to identify the quality culture factors that correspond to the types of organizational culture: “clan culture”, “adhocratic culture”, “market culture” and “hierarchical culture”. The analysis of quality culture factors revealed the criteria that are focused on organizational development. As a result of the research, it is possible to identify quality culture factors which are based on the principles of total quality management and can, under certain circumstances, produce positive results for the development of an organization.

**Methodology of Quality Culture Analysis**

The research is based on the study of quality culture factors using literature review, qualitative content analysis and the “Organizational Culture Assessment Instrument” developed by Cameron and Quinn. On the basis of the results of a qualitative content analysis, the frequency of the categories of quality culture parameters in the literature was determined; with the help of the logical analysis and comparative analysis methods, the factors of quality culture corresponding to the parameters – dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria – were identified.

With the help of qualitative content analysis, the authors revealed the factors that are included in “quality culture” and the frequency of categories in the literature. For qualitative content analysis, research papers were selected using keywords “quality culture”, “organizational culture”, “total quality management”, choosing 20 literature sources available in the international publication database ScienceDirect, in scientific journals, research, scientific literature and internet information sources. The article was prepared between June 2018 and January 2019.

The codes and categories identified during the qualitative content analysis are shown in Table 1.
The Latvian Business Consulting Centre “OKA Centrs” Ltd. (Organizational Culture Analysis Centre) (SIA OKA Centrs, 2015) has prepared descriptions of organizational culture dimensions on the basis of the organizational culture typology developed by Cameron and Quinn; and the authors of this study have used these descriptions to explain the codes.

Table 1. Summary of codes and categories (SIA OKA Centrs, 2015)

<table>
<thead>
<tr>
<th>Code (SIA OKA Centrs, 2015)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>A general set of the organization’s common features and values</td>
<td>Dominant Features</td>
</tr>
<tr>
<td>Leadership-related functions</td>
<td>Organizational Leadership</td>
</tr>
<tr>
<td>Dominant management style and key features</td>
<td>Employee Management</td>
</tr>
<tr>
<td>Features and values that unite the organization</td>
<td>Organization Glue</td>
</tr>
<tr>
<td>Emphasis on organizational values which are deliberately communicated</td>
<td>Strategic Goals</td>
</tr>
<tr>
<td>Goals that are considered to be a success</td>
<td>Success Criteria</td>
</tr>
</tbody>
</table>

The category usage frequency was determined on the basis of the literature analysis. It is shown in Table 2.

Table 2 Category usage frequency (prepared by the authors)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominant Features</td>
<td>12</td>
<td>70%</td>
</tr>
<tr>
<td>Organizational Leadership</td>
<td>7</td>
<td>40%</td>
</tr>
<tr>
<td>Employee Management</td>
<td>6</td>
<td>35%</td>
</tr>
<tr>
<td>Organization Glue</td>
<td>9</td>
<td>50%</td>
</tr>
<tr>
<td>Strategic Goals</td>
<td>11</td>
<td>60%</td>
</tr>
<tr>
<td>Success Criteria</td>
<td>12</td>
<td>70%</td>
</tr>
</tbody>
</table>

Total: 57

From the data given in Table 2, it can be concluded that in the literature the categories “Dominant Features” and “Success Criteria” were each reviewed 12 times (70%). A similar frequency in the literature is attributed to the category “Strategic Goals” which was discussed in 11 cases (60%), while the category “Organization Glue” was reviewed in 9 cases (50%).

Least reviewed in the literature, but numerically similar were the categories “Organizational Leadership” and “Employee Management”. The category “Organizational Leadership” was reviewed in 7 cases (40%), but the category “Employee Management” was reviewed in 6 cases (35%).

The frequency of using the categories “Dominant Features”, “Success Criteria”, “Strategic Goals” and “Organization Glue” in the literature indicates
that quality culture is linked to the organizational culture. These quality culture elements prove that quality culture is a specific aspect of organizational culture focused on the improvement of daily work and methods.

According to the qualitative content analysis, the selected literature sources correspond to the question posed (What factors does quality culture comprise?) and provide an answer to it.

**Results of the Study**

The quality culture parameters and factors of quality culture development were determined with the help of the logical and comparative analysis method on the basis of analysis of scientific publications and literature performed by qualitative content analysis; these parameters and factors are shown in Table 3.

