WHAT VALUES ARE INCLUDED IN QUALITY CULTURE? A THEORETICAL AND PRACTICAL COLLABORATION

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Abstract

Purpose - The purpose of this paper is to describe a collaboration between academia and practitioners where the aim was reach agreement on the Quality Culture content.

Methodology/approach – A project with the aim to measure and develop Quality Culture started in 2015. The overall aim of the project was to create new knowledge and insights about 1) what quality culture is, 2) what quality culture consists of, 3) how quality culture can be measured and 4) how it can be developed. In this paper the work to meet the first and second aim and the results of that work are presented.

Findings – A framework for quality culture consisting of supportive and obstructive behaviours developed in collaboration between academia and practitioners. The paper includes a description of how practitioners and researchers can work together to develop a shared set of values.

Keywords Quality culture, quality values, behaviours, collaboration

Paper type Case study

Introduction

In most industries, quality has never mattered more. Globalization, digitalization and the accelerating pace of change challenge organizations to become more agile and continuously innovate and improve their processes (Eriksson et al., 2016). Today, customers are empowered to seek out and compare products and services from around the world. When customers are dissatisfied they can easily alert fellow consumers about quality problems by social media. As a result of this, managers must find a new approach to Quality Management (QM) that moves away from the common, often short-term, view on various tools and techniques. Instead they should explore how their organizations can create a strong culture based on quality – one of the most important future challenges that organizations face in the QM area (ibid).

Organizational culture as a general factor affects almost every part of organizational interactions (Henri, 2006). Rigby and Bilodeau (2011) maintain that culture is as essential as strategy for organizations' success. Many researchers also support the link between the values held by the members of the organization and the existing culture in the organization. Without a considerable level of agreement on those values a strong culture cannot be said to exist (O'Reilly et al., 1991). The development of an organizational culture is not an easy task, as it consists of a group of shared norms and values shaped over a long time and that effect the way the organiza-

tions work (Santos-Vijande and Álvarez-González, 2007). This is in line with Gimenez-Espin et al. (2013) who state that changes in organizational culture can be hard to achieve and take time.

To develop a quality culture can be seen as a deliberate selection of values, practices and tools in order to achieve systematic improvements in the organization's processes and for its customers (Nilsson-Witell et al., 2005). The concept of a quality culture is often contrasted to a Blaming Culture, characterized by a lack of trust (Khatri et al., 2009; Bergman and Klefsjö, 2010).

Although many authors agree on the importance of a strong quality culture for organizational success, there is little agreement on the quality culture content. Thus, the purpose of this paper is to describe a collaboration between academia and practitioners where the aim was to be agreed on the Quality Culture content.

Organizational Culture

An organizational culture is a structure of shared values (Chatman and Eunyoung Cha, 2003) and common values are the very core of cultures and of organizational cultures in specific (O'Reilly et al., 1991). The organizational culture occurs on different levels where 'level' corresponds to the grade to which the cultural phenomenon is observable (Schein, 2009). The first level, 'Artifacts', can be observed and consists of, for example, organizational charts and stories told about the organization, manner of speaking and style of dressing (ibid). These 'Artifacts' are easy to distinguish but harder to construe. 'Espoused values' are, for instance, the values, norms, principles, strategies and goals which are underlying the artifacts. The espoused values often leave large ranges of behaviours unwritten, but can usually be identified by e.g. use of questionnaires. However, espoused values can be difficult to get an idea about by mere observation. The third and bottom level of the organizational culture is the 'Underlying Assumptions, they tend to be very hard to change, unconscious and often taken for granted (ibid).

A strong organizational culture is formed by a great level of agreement among co-workers about what is valued, and a high level of strength about these values (Chatman and Eunyoung Cha, 2003). Organizational culture replicates the different social practice, values, norms, behaviours, and formalities within a group and is established in an anchored system, something greater than the sum of its parts (Lowie, 1987). To successfully meet the challenges facing organizations today, many claim the need is to develop a performance measurement system that integrates hard data outcomes with soft measures found in organizational culture, including values, norms, and behaviours (Kollberg et al., 2007: Snyder, et al., 2015). When a culture is shaped, leadership is crucial and the managers in the organization are important (Ingelsson, 2013). 'The managers need to be present among their co-workers and aware of how their own actions affect the possibility to build a strong Quality Management culture' (Ingelsson, 2013, p. 77).

