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Quality Management from a Company Development Perspective

-The complexity of a change process

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This paper examines the development of quality management in a company setting and in the perspective of on-going company development processes. Presenting a longitudinal perspective, a discussion of different dilemmas and matters of importance in understanding the QM development in a company and its implications, leads to a conclusion; in order to better understand and develop QM in a company a processual perspective applying a more profound process view than often prevailing is needed.

Keywords: Organizing, Models, Quality Management, Processes, Development, Exploration-Exploitation.

Introduction

During the last decade there have been various studies of Quality Management (QM) based change efforts in industry and of the results of such change. Some authors, such as Hendriks and Singhal (2001), Easton and Jarrel (1998) and Hanson (2003) indicate that QM as modeled in quality awards promoting TQM is likely to render a positive development of a company; while others, e.g. Beer et.al (1990) and Argyris and Schön (1996) indicate that programmatic change often prevailing in TQM initiatives probably end up in no change at all. Some authors make their conclusions based on the assumption that winning a quality award is a firm indicator of a thorough TQM implementation, and hence, it would be possible to discern the effect of TQM by comparing the economic result of these winners with a control group of non-winners. However, other authors doubt that it is possible to make a cause-effect relationship between a QM-approach and the economic result, since so many factors influence the bottom-line result.

Various factors, external to a specific QM-process or a specific QM-based change project, influence the progress. Kimberly (1981) points at several influencing factors, e.g. the effects of previous or on-going other developmental work. Alänge et al (1998) emphasize the importance of defining what is really meant by the phenomenon studied, as various authors writing on the subject are not using a similar kind of definition. QM can be seen either as a managerial innovation or as a systems approach including a comprehensive quantitative and qualitative tool box; it can also be seen as a philosophy characterized by its principles, practices, and techniques (Dean and Bowen, 1994). Furthermore, research on the diffusion of innovations (Rogers, 1995, Wolfe, 1994) identify several characteristics of a new idea, practice or object that affect its diffusion and effects on an organization. Hence, to study and understand a QM change process can be a complex task with a multitude of dimensions to consider.

Both practitioners and researchers have a tendency to view QM as a linear change project, starting from zero and leading to a changed and sustained condition; this view has sometimes been reinforced by consultants interpreting Lewin's (1948) model of change: Unfreezing-Moving-Freezing in a single project sense. Such linear thinking might lead to a simplified view of the complex change processes which occur in organizations. In order to comprehend the change associated with QM, the initiatives taken should not be looked upon as a singular free-standing project, but as a project that has a history and an ever-changing context in which constant adaptations are needed. These intricate processes of organizing change are recognized by several authors from different fields that point to the need of a more longitudinal perspective on change processes.

Weick and Quinn (1999), reviewing several studies of change, point at some of the problems in a simplified view of change and suggests a shift in vocabulary in studies of change. They suggest that a focus on “changing” instead of “change” can stimulate a greater appreciation of the fact that “change is never off, that its chains of causality are longer and less determinate than we anticipated, and whether ones viewpoint is global or local makes a difference in the rate of change that will be observed...” (p. 382). Van de Ven and Rogers (1988) indicate a number of aspects to consider in the study of innovation and change and shows the importance of a longitudinal perspective, studying innovations over time in relation to each other instead of only studying single innovations. Furthermore, focusing on improvement programs, Keating et al. (1999) point at the phenomenon that interconnections between different programs “can create synergies across programs as well as damaging competition” (p.129). Considering the above, in order to describe and analyze dynamic processes of change, there is a need to include a broader perspective both in time and in terms of the array of potentially influencing factors.

This paper examines the development of QM in the perspective of on-going company development processes. It is based on an explorative study of the QM development in Fagersta Stainless AB (FSAB), with a focus on the period from the formation of FSAB in 1984 until 2000. The study was conducted by Book¹ in cooperation with Solly² and Alänge³ during the period 1994 to 2001; during a subsequent 3-year period the data was recurrently processed leading to a presentation in Book (2004). We present an overview of the development with a focus on quality management and in the context of other complex change processes. The case exemplifies a change process taking place in the context of restructuring, investment and disinvestment, parallel internal change projects, and replacement of leaders. These changes take place through decisions and activities influenced by business cycles and different management models used in the company.

