Sustained quality management: how to receive the Swedish quality award twice

Klara Palmberg and Rickard Garvare

Division of Quality and Environmental Management,
Luleå University of Technology, Sweden

Abstract

Purpose – The purpose of this paper is to describe how Agria Animal Insurance Sweden (Agria) has organised its quality-related work through a sustained and systematic focus on basic elements of quality management such as value focused leadership, employee involvement, process management and control, customer focus, and continuous improvement.

Design/methodology/approach – The study has been based on interviews, document studies and action research. It is a single case study design with limited intentions of generalisation.

Findings – The analysis shows that the top management at Agria has been a strong driving force that has effectively united leaders at all levels as agents of change. Additional success factors have been the deployment of basic values, the "five always", and the value focused leadership. Further on the company has succeeded in creating a cultural basis and structures for systematic work with improvements.

Practical implications – A way to address corporate culture in order to open up for a climate of micro improvements of practice within present routines is illustrated in this paper.

Originality/value – Agria could be considered an example for others to study and get inspired by when working with quality-related issues.

Keywords Quality management, Quality awards, Organizational culture, Insurance companies, Sweden

Paper type Case study

Introduction

In December 2003 Agria became the first company ever to receive the Swedish Quality Award twice. This noticeable success was the result of a change process that begun about ten years ago. Why has Agria succeeded in implementing a total quality management (TQM) programme that has been sustainable for such a long period of time? This question was the starting point of a research project that commenced in 2002 and is still in progress. The purpose of this paper is to describe how Agria has organised its work for quality management.

Concepts, such as TQM, process management and self-assessment, have been the subject of discussion among management academics for several years. There have been many reports of a positive relationship between the adoption of TQM and improved performance of organisations, see, for instance, Easton and Jarrel (1998), Hendricks and Singhal (1997) and Reed *et al.* (2000). However, despite the enthusiasm for TQM among organisations, the efforts of implementation have often faced unexpected problems. Many organisations have tried to implement these methodologies, but not all have succeeded, see, for instance, Dale *et al.* (1997), Edwards and Sohal (2003), Garvare (2002) and Haupt and Whiteman (2004).

According to Edwards and Sohal (2003), one of the criteria for the success of TQM programmes is the sustainability over time. Implementing TQM means a long-term commitment and a considerable investment of resources. A lasting positive outcome of such an investment should be of the highest importance to any organisation.

As stated by Eriksson (2004) a common proxy for a successful implementation of TQM is the reception of a quality award. Several case study findings indicate that if the goal is to get lasting results, it is not sufficient to participate in a quality award process only once. Instead one should participate in the process several times, with enough time in between the applications in order to complete as many as possible of the improvement projects resulting from the evaluations (Eriksson and Garvare, 2005). The fact that Agria has received the Swedish Quality Award twice led us to believe that a study of this organisation could indicate some factors that are characteristic of successful TQM programmes, and hence be of general interest.

Research methodology

In 1999 Agria received the Swedish Quality Award for the first time. This was the reason for the researchers' awareness of the quality-related activities, which had taken place in the company, and also the origin of the first contact. The research question of interest in this project is why Agria has been able to successfully implement a TQM programme that has been sustainable over such a long period of time. There are several possible research strategies plausible for answering this question, such as, for instance, literature reviews, face-to-face interviews and mail surveys with questionnaires. Yin (2002) argues that the choice of research strategy should be based on the type of research question posed, the control an investigator has over the events, and the degree of focus on contemporary as opposed to historical events.

In this study the degree of control has been negligible. The purpose was to describe both contemporary and historical events, and the research question is "why" a certain implementation has worked so well. Therefore, the methodology employed for this study has been mainly qualitative, with semi-structured interviews, see Merriam (1994), and direct observations as primary tools for data collection. Over a period of two years, the researchers have visited the company several times and have conducted interviews with both managers and other employees. The focus of these interviews has been to get a deeper understanding of how the mechanisms behind the quality-related issues function in the organisation. The interviews were documented using tape recordings and notes made during the discussions. To gain further insights, relevant internal and external company documents and reports, such as annual reports, descriptions of the company on the basis of the criteria for the Swedish Quality Award, and feedback reports from the award process, have also been investigated.

For three months in 2003 one of the authors was positioned at Agria, carrying out the study in the form of action research; see, for example, Stinger (1999) for a description of this methodology. In this part of the study she participated actively in the improvement efforts performed at the company. This was important as it enabled collection, analysis and validation of empirical material in a cyclic and iterative manner. She also got the opportunity, in the fall of 2004, to take part in the training that is provided to all new employees at the company.

The data collected has been analysed repetitively in discussions in the research group, by looking for patterns in the material and by iterative testing of tentative

hypotheses. The presentation of the case study has been structured according to a set of management principles used in the analysis of the data material: customer focus, value focused leadership, employee involvement, process management and control and continuous improvement.