The quality culture parameters, which include the organisation’s dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria, are compiled by the authors in Table 3.

**Table 3** Quality culture parameters (prepared by the authors)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dominant Features:</strong></td>
<td>Ahmed &amp; Nulland (2016); European University Association (EUA) (2006); Gore (1999); Harvey (2004); Hanze University of Applied Sciences (2011); Juran &amp; Godfrey (1998); Lapina, Kairiša, &amp; Aramina (2015); Malhi (2013); Mosadegh Rad (2006); Sursock (2011).</td>
</tr>
<tr>
<td>- principles of operation, practice, conditions and behaviour of the organization; - employee orientation, employee involvement, communication; - entrepreneurial spirit and work environment; - ideology for improving work methods and results, motivation to achieve results; - creating, maintaining, improving quality awareness.</td>
<td></td>
</tr>
<tr>
<td><strong>Organizational Leadership:</strong></td>
<td>Ahmed &amp; Nulland (2016); Batten (1992); Hanze University of Applied Sciences (2011); Juran &amp; Godfrey (1998); Kanji &amp; Wallace (2000); Malhi (2013); Sursock (2011).</td>
</tr>
<tr>
<td>- leadership development, organizational vision, mission creation, defining key objectives; - change of quality culture, support for quality improvement with structural elements; - fostering leadership, incl. promotion of individual development of employees, recognition and awards</td>
<td></td>
</tr>
<tr>
<td><strong>Employee Management:</strong></td>
<td>Ahmed &amp; Nulland (2016); Drinke &amp; Janovs (2011); Hanze University of Applied Sciences (2011); Juran &amp; Godfrey (1998); Malhi (2013); Sursock (2011).</td>
</tr>
<tr>
<td>- work environment that promotes employee growth, motivation; - employee self-development, respect and tolerance; - management elements that improve quality, employee competence assessment, audit.</td>
<td></td>
</tr>
<tr>
<td><strong>Organization Glue:</strong></td>
<td>Ahmed &amp; Nulland (2016); Cameron &amp; Sine (1999); EUA (2006); Hanze University of Applied Science</td>
</tr>
<tr>
<td>- set of organizational values, beliefs, expectations, commitment to quality;</td>
<td></td>
</tr>
</tbody>
</table>
During the analysis of the quality culture parameters, the following factors of quality culture relevant to the parameters were identified: dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria. The results of quality culture parameters analysis were used to identify quality culture factors corresponding to the types of organizational culture: “clan culture”; “adhocratic culture”; “market culture” and “hierarchical culture”.

When describing the principles of the organization’s activities, R.S. Malhi (Malhi, 2003) expresses the view that in a quality culture, “quality” is a way of life, quality principles are reflected in the activities and behaviour of the organization, whereas I. Lapina et al. (Lapina et al., 2015) highlight the idea that in order to facilitate quality management and good organizational governance, companies should pay more attention to the operating principles and conditions. According to the authors, the principles and conditions of the organization’s activities focus on the organization’s internal orientation and are an important factor in the development of the organization and the creation of innovations, and the willingness of employees to take risks, which is characteristic of an “adhocratic culture”.

There is a view (Gore, 1999) that a radical process change (reengineering) can reduce the positive elements of culture, possibly the best way to tackle it is by ensuring that process improvement efforts are launched at the beginning of any total quality management initiative and used in total quality management
concepts, such as employee involvement or good communication. A.M. Mosadegh Rad (Mosadegh Rad, 2006) also emphasizes employee involvement and good communication in improving the organizational performance by analysing successful implementation of total quality management within an organization, explaining that organizations need to build an effective, quality-based organization that provides communication at different levels within the organization, that they need to change the bureaucratic system, develop a strategic plan to have work performance guidelines. This statement is related to the view expressed by R.S. Malhi (Malhi, 2013) that in an organization with quality culture, quality is deeply integrated into practically all aspects of the organization’s life, including focus on employees.

According to the authors, focus on employees, involvement, good communication contribute to the loyalty of the organisation’s employees, mutual trust that is typical of a “clan culture” and is an important factor for developing the organization and making positive changes.