The paper is structured starting with the methodology and followed by a presentation of the theoretical framework used in the analysis of the development of QM. The next section is based on Book (2004) and provides an empirical picture of the development of QM at FSAB. In the subsequent analysis section, the QM development is discussed along three main dimensions in the theoretical framework: the QM practice and phenomenon, management models and organizing processes at company level.

Methodology

The empirical section in this paper is, as described above, based on Book (2004) providing an explorative study of the QM development at FSAB. This study takes a stance in an overview of several hundred years of evolution of the Fagersta AB operations, prior to the formation of FSAB, leading to a 30 year period from 1970 until 2000 when QM was successively changed in parallel with a successive restructuring of the operations; and during this period FSAB was constituted in 1984 as a final step in the successive restructure of Fagersta AB.

The data collection was conducted through a combination of participative observations, retrospective interviews, document analysis and an action research approach. This active involvement in the FSAB development enhanced the understanding of the company, its development and the development of quality management; the involvement also rendered a risk of bias and a risk of losing perspective however. This risk was reduced by a triangulation of data from the different sources presenting complementary information.

The guiding sources of data were, in order to minimize bias, different types of documents: strategy documents, offerings from consultants, planning documents, minutes from meetings, and notes from meetings. This data was complemented by direct observations and reflections made and documented by the researchers during the development process in the company. The data above was used in conjunction with data from 23 retrospective interviews conducted half a year after Book and one year after Solly had left the company. The interviews covered all the areas of the company and different aspects of the developmental work, and were based on the narratives of top and middle managers, operators, union officials and consultants.

All the interviews, except one with an external consultant where only notes were taken, were taped and notes were taken during the interviews to facilitate the latter processing; and all the interviews started in open questions where the interviewees were asked about their role and when they started at the company. It

was explicitly expressed that the interesting matter was the interviewees experiences and perception of the development in the company, in order to better understand the development at FSAB; then an explorative interview followed, where open questions were combined with closed questions to confirm statements that were unclear. The immediate impressions and notes from the interviews were clarified in direct connection to the interviewing occasion.

Nevertheless, there is naturally a certain bias in the study, but this does not intrude on the purpose since the aim is not to present “objective” data but rather to capture certain phenomena and discuss their implications on research and practice. The continuous awareness and caution, however, of possible bias in all steps of the study increase the reliability and validity of the study. This has been emphasized along the way as the explorative study is intended to be used in latter explanatory studies in line with Yin (1994, pp. 3-5).

Practices, Models and Organizing

From the perspective of the individual firm, inspiration to new ways of organizing QM typically arrives from the outside. QM can be seen as a “practice in action” in one (or several) organizations which is presented to members of another organization via different models. Such a model is a simplified description of a complex practice in action, where someone (a researcher, a consultant, etc.) has tried to lift forward the specific characteristic of the practice in order to facilitate a communication with members of other organizations. Hence, a certain practice can be transferred into an idea, concepts, methodology, object or stories, which can be viewed as an (organizational) innovation being diffused. In this sense diffusion of innovation theories, exemplified in the introduction by Rogers (1995), Wolfe (1994) and Van de Ven and Rogers (1988) can contribute in the understanding of change processes affected by different models. This is also indicated by Alänge et al. (1998) and Alänge and Jarnehammar (1999).

