What is the value of participating in a quality award process?

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ABSTRACT

To use Total Quality Management (TQM) has for some time been a major management strategy to increase competitiveness and financial results. TQM can be considered as a management system consisting of values, methodologies and tools with the aim to increase external and internal customer satisfaction with a reduced amount of resources. One way of working with TQM and its values, methodologies and tools is to participate in a quality award process. The purpose of this paper is to present some research results related to the organizational value of participating in such a process.

Keywords: TQM, quality award, self-assessment, organizational value

1.0 Introduction

To use Total Quality Management (TQM) has for some time been a major management strategy to increase competitiveness and financial results. Investigations show that organizations, who have implemented TQM successfully show better financial results than "the average company"; Hendricks & Singhal [1997] and Eriksson & Hansson [2003]. On the other hand, many companies have failed to implement TQM; see Cao et al. [2000] and Foley [2004].

After the success of the Deming Prize in Japan, many local, national and transnational quality awards have been established. Two examples are the Malcolm Baldrige National Quality Award (MBNQA) and the European Quality Award (EQA). The established awards have two main purposes. One is to bring out good examples, as inspiration to other organizations. The other one is that participating in a quality award process should support organizations with the implementation since the criteria of quality awards conform with the major constituents of TQM.

In the year of 2003, 68 organizations applied to the MBNQA, see NIST [2003]. Over the years, several hundred organizations covering virtually every European country have applied to the EQA, see EFQM [2003]. In addition to organizations participating in a quality award process numerous organizations use the criteria of the different quality awards in order to improve their performance, i.e. by using self-assessment.

Applying for a quality award means that the organization has to plan for and write an application. Furthermore, the intention with the quality award is that the organization should follow-up the application and the suggested improvements obtained in the feedback report from the examiners. However, these activities have to be performed without neglecting "everyday" activities within the organization.

The main theme of this paper is to illuminate whether organizations really benefit from participating in quality award processes or if the resources spent on the quality award process are inappropriate investments? The paper discusses experiences from both national and in-company quality awards.

1.1 Total Quality Management

Different definitions and descriptions of TQM have been presented over the years; see e.g. Oakland [1993], Dahlgaard et al. [1998] and Dale [1999]. Hellsten & Klefsjö [2000] support a system view and define TQM "as a continuously evolving management system consisting of values, methodologies and tools, the aim of which is to increase external and internal customer satisfaction with a reduced amount of resources", see also Figure 1. They argue that the methodologies (which means ways to work with a sequence of activities) and tools (which are more concrete, sometimes with a statistical base) should continuously be chosen to support the values. The three units together form in that way the whole.

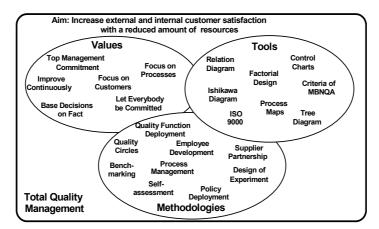


Figure 1 TQM seen as a management system, Hellsten & Klefsjö [2000].

The TQM concept and its definition is not uncontroversial. Boaden [1997] claims that "attempting to define TQM is like shooting at a moving target. As it is more widely practised, and other initiatives emerge, the emphasis on different aspects change". Furthermore, van der Wiele et al. [2000] discuss whether TQM is a fad, fashion, or fit. Foley [2004] summarizes some of the criticism against TQM and claims, in particular, that it does not have a general accepted definition and has failed to deliver promised results. He claims further that, due to the criticism, consultants and quality promotion institutions are trying to expunge "quality" from their lexicon, and that TQM now appears under a different guise, often with new "catchy" slogans – but it substance remains the same. Foley [2004] also notes that some quality awards are giving way to Business Excellence Awards and states that TQM should rather be seen as the means to reach business excellence.

1.2 Quality Awards

Today, there are several kinds of quality awards. In this paper we will focus on national quality awards and in-company quality awards.

National Quality Awards

After the successful development in Japan, several countries established national quality awards to recognise the quality practices taking place. Among those awards are the MBNQA and the EQA. In 1992, the Swedish Institute for Quality (SIQ) established the Swedish Quality Award (SQA) inspired by the MBNQA. For a thorough list of quality awards and a comparison between different awards, see e.g. Vokurka et al. [2000] and Johnson [2002].