Company description

Agria is a wholly owned subsidiary of the Swedish insurance company Länsförsäkringar AB and has specialised in the provision of animal and crop insurance. Länsförsäkringar AB and its subsidiaries are jointly owned by 24 mutual companies. Agria has about 130 employees, who together serve about 360,000 customers. The premium incomes for 2003 were about €77 million and the market share was about 62 per cent of the total market in the animal and crop insurance segment in Sweden.

Agria is divided into three business areas: small pets, horses and agriculture. In addition to these areas Agria also has a process organisation (see Figure 1). The core processes of Agria are: sales, underwriting and claim handling. They are supported by a number of business support processes, such as: market support, human resource, economy, information technology and organisational improvement. The purpose of the strategic processes (business analyses, business development and business planning)
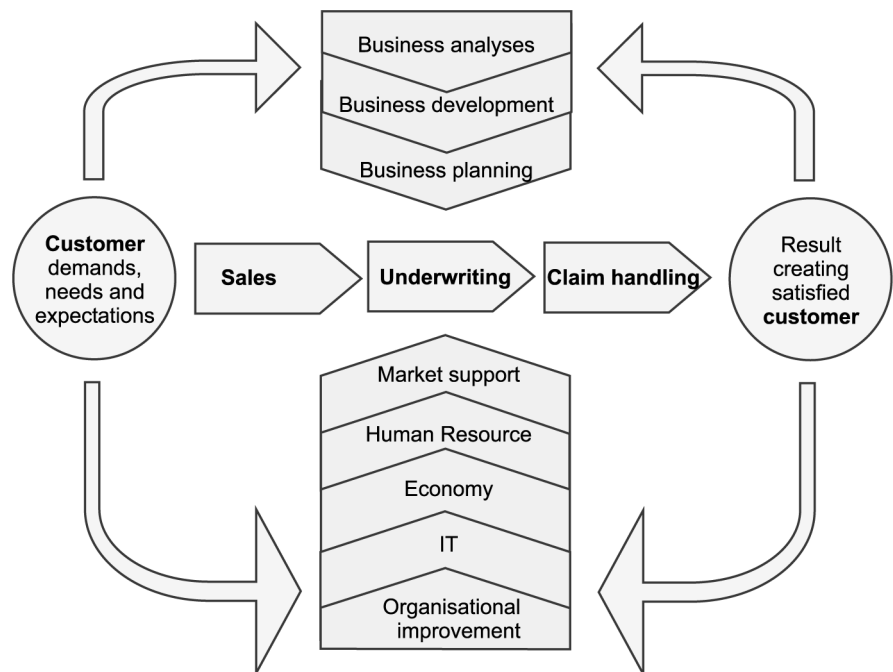
Note: The strategic processes at the top and the business support processes at the bottom give direction and support to the business processes, which are shown in the row in between

Source: Agria (2004)

Figure 1.
Agria's process map

is to ensure the company's future development and results. The stated mission of the company is to "use expertise and commitment in order to develop and sell security for animals and people".

In 1998, Agria became the first Swedish insurance company to receive an ISO 9001 certification. The same year Agria participated in the Swedish Quality Award for the first time, and one year later the award was received. Some of the milestones in Agria's work with quality are:

- 1995: The criteria of the Swedish Quality Award are studied by the CEO and presented to the top management group.
- 1996: Agria starts working with projects on process orientation and implementation of structures for continuous improvement.
- 1997: Agria's satisfied customer index is launched.
- 1998: ISO 9001 certification and first application for the Swedish Quality Award.
- 1999: Receives the Swedish Quality Award.
- 2000: Upgrades to ISO 9001:2000. ISO 14001 certification.
- 2001: A new, process based, organisational structure is introduced.
- 2002: Certified to Investor in People.
- 2003: Receives, as the first organisation, the Swedish Quality Award for the second time.

Quality management principles at Agria

According to the CEO a main reason, for him, to start the work on systematic quality improvement was curiosity. He points out that the company did not begin working with the criteria of the Swedish Quality Award because of external pressure, but because of an ambition among the top management group to improve productivity in operations and reduce operating costs per business item. In the mid-1990s they were looking for some kind of instrument that could help to strengthen and improve the whole organisation. Agria was looking for a new strategy of administration and came to the conclusion that this strategy should not only be about information technology but also about new ways to develop work procedures. They wanted to strengthen their improvement efforts and their ability to adjust to changing conditions.

At this time the CEO started reading the criteria of the Swedish Quality Award. They seemed to be able to fulfil the wish of something that could structure the wanted change of the company. The CEO says:

> In order not to scare the other people in the management I selected only smaller parts of all the criteria of the Swedish Quality Award to begin with.

With the criteria of the Swedish Quality Award they started with the questions regarding business process management. Along with the work with the processes the focus on customers followed naturally, as the processes had their origin in customer demands. After a short period of time the project was enlarged to include all criteria of the award.

Customer focus

Agria has been recruiting on the basis of a recruitment policy involving that employees at the company should be animal owners. With a few exceptions everyone at Agria is, or has been, an animal owner. Several of the employees have a history of competing with their animals, or owning farms. This has ensured that many of the employees have an active interest in animals and also have extensive knowledge of animal care.