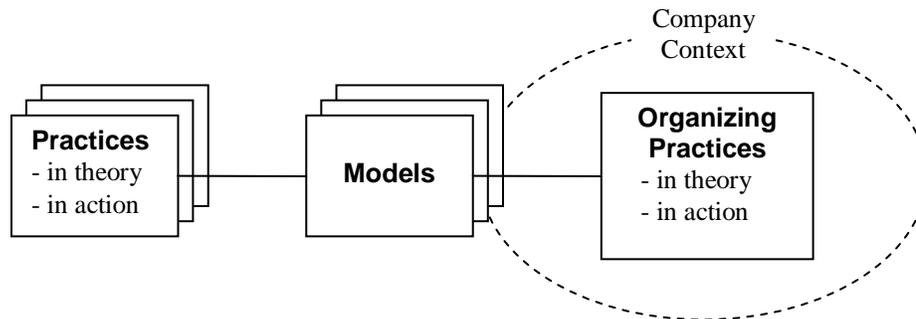


Figure 1: A model of organizing for quality management

In our study, QM models are in focus, as part of a development process contextualized by other models and development processes. In this context, the employees have to develop an understanding of the essence of these QM models in order to evaluate if the models could be useful for their organization; they “translate” the characteristics of the model (which is a simplification of reality and influenced by external consultants’ understanding) based on their own pre-knowledge, and they try to relate their perception of the model to on-going processes and practices in their own organization, i.e. through a sense-making process (Weick, 1995). If some members of the organization decide to introduce a new management model this can take place in different ways; the model can be adopted to the “full” extent or parts can be deliberately chosen for adoption.

There is typically a considerable degree of modification to fit a new organizational context; and the model is sometimes reaching different members at different points in time; in the study of diffusion of innovations this is referred to as Re-innovation (Rogers, 1995). A model could, thus, be modified along the way and hence different members meet different versions of the model (Alänge & Jarnehammar 1999). This process of implementation can be seen as consisting of two interrelated steps; one step consisting of organizing for

new practices in theory, i.e. planning, training, producing mental pictures of desired futures, and another step of organizing in action, of making changes in practice and directly influencing the behavior of selves and other organization members. This second step is sometimes taken simultaneously with the first step, but often it is not, which risks result in no change.

The characteristics of a specific practice determine both the potential of encompassing its characteristic in a management model, and the possibilities of organizing for new practices in a new organization. Hence, it is essential to identify what the phenomenon consists of, both with the practical purpose of using the practice and for the purpose of examining, analysing and evaluating the implementation process (Alänge et al. 1999). Quality management is a complex phenomenon, practiced in many different variants in different organizations; there are a large number of management models describing the phenomenon in partly overlapping manners. In the case of QM there are also standardizing bodies who actively have tried to formulate their version of QM, e.g. ISO 9000, QS-9000, Malcolm Baldrige National Quality Award Values, as well as consultancy organizations and researchers providing their versions of the phenomenon (Lundgren & Alänge, 2000).

In the description above we have focused on the models reaching an organization from the outside but models of practices exist inside the organization as well. On some level, all individuals in an organization have their own models of company practices, more or less elaborated and more or less explicit. An individual's model is influenced by position and perspective, but also by previous experiences and education. The management's models, i.e. how they interpret reality and practices may have a considerable importance for a company's development. Engineering staff and other technical personnel often have their models; and shop floor workers and labor union representatives have their models of company practices. These models influence the way new models are being perceived and reacted to. In this way new models arriving from the outside blends into something that sometimes can be seen as a true melting pot, but other times they have the character of separate substances refusing to mix. In such melting pot March's (1989, 1986) arguments of the importance of a balance between exploration and exploitation is relevant. In this perspective, for a sustainable and balanced development to take place, a balance between exploiting internal models and exploring external models is essential.

Overview of the Company and QM Development

The roots of FSAB go way back into the 12th century, and the Fagersta Steel industry was part of a development that accelerated between the 16th and 18th century. Fagersta Bruks AB (renamed in the beginning of 1970 to Fagersta AB) became a limited-liability company 1883 after several hundred years of operation in the Fagersta area. Hence, the operations have long tradition and history and all the way into the 1980's the concept of quality is mainly product related, referring to different product characteristics. Quality management is not a common concept; instead it is an integrated part of other work where inspections and assurance measures are taken as part of production or product development. Several ups and downs influence the capital intensive Fagersta operations that go through a number of crises over the years. During this time a very good 'quality reputation' on an international level evolve.

In the 1970's there is a gradual increase of formal quality system requirements. This development is enhanced by formal requirements from the Civil Aviation Authority (CAA) in the UK, and Fagersta AB receives a certificate of approval in the middle of the 1970's; the requirements are still focused on product quality. At the same time the steel industry in Sweden, and in Fagersta, is struggling to cope with a crisis infused by the financial downturn during the 1970's. The crisis leads to the restructure of the Swedish steel industry including Fagersta AB. Fagersta AB is successively reconstructed into four specialized and highly competitive companies on the world market: Seco Tools AB, Kloster Speed Steel AB, Secoroc AB, and FSAB that is constituted in 1984 as a last step of this restructuring, which continues within FSAB until the end of the 1980's.