Link & Scott [2001] performed an economic evaluation of the Baldrige National Quality Program and concluded that the net private benefits associated with the program to the economy as a whole in the United States were conservatively estimated to be \$24.65 billion. When compared with the social costs of \$119 million associated with the program, it is clear, from an evaluation perspective, that the Baldrige National Quality Program is socially beneficial, see Link & Scott [2001]. Leonard & McAdam [2003] argue that the training and experience that is obtained by quality award examiners and assessors is one of the most unique, rigorous, practical and worthy forms of professional development that one can participate in.

However, quality awards have also received criticism. For instance, Loomba & Johannessen [1997] criticise the MBNQA and conclude that three areas, unfairness, superficially and publicity related problems, may arise in the process of applying. The unfairness of the program is prohibitive cost of joining the competition, the imbalance in the number of laureates between competing categories and the conflict of interest arising when examiners judging the competition also work as consultants for competing companies. The superficial area includes that the Baldrige program is used by the recipients only to get free and extensive publicity, and that companies with mediocre consumer ratings win and thus get undeserved positive media coverage.

In-company Quality Awards

An in-company quality award is a quality award to which only units within a given company are allowed to apply. One advantage with an in-company quality award is that it is easier for units to benchmark and learn the best practices, since access to the award recipients of in-company quality awards is easier.

For instance, Myers & Heller [1995] discuss AT&T's in-company quality award, called the Chairman's Quality Award, based on the MBNQA, and Hannukainen & Salminen [1998] discuss Nokia's Current State Analysis tool for self-assessment inspired by the criteria of the EQA. Nokia is, through this successful way of working, exhorting its people around the globe to establish the most challenging performance targets.

One disadvantage of a competition like an in-company quality award can be that too much focus is on the scoring instead of finding and executing improvements. Conti [2001] states that if the goal of self-assessment is performance improvements, the best choice is to ignore scores and weights. Furthermore, he argues that internal awards linked to self-assessment can indeed be a stimulus, drive interest and create the motivation in the beginning. However, the rate of improvement then tends to slow down, see Conti [2001].

Quality Award Processes versus Self-assessment

There are many similarities between a national quality award process, an in-company quality award process and self-assessment. In all cases the organizations pass the sequence of phases consisting of planning, training, description of activities, analysis of the description, and improvement activities. These phases are used in the studies described below. One main difference between a quality award process and self-assessment is the ownership. The owner of a quality award process is not the evaluated organization. During participation in a national quality award process, an external organization is administrating the award, supporting the award applicants in different ways and training external examiners.

2.0 Value of Participating in In-company Quality Awards

To investigate the benefit of in-company awards, three different Swedish companies were studied, the Swedish National Road Administration ("Vägverket"), Sydkraft (a supplier of electricity) and the Swedish Post Office ("Posten"). Within these three companies 77 units were surveyed with a mailed questionnaire. The respondents were heads of these units and the response rate was 66%.

The respondents of the questionnaire were divided into three groups: units that have not applied for the in-company quality award, units that applied once for the in-company quality award, and units that applied twice or more times for the in-company quality award. The general development of the key-indicators and other relevant indicators that the unit used to measure within the four groups (customers, processes, employees and owners) were studied. Figure 2 presents the general development of the key-indicators of customers for the different groups. The tendency was similar for the other three groups; see Eriksson et al. [2003].

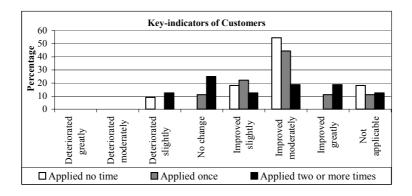


Figure 2 The answers regarding the general development of key-indicators of customers.

In order to illuminate how units experience the work with in-company quality awards, a unit within the Swedish National Road Administration that has been working with an in-company quality award since 1998, and has written three award applications was chosen for a deeper analysis by using interviews with people with different roles in the award process.

Advantages

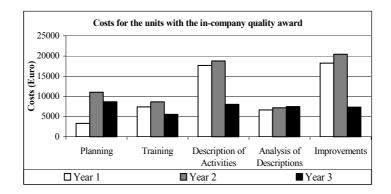
One large positive effect stated by the respondents that worked with the in-company quality award was increased customer orientation, but also increased focus on improvements, processes, quality and results, and an increased comprehensive view of the business were mentioned. Some of the perceived effects have many similarities to the core values of the model used in the in-company quality awards. Only units that had applied for the in-company quality award experienced that the general development of the key-indicators was improved greatly concerning all four groups of key-indicators; see Figure 2.