There exists an opinion (Ahmed & Nulland, 2016; Hanza University of Applied Sciences, 2011) that quality culture manifests itself in the entrepreneurial spirit and that a work environment that promotes team spirit is an essential factor in organizational development. The authors agree with this statement, because it is the entrepreneurial spirit that is embodied in the organization’s work, which focuses on the organisation’s willingness to take risks, where success is rooted in innovation that is essential for organizational development; these factors being characteristic of an “adhocratic culture”.

A. Sursock (Sursock, 2011) believes that a quality culture approach is based on the motivation to achieve results. L. Harvey (Harvey, 2004) explains that quality culture is a set of practices adopted by an organization that embrace the group or organizational ideology and determine how to improve daily work methods and results. The authors believe that the organisation’s ideology for improving work methods and results is based on the motivation to achieve results and focuses on the external orientation of the organization, creating a competitive edge in the market; it is characteristic of a “market culture”.

Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998) believe that one of the elements of developing a positive quality culture is the creation and maintenance of quality awareness. When developing a definition of quality culture, the European University Association (EUA, 2006), similarly to Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998), note that quality culture is a structural management element with certain processes which improve quality and aim to coordinate individual efforts that, according to the authors, characterize the organisation’s focus on results, which is typical of a “market culture”.

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There are different views in the literature on the impact of leadership on organizational development. J.D. Batten (Batten, 1992), describing the role of a leader in a quality culture, believes that total quality management is a company’s philosophy, a way of thinking about the company’s goals, organization, processes and people, and is the basis of the quality culture. The role of the leader in creating a quality culture is to create visions and dreams, to define the mission and main goals of the organization. A. Ahmed and Y.V. Nulland (Ahmed & Nulland, 2016) also believe that leadership is one of the most important success factors of quality culture.

The authors are of the opinion that the aim of the quality management system is to achieve, retain and improve the quality of the organization. K. Kanji and W. Wallace (Kanji & Wallace, 2000) argue that behind all successful organizations there have been leaders who have revived and changed the quality culture in their organization, A. Sursock (Sursock, 2011) expresses a similar view that a quality culture approach should be supported by structural elements that improve quality.

On the basis of the opinions expressed on the importance of leadership in organizational development in the literature, the authors conclude that the organization should focus on business development, risk-taking and innovation, which is characteristic of an “adhocratic culture”.

Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998) and the Hanza University of Applied Sciences (2011) consider recognition and rewarding to be positive cultural development elements in promoting individual development.

The authors believe that promoting individual development, recognition and rewarding of employees are quality culture factors that characterize the direction of the organizational leadership. The idea of leadership that is geared to supporting employees, offering work incentives, promoting new ideas is typical of a “clan culture”.

Employee management or management style in the organization characterizes the facilitation of employee involvement in quality improvement. A. Ahmed and Y.V. Nulland (Ahmed & Nulland, 2016) express the view that an integral part of a quality culture is a work environment that promotes employee growth and that employee motivation is a key success factor for quality culture. Malhi (Malhi, 2013) characterizes an organization with a quality culture emphasizing the importance of motivating employees, recruitment and promotion.

A positive work environment, according to the authors, is a stimulus for employees to find new opportunities in organizational development, promote the creation and uniqueness of innovation; such an approach to the employee management enhances the competitiveness of the organization, facilitates
individual risk-taking and creative freedom; these are features of an “adhocratic culture”.

Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998) believe that ensuring employee self-development contributes to the growth of a positive quality culture within the organization; Hanze University of Applied Sciences (2011) strives at a quality culture that expresses itself in the values of the organization, including respect and “active tolerance”. According to the authors, the management style characteristic of a “clan culture” – teamwork, compromises, participation in decision-making – determines the level of employee involvement in quality improvement within the organization.

It is believed that a quality culture approach is supported by managerial elements (Sursock, 2011) and, in order to ensure efficiency of the organisation, it is possible to use the quality management system methodology that includes the development and assessment of employee competences, as well as the development of personnel management audit (Drinke & Janovs, 2011). According to the authors, such an employee management approach is characteristic of a “market culture” that focuses on high requirements, competitiveness and rewarding employee performance.