In this context of structural changes the ISO 9000 requirements start to influence FSAB during the middle of the 1980's; and over the years FSAB is influenced by several other models besides ISO 9000. The explicit QM development is characterized by seven different models, formalized and diffused in different ways: the CAA requirements based on some kind model for quality assurance; ISO 9002 comprising a system of requirements based on another kind of model; a TQM model incorporating several sub-models, including a business process improvement and management model that consultants use as part of the

facilitation of TQM; QS-9000 comprising the ISO 9000 requirements but further developed by the US automotive industry, and VDA 6.1 that is a corresponding system of requirements from the German automotive industry; and finally ISO 9000: 2000 that starts to influence FSAB in the end of our data collection during 2000. The development inspired by these models is over the years contextualized by many other processes and models; and examples that appear in the FSAB study are presented in Table 1, in relation to FSAB President Changes and major structural changes during financially unstable periods. The content in Table 1 is organized in ascending order depending on when they started, and three major financially unstable phases, comprising restructures, are indicated by the “explosion” symbols.

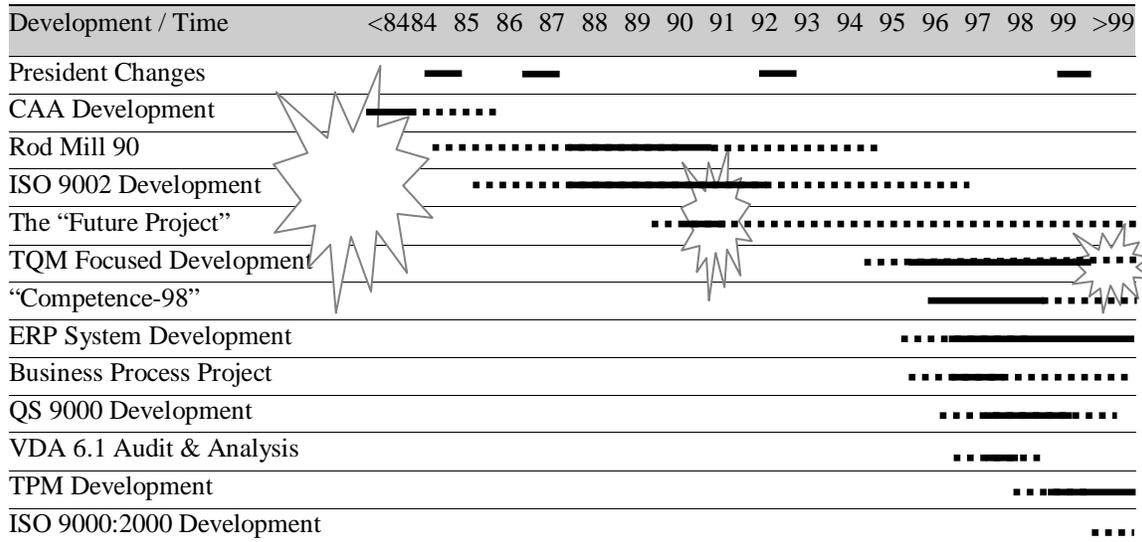


Table1: An overview of development inspired by different models and sorted in ascending order depending on when it started.

The first row presents the changes of Presidents from the formation of FSAB. We make an estimate that this change process takes approximately a year. It may take less and it may take more time depending on the circumstances. The matter of interest here is the fact that these changes contextualize other developmental processes within the organization. The dotted lines indicate pre or post stages at FSAB, of the actual work related to a certain model. The complex of models that over the years have been complementary or competed in the evolution of the company presents a perspective on either of the developmental sub processes.

In the first stage after FSAB was constituted in 1984 the first president had to manage reductions of the operations, as a consequence of the chosen strategy; and the second president, arriving in 1996 continued the restructuring and also managed a development program “Rod Mill 90” aiming at improving three aspects – the finishing speed, the coil weight, and the rod size – by a factor three of FSAB’s rod operations. The board of directors granting of funds for this development is viewed, by the president, as a major decision changing a previous development mainly directed at reducing the operations. The two first goals were reached but the third was abandoned. During this period a QM System (QMS) is developed with the objective to receive an ISO 9002 certificate. The QMS is rather defensive, however, and mainly a system of documentation aiming to assure quality; and indeed at this time QM is mainly a matter of quality assurance. Even though all presidents managing FSAB during the ISO 9002 development formally support the development, the QMS is not in focus due to other priorities; furthermore the QMS is met by skepticism and mistrust where formalities and documentation are perceived as being more important than actual development.