Since finding in the questionnaire is that the work with the in-company quality award has positive effects on the core values within the organizations. Hence, the core values were analysed further in the interviews in the second part of this study. On the whole, competence development, management by facts and customer orientation are the core values that are perceived by the respondents to permeate the unit the most. In specific, the core value of customer orientation is perceived to be affected the most by the work connected with the in-company quality award. The feedback report from the examiners from the three different years also strengthens this, as the examiners are more and more positive in their reports to the customer orientation of the unit.

Disadvantages and suggestions for improvements

The main criticism of the work connected with the in-company quality award is that it is resource-demanding. The median costs for the units applying for the in-company quality award are displayed in Figure 3. The largest costs with the in-company quality award were considered to be the

description of activities and the improvement work that followed. Moreover, all the sources used for data collection indicate that most work is required the second time units apply for in-company quality awards.



<u>Figure 3</u> The median costs in Euro for the units that applied for the in-company quality award. The results are based on answers from the questionnaire part of the study.

The unit in the interview part of this study performed an estimation of how many hours the unit worked with each phase per year. The result is displayed in Table 1. A large amount of resources was spent on planning for improvements, as the unit had to agree on which improvement areas were to be prioritized and transformed into improvement projects. The improvement projects were thereafter communicated to the director-general of the Swedish National Road Administration and included in the plan of action for the unit. Furthermore, the unit claimed that on average only about 2% of the total work connected with the in-company quality award was spent on planning for the participation in the quality award process.

The interviews showed that the information about the work connected with the in-company quality award did not reach the whole unit. Hence, one should pay more attention to communication between different parties within the unit. By putting more emphasis on and devoting more work to the phase of planning, it is possible that the communication problems can be prevented. In addition, the SIQ Model for Performance Excellence, which is used in the award process, received criticism from several respondents. The SIQ Model is perceived to be too bureaucratic and extensive for the in-company award purpose.

<u>Table 1</u> The percentages of spent on the in-company quality award phases.

Phase	Planning	Description	Analysis	Improvement Plan
Average time spent on the phase	2.1%	59.6%	17.7%	20.6%

3.0 Value of participating in a National Quality Award

The organizational value of participating in the Swedish Quality Award (SQA) process was studied by using phone interviews with people responsible for the award application within 29 organizations that had applied for the SQA between 1998 and 2002, In this group also some quality award recipients was included. The group of organizations contained both small and large organizations, service and manufacturing

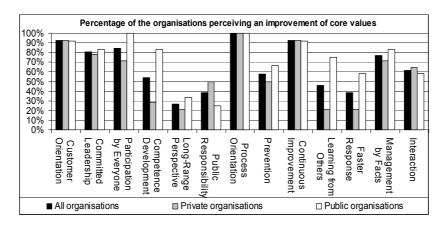
companies, as well as public and private. The phone interviews were then followed-up by case studies in three successful companies; see Eriksson [2004a, b].

Advantages

One major benefit of participating in a quality award process is, according to the respondents, that one obtains an external evaluation of the business, and a confirmation and assessment of the current position of the business in comparison with, for example, the organization's goals, competitors and best-in-class organizations. Furthermore, the participation in the award process in itself resulted in a stronger participation by everyone and a common goal to work towards. Moreover, an increased focus on improvements was mentioned as a result of participating in the quality award process. The process was also an important learning experience for the employees, who were involved in the quality award process.

Furthermore, many award applicants that had little previous knowledge about TQM, believed that the SIQ Model resulted in a new thinking in the organizations. This was due to the fact that the employees were trained in and were required to work with the SIQ Model.

When analyzing whether the different core values had improved as a result of the participation in the award process, some core values were considered to have been improved, while others were not; see Figure 4, where public organizations are compared to private organizations. Public organizations believed to a larger extent that the core values had improved. This is especially true for the core values of competence development and learning from others. All the public organizations also believed that the core value participation by everyone was affected by the quality award process. On the other hand, the public organizations did not believe that public responsibility had improved to a large extent, which should be one of their main objectives. When studying the impact on the core values of participating in the quality award process, it seems that the size of the organization does not matter. With small differences, manufacturing and the service organizations believed that the same core values were affected by the quality award process; see Eriksson [2004a, b].