The European University Association (EUA, 2006), in the definition of quality culture, explains that quality culture is a psychological element because it comprises the organisation’s shared values, beliefs, expectations and commitment to quality; a similar explanation is given by L. Harvey (Harvey, 2004) who emphasizes the importance of organizational values in improving the organization’s daily work methods and results. K. Cameron and W. Sine (Cameron & Sine, 1999) highlight quality as a set of values, an organizational ideology more than a set of tools and methods. The authors believe that the organisation’s shared values, beliefs, expectations and commitment to quality determine the united commitment of the members of the organization to undertake innovative actions aimed at the development of an “adhocratic culture”.

R.S. Malhi (Malhi, 2013) thinks that in an organization with a quality culture, continuous training and compensation of employees is one of the factors of quality culture; there are also views (Ahmed & Nulland, 2016; Juran & Godfrey, 1998) that quality culture success factors and elements for the development of a positive quality culture within the organisation are the employee empowerment and enhancing their powers. The authors believe that employee empowerment is characteristic of organizations focusing on new solutions. Enhancing employee empowerment promotes the organization’s unity and development, which is characteristic of an “adhocratic culture”.

According to Hanze University of Applied Sciences (2011), quality culture in the organization is a responsibility that is one of the values of quality culture. A. Ahmed and Y.V. Nulland (Ahmed & Nulland, 2016) express a similar opinion,
emphasizing a work environment that promotes fairness. R. Luburić (Luburić, 2013) is of the opinion that quality culture can be considered a quality management initiative and a guiding principle. All the above-mentioned means communication, participation, mutual trust and respect, understanding of common goals and tasks, as well as efforts to balance and harmonize both traditions and changes in all their contradictions and specificities.

The authors believe that the responsibility of the organization, a work environment that promotes fairness, communication, participation, trust, dignity, understanding of common goals and tasks are factors of organization glue that manifest themselves in the loyalty and trust of employees, which is characteristic of a “clan culture”.

An organization needs a strategy to identify the organisation’s current position, define and assess its activities, evaluate its resources, plan how the strategy will be implemented and how the result will be achieved.

L.N. Gambi et al. (Gambi et al., 2013) believe that organizations see quality management as part of a strategy to increase productivity. A. Ahmed and Y.V. Nulland (Ahmed & Nulland, 2016) express the view that a sustainable quality strategy depends on the creation of a quality culture; a similar view is expressed by G.K. Kanji and W. Wallace (Kanji & Wallace, 2000), who believe that a quality culture which is dynamic and progressive is constantly evolving and helping to change business. I. Lapiņa et al. (Lapiņa et al., 2015) note the need for the organization to stimulate employees to focus on the long-term interests of the organization.

The authors believe that the organisation’s emphasis on creating new opportunities is focused on innovation, while the need to increase productivity draws attention to the provision of new resources, which is inherent to an “adhocratic culture”.

According to R.M. Malhi (Malhi, 2013), in an organization with a quality culture, quality is integrated into decision making and organizational structure. The authors believe that the organisation’s strategic goals aimed at employee development, trust, openness, and belonging are features of a “clan culture”, as any organization’s goals are products, services and efficiency, each employee’s responsibility provides involvement and decision-making.

A. Jancikova and K. Brychta (Jancikova & Brychta, 2009) are of the opinion that the basic principles of total quality management – continuous improvement and customer satisfaction – are essential for maintaining the organization’s competitiveness in the competitive environment. R.S. Malhi (Malhi, 2013) believes that quality culture is focused on customer satisfaction. A.C. Campos et al. (Campos et al., 2014) note that the development of a total quality culture is a strategic issue aimed at achieving stakeholder satisfaction in a very demanding and variable business environment. The authors share the views expressed, as
customer and stakeholder satisfaction is one of the most important strategic goals of the organization that can influence the organization’s competitiveness in the market.

Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998) think that one of the elements necessary for developing a positive quality culture is providing evidence of management leadership on quality. Similarly, Z. Drinke and V. Janovs (Drinke & Janovs, 2011) offer a solution for ensuring efficiency by using elements of the quality management system methodology, emphasizing the orientation to the use and improvement of existing resources, as well as process management. This is necessary to gain evidence about how the organization identifies, manages and enhances its main processes to implement the organization’s strategy and policies so that they fully meet the needs of customers and other stakeholders and create added value.

The organization’s strategy based on customer and stakeholder satisfaction, evidence-based quality management within the organization demonstrate, according to the authors, the organization’s focus on competitive activities geared to the market, which is characteristic of a “market culture”.