It is not only the QMS that is met by this attitude, the developments infuse mistrust and skepticism towards top management in general, and toward different initiatives based on models of reality and development.

One initiative infusing such mistrust and skepticism is called the “Future Project” and is initiated by the president in 1990 after the major restructuring is over. It focuses four fundamental principles – Basic Values, Long-Term Direction, Goal, and Mission Statement – and is a very serious effort to initiate a positive development. The work is abandoned, however, in a financially problematic situation within a year from the start leading to a decision to reduce the staff with approximately 40 percent. The current President initiates the downsizing, but a change of presidency is approaching.

The third president, since the formation of FSAB, starts in 1992 and the company receives its ISO 9002 certificate of approval in February 1992. QM is successively mainly associated with the QMS and its development, but this development is not very action driven; it is mainly a matter of planning, coordinating and documenting, based on a system of internal and external audits. QM is still in the margin of development during a period, 1992-1994, of economic growth and benefits from investments during prior restructuring; the market is growing and continual measures are taken to adapt the operations. There is a belief that the ISO 9002 system is not enough and a TQM process starts as the top managers take part in a 17-day training program in 1994; a plan for internal training and development of a TQM culture is defined.

A QM focus emerges via internal training comprising numerous models for development, tools and techniques, but there is continuous focus on planning and mobilizing via training and coordination, and not on action; even though action is sought for and intended as part of the concept. A tailored concept for development based on an internally developed “Success Tree”, in conjunction with a defined approach called “FSAB’s way of working” based on a learning cycle, characterizes the work. Throughout the process a TQM mentor together with other consultants facilitate the development and a kind of “infrastructure for development is defined, including coordination by a Steering Committee. The TQM initiative is met by skepticism, however, when it is launched on a broader term in December 1995. The top management never comprehend the amount this skepticism, they do not see the mistrusts that are partly catalyzed referring to the experiences from the Future Project in 1990. In this context some of the action driven managers are successively leaving the company; there are also different interpretations of the meaning of TQM. A new personnel manager coming from a company where TQM had another role than at FSAB take action indicating a lack of understanding in the FSAB approach; a program for competence development “Competence 98” is not developed by using the principles and tools underlying FSAB’s TQM concept. Furthermore a new Division Head and a new Head of finance, both employed after the initial stages of the TQM process, never get truly involved in this process.

In parallel with FSAB’s QM development, Chrysler, GM and Ford are harmonizing their requirements on suppliers through an action group that started in 1988; this work leads to the development of quality system requirements QS-9000 that via different processes give rise to the start of a QS-9000 project at FSAB in May 1997. This project starts in conjunction with the TQM process and is intended to boost the inactive development; it also starts in conjunction with the development of a new IT-system, characterized by a new Enterprise Resource Planning (ERP) system purchased but developed in cooperation with a consultancy firm. These two projects are explicitly stated to be of the highest priority; they are, however, competing for resources and as the ERP project gets very problematic and numerous other development plans exist a complex situation arises.

Much of the intended development was summarized or generated in a business process (BP) project facilitated by another consultancy firm taking part in the TQM training. This consultancy firm was to have one role within the total concept, but instead it was clear that they took much wider and strategical considerations than what was intended; they formed another comprehensive framework on the same level as the TQM work instead of taking a role within the TQM process. Their approach was based on a standardized model and strategy developed in the US in cooperation between a consultancy firm and a major US company. The BP-project is closed before any action in practice is taken due to adaptation problems, after spending substantial resources. Before it is closed however, a number of persons have gained experiences from process mapping and analysis. The process analyses are conducted in conjunction with the mapping of processes for the ERP project but those two development projects are not coordinated by adapting their respective process view into a common view facilitating a synergistic development. It is clear that there are different interpretations and emphasis with regard to processes in these two projects. A common characteristic, however, is the inability of the consultants to understand the FSAB needs and adapt their approach to these needs.