Quality Culture

Leaders within organizations have the complicated challenge to realize the market, meet customer needs, and anticipate and adapt to changes in the market to consolidate a competitive advantage (Bäckström et al., 2012). This increases the demand to develop better efficiency to improve effective performance (ibid), and also maintain a healthy working environment. However, many organizations fail to meet this challenge. One cause for the absence of success seems to be a focus on Quality Management tools and processes and an absence of understand-

ing of the influence of Quality Culture (Ingelsson et al., 2010). The values within the Quality Culture can be found in the second level of the organizational culture, called 'Espoused values' by Schein (2009), which often leaves large areas of behaviours unexplained.

According to Sila and Ebrahimpour (2002), the most frequent values referred to in Quality Management (QM) literature are: customer orientation, leadership commitment, participation of everybody, continuous improvements, management by facts and process orientation. This is comparable to the values Motawi (2001), presents as critical QM factors from a literature review: top management commitment, quality measurement and benchmarking, process management, product design, employee training and empowerment, vendor quality management, customer involvement and satisfaction. Lagrosen (2006) sees the values within QM as the basic elements. The establishment of these values constitutes both the outcome and the ingredients of an excellent QM initiative. In a literature review she notices that different authors use different names for the content of QM such as, for example, key elements, values, corner stones, principles or fundamental concepts (ibid). A summary of the literature review is presented in Table I, where it can be recognized that although there is a difference in naming and content they are strikingly similar.

Moreover, Flynn et al. (1994) included seven values in QM: top management support, quality information, process management, product design, workforce management, supplier involvement and customer involvement. The newly revised ISO 9001 standard (ISO 9001:2015) is also based on seven values (principles): customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making and relationship management (ISO, 2016). Hellsten (1997) found in her literature review six values that seemed to be common in most descriptions of QM: focus on customers, focus on processes, fact-based decisions, continuous improvements, everybody's commitment and management commitment. According to Dean and Bowen (1994), most of what has been written about QM is based on three values (principles): customer focus, continuous improvement and teamwork.

Hence, the review of values of QM shows, the number of values and the values themselves differ among authors, from Dean and Bowen's (1994) three values to the SIQ Model's 13 values. An explanation for this is that the SIQ Model includes a number of principles that do not belong to the fundamentals of QM. An example of this is 'social responsibility'.

Table I. Cornerstones, key elements, principles, core concepts, core variables, core values or values of QM identified from a literature review (Lagrosen, 2006).

Bergman & Klefsjö (2003) *Cornerstones*	Dale (1999) *Key elements*	Dahlgaard et al. (1999) *Principles*	EFQM Excellence Model (2002) *Fundamental concepts*	Hardjono, ten Have et al. (1997) *Core values*	SIQ Model for Performance Excellence (SIQ, 2005) *Core values*	Malcolm Baldrige Excellence Framework (NIST, 2006) *Core values & concepts*
Committed leadership	Committed leadership of the CEO	Leadership	Leadership & constancy of purpose	People focus	Leadership commitment Constancy of purpose	Visionary leadership
Let everybody be committed	Involvement Teamwork Education and training	Everybody's participation	People development & involvement Partnership development		Participation of everybody Competence development	Valuing staff and partners
Improve continuously	Culture for continuous improvements	Continuous improvements (Kaizen)	Continuous learning, improvement & innovation	Learning focus	Continuous improvement Learning from others	Organizational and personal learning Managing for innovation
Focus on customers		Focus on the customer and the employee	Customer focus	Customer focus	Customer orientation	Customer focused excellence
Focus on processes	Using tools and techniques Measurement and feedback		Management by processes & facts	Business process focus	Process orientation	
Base decisions on facts		Focus on facts			Management by facts	Management by facts
	Planning and organization		Corporate social responsibility Results orientation		Social responsibility Collaboration Faster reactions Prevention	Social responsibility & community health Agility Focus on results & creating value Focus on the future Systems perspective

Methodology

A project with the aim to measure and develop Quality Culture started in 2015. The founder of the project was SQMA (Swedish Quality Management Academy), a research network whose purpose is to conduct needs-based research in collaboration between practitioners and academia in the area of QM. Seven large Swedish organizations from different lines of business were part of and also funded the project. SIQ – Swedish Institute for Quality, Mid Sweden University and Linköping University represented academia. The overall aim of the project was to create new knowledge and insights about 1) what quality culture is, 2) what quality culture consists of, 3) how quality culture can be measured and 4) how it can be developed. In this paper the work to meet the first and second aim and the results of that work are presented.