<u>Figure 4</u> The percentage of the 29 private and public organizations, perceiving the core values to have been improved as a result of participating in the quality award process.

All the organizations believed that the process orientation had improved. Furthermore, customer orientation and continuous improvement were also considered as improved. Committed leadership, participation by everyone and management by facts were, by a relatively high number of respondents, also considered to have been improved. On the other hand, the core values long-range perspective, public responsibility and faster response were considered as improved by just a few organizations.

The impact of the criteria, due to the participation in a quality award process, was also illuminated. The criteria of customer satisfaction, process management and strategic planning were the criteria considered as most improved as a result of the participation in the quality award process. These results reinforce the picture that it is in the areas of processes and customers, where the greatest impact is achieved when applying for a quality award. Surprisingly, strategic planning was also considered as a criterion that was affected to a large extent. This might be due to the fact that the respondents in many cases were the CEO.

Disadvantages and suggestions for improvements

The main disadvantage of participating in the Swedish Quality Award was the resource-demanding and time-consuming work that organizations were required to perform when participating in the quality award process. In particular, the time-consuming phase of description of activities took the focus away from the operative activities. As a result of this time-consuming phase, the improvement work that should follow was sometimes neglected.

The SIQ Model also received criticism for being too abstract and circumstantial, and difficult to use for beginners. Furthermore, the language and the definitions were hard to understand, according to the respondents. As a result, the work performed with the SIQ Model was difficult to communicate to the employees, who were not involved with the work. Consequently, some employees within the organizations had difficulties in following the process, and instead chose to be very critical.

Two organizations claimed further that the SIQ Model did not fit all organizations. One public organization stated that the SIQ Model did not fit the public sector and another one claimed that the SIQ Model did not fit non-profit-driven organizations within the service sector. Two organizations also believed that the SIQ Model only fitted manufacturing organizations.

Two organizations that had applied with the incentive of receiving an award felt that they had been misunderstood by the examiners, when they did not receive the award. The disappointment among the employees spread, which led to quality issues not being prioritized any longer. The quality assurance of the examiners evaluating the organizations was questioned by some participating organizations.

Two small organizations that had received the quality award expressed that the work that followed the quality award announcement was too much for small organizations, as they did not have enough resources to handle this extra work. Everyday activities were therefore to some extent neglected within these organizations, and it was impossible to find time for improvement work.

One quality award applicant claimed that the whole idea about learning from others was neglected, as one could not benchmark other organizations that had participated in the quality award process, except for the quality award recipients, because the organizations applying for the award were anonymous.

4.0 Conclusion

The quality award applicants, both in the national and the in-company awards, experienced a great benefit from participating in the award process. The main conclusion from these studies is that most of the organizations considered the process orientation, customer orientation and improvement work to have been improved as a result of the participation in the quality award process. However, there are also obstacles to surmount in order to benefit fully from the process. Two main obstacles are difficulties in finding resources within the organization to perform mandatory work and implement identified improvements, and difficulties in applying the circumstantial model used in the quality award process. These results also indicate that many of the used criteria tools are too complicated and too comprehensive, at least for the less experienced organizations, and that new tools, similar to the Springboard (see Hellsten, 1998), have to be developed to support quality award participation and self-assessment as methodologies.

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Authors' Background

Prof. Bengt Klefsjö is professor of Quality Technology and Management at Luleå University of Technology. He has published more than 80 papers in reliability theory and applications, and in quality technology and management. He is also co-author of 19 published books in Mathematics, Statistics, and Quality Management. He has received several awards for excellent teaching from students and from Luleå University of Technology. He is a member of the jury of the Swedish Quality Award since its start in 1992. He is a regular reviewer of books in Quality Progress and of scientific papers in different journals. He is a member of the editorial board of Measuring Business Excellence, International Journal of Six Sigma and Competitive Advantage, International Journal of Reliability and Applications, and IAPQR Transactions.

Dr. Henrik Eriksson has recently presented his doctoral dissertation entitled "Organisational value of participating in quality award processes" at the Division of Quality and Environmental Management at Luleå University of Technology. He is now working as Assistant Professor at University College of Borås.