As QS-9000 customer demands successively increase, so are also VDA 6.1 demands, and an audit is initiated by the German steel industry; these demands affects the planning of QS-9000 during 1997 and the beginning of 1998. And in conjunction with the QMS work a case of dumping, forced and processed by the US steel industry, is a recurrent topic of discussion. There are some further TQM trainings, but minor action, substantial planning, and coordination on a higher level are continuous characteristics of the development. To a great extent many tasks, using different principles and tools within TQM, are performed in a rather superficial manner; and this is also the case in the QS-9000 project with its extensive and broad requirements that stimulates a broad but rather superficial developmental work. During this work, however, a Total Productive Maintenance (TPM) process is started that incorporates several principles and intentions in the TQM approach. The process is facilitated by a company to which the maintenance has been outsourced during the course of the development. This outsourcing causes many arguments and some conflicts leading to an action driven production leader that leaves the company. Via the outsourcing of maintenance a TPM approach is implemented, facilitated by a software for maintenance – Maintech. A more systematic maintenance work evolves involving more operators, but the perception among several persons is that it is expensive.

Via the TPM work several intentions in TQM and several requirements in QS-9000 are somehow realized and satisfied, but there is much energy spent on coordinating intentions in QS-9000, from the consultancy firm facilitating TPM, the ERP-project and planned activities within the TQM process. It is evident, in the spring of 1999, as FSAB receives its QS-9000 certificate of approval, that the training and continuous processing of requirements, principles and tools in different settings starts to affect the way people conduct certain tasks; the changes are often on a rather superficial level but also, in some cases, on a rather profound level. Several persons perceive that they need further facilitation, however, and there is still much to wish for, but there is a sense of a positive trend and several measures are taken, to rationalize and facilitate a more efficient and effective process. In one of these efforts a new organizational structure is formed and implemented.

Unfortunately the awareness unfolds on several parts after some important projects have already ran into problems that could have been reduced, if tools learned during the TQM training had been applied. At the time when the positive effects are perceived to be on its way there is also a financial downturn on the market and substantial internal problems. In the case of the ERP project for example the problems are acted on, with success, using one of the TQM tools in the end of 1999; another example is a technical project managed by an externally recruited and learning oriented project leader, who was facilitated in an analysis using some of the tools. The company is in major trouble, however, and in the end of 1999 a new president arrives in conjunction with the problems.

The focus on TQM is abandoned since it is hard for the new president to see any concrete effects of this work, and therefore troublesome to defend TQM in the light of the financial situation; the managers of TQM leave FSAB, and the new president's view is that many developmental aspects within TQM is the responsibility of the president and should not be managed by other persons. There is a reorganizing and shift in focus. QM is redirected towards production and maintaining certificates and there is an explicit focus on cost reductions via internal measures on problems that hinders profitable operations; a lean thinking and financial review of the product portfolio characterizes the management of the company. There are some disappointments on behalf of the TQM development, but also many employees' recognition of the new president's measures. A new Quality Manager, very familiar with the QMS and the operations of FSAB is appointed internally; and parallel to the QM changes the final of the ERP project is coming closer, but much development remains before it can efficiently support the operations. The QMS is successively developed and refined via the developed audit system; and many of the principles and forms of TQM have previously been integrated in the QMS, and are thereby still part of the operations, even though the focus on TQM has been abandoned.

During this period of focus on internal measures to reduce costs and come to financially stable situation auditors inform on the coming ISO 9000:2000 and ISO/TS 16949. In the total context however, this is a marginal thing, even though several managers show interest in knowing more about the new system of requirements. It is not at all the same skepticism as during prior introductions of QMS requirements, there is a confidence. Some persons express that the approach after the reduced focus on TQM is actually closer to the intentions of TQM than before, while others find the development as being a closure of a development where benefits of TQM were emerging.

QM From a Company Development Perspective

This paper examines the development of QM in the perspective of on-going company development processes. The QM development at FSAB proceeds over a longer period of time and to understand its role in the company, it is essential to identify its character. QM is a complex phenomenon encompassing various interlinked components. However, the content is not stable over time, instead it is continuously evolving. In addition, there is an array of perceptions, or models of what QM stands for. What is clear from our empirical data is that QM is in the middle of a fight for management time, and that at times other activities such as investments, restructuring, financial problems, or other development initiatives takes the major part of managements' time. QM in this perspective may even be seen as disturbing other "more relevant" activities; and "quality professionals" could be perceived to infuse an overload of unnecessary work.