The research project consisted of five workshops in total with two representatives from each organization and one researcher from each university/institute. The first workshop was held in March 2015 with the purpose to develop a common framework between academia and practitioners regarding: "What is Quality Culture?" and "What does Quality Culture consist of?" During the second workshop in May 2015, supportive and obstructive behaviours were discussed, developed and described for each commonly agreed quality value. After the second workshop the researchers compiled and analysed the collected material. Then, a further developed framework with supportive and obstructive behaviours in quality culture was analysed and revised during the third workshop in August 2015. During the period October 2015 until January 2016 a pilot survey was tested among the seven organizations. The survey consisted of an assessment of the framework for supportive and obstructive behaviours in quality culture. Hence, the aim of the tests was to measure quality culture. The results of the tests were further discussed during the fourth workshop in March 2016. The fifth and last workshop in the project took place in June 2016. The purpose was to evaluate the measurement tool for quality culture and the project as such.

The first and second workshop in 2015 are for the subject of this paper.

A way of collaborating between practitioners and academia

Research conducted in collaboration between practitioners and researchers stresses the importance of separating the roles of practitioner and researcher. Also, it emphasizes reflection and distance, both in time and space, to achieve the goal of critical research (Johannisson et al., 2008; Shani et al., 2008). This project is based on an interactive research approach where research has made contributions to: (1) creation of scientifically valid knowledge; (2) practical concerns, and (3) creation of knowledge and competencies of the parties involved in the research process. The research has both a practical and theoretical purpose. The practical purpose and challenge addressed by the seven Swedish organizations participating in this project was to measure and develop their own quality culture (see also, Eriksson et al., 2016). The theoretical purpose was to develop a framework for (1) what quality culture is; (2) what it consists of; (3) how it can be measured; and (4) how it can be developed.

The collaborative research approach is characterized by the mutual sharing of responsibility for the other partners' learning and knowledge (Shani et al., 2008). Hence, the practitioners will benefit if the researchers succeed in formulating an innovative framework for quality culture. Further, the researchers will gain if the practitioners try out the measurement tool for quality culture and if this results in scientifically interesting results (Shani et al., 2008). Chisholm and Elden (1993) described a spectrum of researcher roles with 'researcher-dominated' at one end and 'collaboratively managed' at the other end. In the researcher-dominated scenario, the researcher develops the research model, generates information used and makes the key decisions during the research process. In collaboratively managed projects, the research model is jointly developed and information used is jointly generated. Also, the decisions during the process are made by mutual agreement.

This was a collaboratively managed project, where the researchers prepared the workshops, but the practitioners also had assignments prior to each workshop, and actively influenced the outcome. After each session, the researchers gathered, analysed and revised the collected material. It was then sent out to representatives of the participating organizations for feedback.

The results of the project are a co-creation between academia and practitioners. Additionally, the project was designed for the latter to benchmark and share best practice among themselves. After the pilot tests, i.e. the period October 2015 until January 2016, each organization made a presentation during the workshop in March 2016, and shared examples of how they worked with best practice in quality culture. Figure 1 visualizes the meetings/workshops between the research system and the practitioner system, where new insights and knowledge are created (Ellström, 2008).

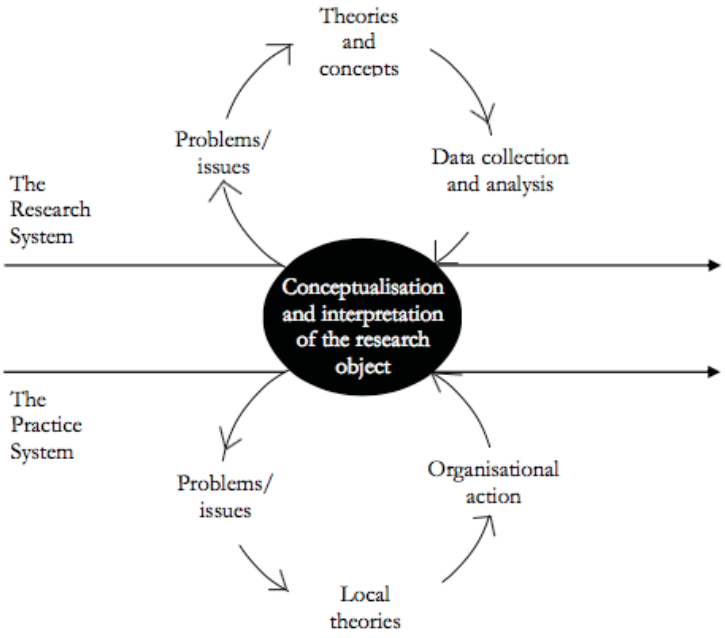

Figure 1. The interactive research process (Ellström, 2008).