The organization’s success criteria describe reaching goals of success. The authors believe that the organization’s goals are products, services and efficiency, while the key resources that ensure reaching the goals are employees, finances, raw materials, technology and information.

R.C. Rose et al. (Rose et al., 2008) expresses the view that when organizations know how to develop their own organizational culture effectively, they improve productivity as well as increase the quality of employee performance. A.C. Campos et al. (Campos et al., 2014) emphasize the development of a total quality culture as a strategic issue for achieving the organization’s competitiveness. According to R.S. Malhi (Malhi, 2013), a quality culture focuses on continuous improvement of the quality of products and services; A. Sursock (Sursock, 2011) is of a similar opinion that quality culture is supported by processes that improve quality.

The authors believe that the organization’s success criteria aimed at increasing competitiveness and productivity, striving to continuously improve the quality of products and services characterize the organization’s focus on success in conquering the market and being ahead of competitors, which is typical of a “market culture”.

According to R.S. Malhi, (Malhi, 2013), in an organization with a quality culture, quality is deeply integrated into work processes. The European Association of Universities (EUA, 2006) expresses the view that quality culture refers to an organizational culture which aims to continuously improve quality, and that the Flemish Bologna Expert Team in formulating quality culture as an integral part of a total quality management paradigm emphasizes that a quality
culture is an organizational culture that promotes effective care for quality (Berings, Beerten, Hulpiau, & Verhesschen, 2010). Z. Drinke and V. Janovs (Drinke & Janovs, 2011) note that in order to ensure efficiency, it is possible to use elements of the quality management system methodology that focus on innovation and modernization, including optimal use of information technology in the organization’s activities.

The authors believe that the development of quality and work processes focused on innovation is one of the success criteria. The organisation’s success in developing new, unique products is inherent to an “adhocratic culture”.

According to Joseph M. Juran and A. Blanton Godfrey (Juran & Godfrey, 1998), a positive quality culture in the organization can be developed by providing participation as a means of inspiring action; I. Lapiņa et al. (Lapiņa et al., 2015) emphasize the employees’ shared values in the organization. The authors believe that the involvement of the employees in the organization’s work by developing human resources, promoting teamwork and loyalty is one of the success criteria for the organization’s achievements, which is characteristic of a “clan culture”.

Conclusions

Quality culture factors that correspond to the parameters: dominant features, organizational leadership, employee management, organization glue, strategic goals and success criteria can affect the continuous improvement and development of an organization.

The organization’s quality culture is influenced by the organization’s structure, processes, implemented management measures, as well as each employee’s individual involvement, responsibility and willingness to participate.

In order to develop a quality culture, organizational leadership should aim to increase the organisation’s competitiveness. In order to enhance the competitiveness of the organization, it is necessary to create a positive work environment. Organization glue has to be expressed in shared values, understanding of common goals and objectives, employee participation in decision-making. The organisation’s strategy should focus on customer and stakeholder satisfaction. Improving the quality of the organisation’s products and services and improving work processes are also important factors in the continuous improvement and development of the organization.

An organizational culture based on the principles of a quality culture approach is an important factor in utilizing the organisation’s competences by creating an effective management and resource-oriented approach that is implemented in pursuit of the organisation’s long-term interests and goals.

On the basis of the study of theoretical aspects of quality culture and the analysis of factors, the authors conclude that there is a need to continue research
on the factors of interaction between “organizational culture” and “quality culture” which are important for the continuous improvement and development of the organization.

Summary

Total quality management is a way of thinking about the organization’s goals, processes and employees that can change the attitudes and behaviours of the entire organization and its employees, resulting in performance improvement.

By adopting a total quality management philosophy in the organization, the company can become more competitive, creating a work environment where every employee can contribute, as well as enhancing cooperation between team members. Likewise, total quality management is an approach that focuses on the organisation’s efforts to continuously improve its capability to deliver high-quality products and services to the customer, therefore maintaining high quality is essential. In order for an organization to be able to ensure efficient use of resources, increase productivity and maintain excellent quality, it is necessary to develop a quality culture.

Quality culture factors, despite their significant impact on the continuous improvement of the organisation’s activities, have been studied relatively little. The authors’ research study reveals the main factors of quality culture, which under certain conditions, can produce positive results for organizational development.

References