A general characteristic is that QM as a phenomenon relates to practices in theory. At FSAB it consists of general work approaches, philosophies on how to behave, and tools for analysis accompanied by perceptions or models directing the way QM can be implemented, including methods of training; it even includes strong recommendations concerning management behavior and symbol actions. However, QM is not the value-adding activities in business processes; instead it can be seen as a structure supporting value-adding activities in processes. The actions taken are mainly measures in theory to comply with requirements, act on audits, map processes, develop new routines or provide customers or colleagues with some kind of theoretical explanations on quality issues. Measures in action, which may be an effect of such QM activities, are by many employees not perceived as being part of QM; instead they are seen as an integrated part of the operations and their improvement. Hence, QM is commonly perceived as some kind of theoretical organizing which is not aligned with the more action driven value-adding parts of the organization.

With this taken into consideration the broad scopes of different quality concepts such as ISO 9000, QS-9000 and TQM may cause a negative view of QM, lacking a balance between organizing in theory and action. This may also cause a focus on exploring external models instead of balancing this exploration with exploitation of internal ideas, possibilities and methods. According to March (1991, 1996) this inability to balance exploration and exploitation can hinder a sustainable development and prosperity. The QM staff are easily caught up in all kinds of theoretical "quality matters" handling issues generated by internal or external audits, or in problem and process analyses not leading to action. This can stimulate a development of more and more efficient ways of organizing in theory, without adding any significant value other than for the staff managing the QM system. A system evolves where different professionals rationalize the complex processes in a "virtual reality" alienating QM from the actual processes in the operations. Successively "quality professionals" and other managers may start to focus on process maps and other theoretical perspectives, instead of on the much more complex mix of activities and humans that forms the actual processes. Hence, there is a risk that a major part of QM related activities will refer to organizing in theory, without connection to organizing in action.

Another dilemma is the fact that, most often, only a few persons, e.g. the quality manager, have QM in focus during longer periods of time; for the rest of the personnel QM is one issue among many others. It may be in focus temporarily, especially in connection with training activities, management actions and audits, but it is often a focus that is interrupted by many other issues of higher priority; there are problems which need to be solved instantly, issues of resource management and matters directly related to the core operations. Hence, a gap in perceived priorities easily develops between the QM staff and other groups of personnel that further enhance the lack of alignment that Schein (1996) indicates as being a major hinder in organizational learning. Such deficient alignment can cause mistrust, diverging focus, and a QM culture where only formal actions, forced by requirements, are taken by managers in the operations. Hence, actions are taken and formally there is a support of QM, but most of the activities under the label "QM-work" are without substance.

The risk is thus that actions are taken in the purpose of gaining legitimacy and not in order to act on actual needs. This is in line with Meyer and Rowans (1977) arguments that the "formal structures of many organizations in postindustrial society (Bell, 1973) dramatically reflect the myths of their institutional environments instead of the demands of their work activities" (p. 341). The ultimate aim of QM, however, is to positively affect processes and the behavior of individuals doing value-adding activities. A dilemma

for QM is that when its aim is fulfilled, the resulting action becomes part of “daily work”, i.e. of the value-adding processes. Thus, while it may have a considerable influence on a value adding process, it is not perceived as part of organizing in action, and hence its contribution to the total process is not being recognized.

In this way, a type of “functional” view of operations presented by e.g. by Rummler and Brache (1995) while promoting a process oriented approach, can negatively affect the perception of QM. The promoters of process management, however, are most often not considering the types of more complex processes that are not repeated in a certain pattern. This is in line with what Keen (1997) address, stating that “The process-as-workflow flow definition excludes many processes that have no clear inputs, flows, and outputs”. Surely the process view promoted by the “process movement” and institutionalized in ISO 9000:2000 can contribute in understanding different dilemmas; if to much time and to much efforts promoting a rather superficial process view have not clouded a more dynamic perspective on process oriented work.