Quality Culture according to practitioners and academia

In preparation for the first workshop in March 2015, each organization described, according to their view, what quality culture is and what it consists of. The practical view on quality culture was then clustered and visualized on the left hand side of a whiteboard, see Figure 2.

Quality culture according to the practitioners ended up in 18 values: Long-term perspective, Social responsibility, Prevention, Performance management, Visualization, Interaction, Competence development, Learning from others, Agility, Dialogue, Clear normal situation, Standardization, Process orientation, Customer orientation, Everyone's participation, Management commitment, Base your decisions on facts and Continuous improvement.

The theoretical perspective on quality culture resulted in six values, which were visualized on the right hand side of the whiteboard (see Figure 2): Focus on customers, Focus on processes, Fact-based decisions, Continuous improvements, Everybody's commitment and Management commitment (see e.g. Hellsten, 1997; Bergman and Klefsjö, 2010).

Agreed values of Quality Culture

The practical view and the theoretical view on quality culture were visualized as two parts of

a Venn diagram. The next step of the process was to analyse which values from the two perspectives were overlapping. This resulted in six values being common from both practitioners and research and agreed upon: *Customer Orientation, Process orientation, Everyone's participation, Management commitment, Base your decisions on facts and Continuous improvement* (see Figure 2).

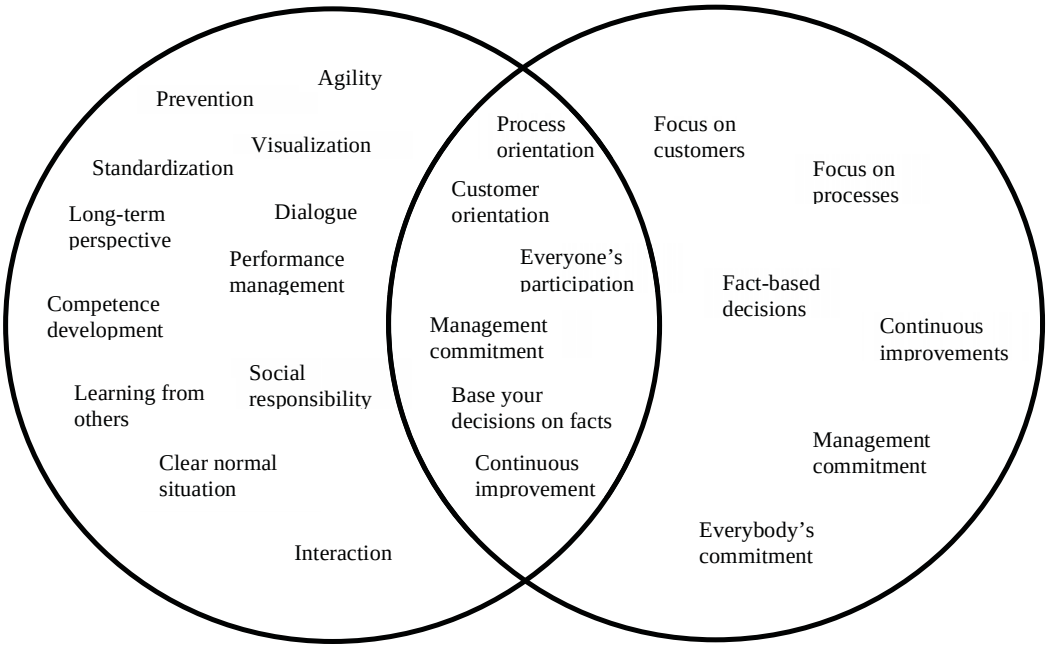

Figure 2. Quality culture according to practitioners and academia.
Note: The notions of the values were slightly modified when they were agreed upon by both practitioners and researchers.

After these results had been presented to the participating organizations they suggested adding three more values: Interaction, Proactivity and Competence. After discussions during the second workshop in May 2015 it was agreed that Interaction and Competence are already included in the common values. Thus, Proactivity was the only value that was added to the framework of quality culture.

Behaviours of a Quality Culture

When the framework for quality culture had been designed and the values were agreed upon, the aim was to identify and describe the behaviours of those values. The practitioners and researchers prepared definitions/narratives for the second workshop held in May 2015. During the workshop each value in the framework was analysed to identify the behaviours that constitute the values. The exercise resulted in 67 described behaviours for the seven values in the framework. The researchers gathered after the workshop to further analyse the results and develop the narratives.

A methodological consideration when describing the quality culture as narratives was to avoid bias. Most employees know or have heard that customers and processes are supposed to be 'good'. As the next step of the research process was to measure the quality culture (Cronemyr et al., 2016) and get answers from the practitioners that were not coloured or biased towards what

are supposed to be 'good answers', all behaviours were stated in a 'good' way. Hence, there should not be a good and a bad answer to choose from, but rather a good statement supporting a quality culture and a good statement obstructing a quality culture (but supporting something else). Accordingly, for each value narratives were formulated: two behaviours that support a quality culture and two behaviours that obstruct a quality culture. The developed framework with supportive and obstructive behaviours in quality culture was then analysed and revised by both practitioners and researchers during the third workshop held in August 2015. The results from that workshop are presented in Table II.

Table II. Statements describing behaviours, within six quality values, that either support or obstruct the creation of a Quality Culture

Quality values	***Customer orientation***	***Process orientation***	***Committed management (*Proactivity)***	***Participation and cooperation***	***Continuous improvements***	***Base decisions on facts***
Supportive behaviour #1 *vs.*	We cooperate to satisfy the customer's needs.	We adhere to our agreed guidelines and working methods.	Our leaders encourage suggestions for improvements and look at problems as a way to improve.	Development of our activities involves all co-workers based on their competencies.	We evaluate and improve our working methods.	When we have a problem, we find out what the root cause is before we decide on a solution.
Obstructive behaviour #1	In our organization, specially appointed staff solve the customer's problems.	Each person chooses individually how to work.	Our leaders assume that we do things right from the beginning to avoid problems.	Our improvement work is managed by our leaders or specialists.	We solve problems when they arise.	We solve problems as quickly and easily as possible.
Supportive behaviour #2 *vs.*	We find out what needs and expectations the customers have and adapt our products and services.	We cooperate between departments and functions as we develop our business.	Our leaders ask for customer consequences in decision situations.	We work to achieve the organization's overarching objectives.	We work on improvements in a structured fashion.	We gather information and measurement results which we use to develop our business.
Obstructive behaviour #2	We develop products and services that are as good as possible. We offer these to customers.	We focus on developing our business within the group and our own department.	Our leaders ask for efficiency when decisions are made.	We work to achieve our team's objectives.	We adapt our improvement work to the situation.	We develop our business based on the knowledge and experience of our co-workers.
Supportive behaviour #3 *vs.*			Our leaders prioritize preventive work.*			
Obstructive behaviour #3			Our leaders prioritize solutions to problems that have arisen.*			

Note 1: The behaviours of Proactivity were later incorporated into the analysis of Committed Management.

Discussion and conclusions

In this paper we present a framework for quality culture: what it is and what it consists of. Quality culture is a topic widely discussed by both practitioners and researchers, but it has no clear definition. The Quality Management literature is limited to the view of values as a set of underlying assumptions of how to view the organization and its relation to customers, competitors and suppliers (Dean and Bowen, 1994). The values are about people, organizations and change processes (Hackman and Wageman, 1995). Each value is implemented through a set of

practices, which are activities designed to display and embody the values. The practices are, in turn, supported by various techniques to make them effective. Hence, the focus is on QM methodologies and tools – not on behaviours or actions that are there or not in an organization. Thus, results like this, were each value of the quality culture is described by behaviours is needed.

In this framework and the various narratives, we have never mentioned the values directly (customers, processes etc.) We have made an effort to describe these behaviours in concrete and easy to understand terms. Answering questions about distinct behaviours in a survey and presenting the results thereof, also makes it easier for managers to take action and develop the quality culture based on these behaviours.

This research was co-created between academia and practitioners during several workshops, a mutual sharing of responsibility for the other partner's learning and knowledge as Shani et al., (2008) describe. We can conclude that the results were enriched by this cooperation. Also the Quality content and the described behaviours would not have been as exhaustive as they became without the views from different types of organizations together with the views from academia. The results from this paper can be used to maintain a quality culture which Rigby and Bilodeau (2011) assert is as essential as strategy for organizations' success. The described values and behaviours in this paper can help managers to select what to focus on in their efforts to develop a quality culture. The results have been validated by the participating organizations; there was consensus that the values and behaviours were a good description of a quality culture. The analysis and evaluation of the measurement tool and project as such is still ongoing.

Acknowledgment

This has been a research project within SQMA – The Swedish Quality Management Academy, see www.sqma.se. The project is funded by organizations in SIQ's supporting members' association.

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