The study of FSAB, however, indicate that a model of process oriented work as being a matter of understanding frequent work flows, needs to be adapted to a more dynamic and historical view on processes. In such a dynamic and historical perspective, the adoption processes of different models and the subsequent complex internal change processes following such an adoption is of interest, as well as the understanding of the history of the current processes, where a certain model is to be applied. In such a perspective it may be more comprehensible to recognize different dilemmas in the type of adoption and adaptation processes that are present in many organizations.

These kinds of adoption and adaptation processes are evident in the case of FSAB. The FSAB QM approach has been based on several models competing for attention, and it has been changing over time. Furthermore, the QM development competed with other parallel models, such as Competence 98 and the ERP project, but also with history. And in this already complex situation perceptions of earlier variants of QM affected the new models introduced and so did experiences of earlier failed development activities, e.g. the “Future Project” which was referred to with skepticism during the TQM process. The effect of history, sometimes referred to as the organizational memory, seems to be considerable and affect the way new models are being perceived and embraced; and it seems like the negative experiences leave a much stronger and longer lasting impression than do more positive; in fact the future project were referred to, with frustration, more than eight years after the project was closed (Book, 2004).

In the case of FSAB, this was further complicated by the lack of an “official company development history”, describing on-going development activities in the context of earlier and parallel development. This type of historically based road map for the development activities have shown to be of importance in other companies, e.g. Motorola and ABB, as it can assist in putting present activities into a context, where previous efforts still are valued (Alänge 1992). The next step then becomes more natural and not something that questions what people earlier believed in and fought for. Hence, it can be seen as a pedagogical management task to simplify complexity and articulate and illustrate how different pieces can be seen as parts of a whole change process. Of course, there is always a risk that the story teller has poor contact with reality and then the story becomes a management trick, when employees do not recognize their own reality in the story. Hence, it is of importance that the story told is built on reliable input from several sources on different system levels, including shop floor workers as well as other positions and perspectives in the company.

This type of “official company development history” can be developed via a kind of process mapping presenting a “processual” point of view in the further development. Such processual point of view is in line with what Sztompka (pp. 69-71) refer to as “processualism”, and “in this image, the pattern of history is not superimposed or preestablished, but rather emerges out of the intermeshed plurality of events. Such a pattern is not treated as unique or singular, but rather emerges as the combined product of multiple sequences, overlapping and parallel, convergent and divergent, contradicting and complementing each other” (p. 71). And relating to the above we propose that to better understand the complex change processes associated with QM we need to apply a process view within QM that is more profound than often prevailing.

Conclusion

A mixture of different types of models underlying or affecting the evolution and organizing emerges as we examine QM from a developmental perspective at FSAB. In this perspective QM is not defined by using some kind of model or theoretical baseline, instead it is defined in a performative sense, by exploring the practice of QM at a company level over a period longer than two decades. Even though we only focus on one company the models and processes affecting this company are common in many sectors of society during the period of study. It is therefore not unlikely that what we find, while exploring the development in the context of FSAB, is also highly relevant for other organizations, meeting the same models and struggling with the same types of processes. In order to better understand and develop QM in a company a processual perspective, applying a more profound process view than often prevailing, is needed. Such a view can be stimulated by a balance between organizing in theory and organizing in action; in this organizing a vital aspect is to balance the exploration and exploitation of models and to avoid getting stuck in a “virtual reality”.

¹ Stefan Book managed the development at FSAB leading to a QS-9000 registration from 1997 until 2000 while incorporating a TQM approach and facilitating the further development. He has been involved in and studied process oriented development in different organizations since 1995 and is currently a Ph.D. Candidate exploring process oriented development.

² Barry Solly, Ph.D., was the Quality and Development Manager, at Fagersta Stainless AB (FSAB) where our study was conducted during the period 1984 – 2000, after three periods in other roles within the Fagersta AB operations: 1974-1976, working in research and development; 1976-1980, working in a technical market support and process development role; and 1980-1984, manager of technical market support and process development. Solly was Stefan Book’s manager at FSAB from May 1997 until the beginning of 2000. He is currently an OD consultant.

³ Sverker Alänge, Ph.D., Associate Professor at Chalmers University of Technology, was an advisor and mentor in FSAB’s TQM initiative between 1994 and 1999.

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