Agria has developed several policies and guidelines. One of them is the quality policy:

> Our customers are the ones who determine the quality of our work – everyone at Agria has customers. Our associates are the ones who create satisfied customers. Our aim of continued improvement is what increases our competitiveness.

The quality policy has had strong implications for day-to-day operations at Agria. One of the employees described, for example, a situation where she had a system crash on her computer. At the same time there was some problem with the CEO's computer. Since the employee was in a position where she had a more direct customer contact her problems were prioritised by the computer support team.

Through cooperation with its customers Agria has actively strived to investigate their operations and to create products that are adapted to animal owners' demands and needs. Some of the tools used are:

- *Agria's satisfied customer index.* Ten times a year Agria's customer service centre calls 450 customers to examine and investigate their views on Agria's operations. The result is presented to the employees as an index in internal newsletters and at monthly breakfast meetings.

- *Customer suggestion system and customer complaints.* A collection of complaints, opinions and suggestions are gathered in a database. Through this database the organisation is able to learn from mistakes and receives input to improve its operations.

- *Representatives in Agria's board.* Three out of 12 members of the board are representatives of animal owner organisations and one member is a representative of the veterinarians, Agria's most important group of suppliers. This, together with the use of product committees and a claims appeal committee, promotes close co-operation with animal organisations and the veterinarian society.

Value focused leadership

During the interviews the representatives of Agria's top management often expressed an ambition to spread certain values in the organisation. All new employees take part in five days of training, the "Agria school", concerning Agria's operations and values. It is spread over a month of time and is a complement to the training of each employee's own tasks. The new employees meet managers of the different business areas to learn about critical success factors in each area. In order to reach an understanding of process flows through Agria they also meet all the process owners. One and a half days are set aside for discussions of communication and also a day about the quality and environmental work at Agria. The training is followed up by regular developmental conversations each year. The competence level is determined on a four-graded scale, and if there is a discrepancy with the goals established, measures are taken to raise the

competence level of the employee. The training of the new employees is centred on the quality policy and Agria's five basic values, "Agria's five always", that are repeated in different assignments:

(1) Always make a little extra effort – to exceed customers' expectations.

(2) Always see possibilities – to help us succeed.

(3) Always improve skills – to work preventatively at all times.

(4) Always act professionally – to help us attain long-term profitability.

(5) Always show respect and trust – to help us create a good working climate.

These basic values are supposed to facilitate work and increase the opportunities of attaining set goals. A business controller, who was responsible for the process connected to the Swedish Quality Award 2003 at Agria said:

> The only things you need to know at Agria are the five always, the quality policy and the ladder of initiatives [described below], no rules. If you don't live up to the basic values then you are not considered for the salary audit and if you do something seriously in opposition to the values it can even be reason for notice of dismissal.

The basic values and the quality policy have been developed in the same way as many other things at Agria. The top management group creates a suggestion, which is presented to the employees at a breakfast meeting, a division conference or at the yearly company convention. The employees are encouraged to give feedback to the suggestion, which is then improved before implementation or establishment.

One example of how the values have been integrated in the training is in the "health game", which has been developed by employees at Agria to improve the awareness of health issues among the employees. The game is a set of different scenarios, where the participants have to take a stand. Each of these, in a group of five, gets a value to observe and then the group is appointed to bring out three different outcomes of the scenario: one outcome being full of initiative, one neutral, and one passive outcome. This puts the employees in a situation where they have to take a stand in questions about, for example, sick-leave, stress, customer demands and balance between family and work – all with the basic values in mind.

The health game is supported by the "ladder of initiatives" (see Figure 2), another tool for value deployment. It consists of seven grades, starting with "you as a victim of the circumstances" and ending at the top where "you just go". Being at the top you take initiatives on your own and do not ask the management or co-workers about how to

7 **Just move ahead** ➜ See the problem – act – do not inform

6 **Start to solve** – ask sometimes ➜ See the problem – act – inform – ask sometimes

5 **Start to solve** – ask afterwards ➜ See the problem – act – inform – ask afterwards

4 **Suggest** ➜ **See the problem** – see possibilities – take no action before approval

3 **Ask** ➜ See the problem – orientate around the problem – would like someone else to take over the problem

2 **Wait** ➜ See the problem – take no action – do not bother

1 **Complain** ➜ See the problem – see no possibilities – point to shortcomings.

Source: Agria (2004)

Figure 2.
Agria's seven grades on
the "ladder of initiatives"

solve your problems. The ladder is a development from a three grade scale: being full of initiatives, neutral, or passive. The ladder of initiatives is used in the regular conversations of personal development to discuss the employee's degree of involvement, where the employee is at present and where he or she would want to be in the future. Then a plan of actions is developed, with activities such as project participation or further education. The ladder of initiatives is also a part of daily discussions among employees. "Today I was low on the ladder; I didn't have the energy to take care of this or that", was, for example, heard from one of the employees during a coffee break.

All managers in Agria are supposed to spend 25 per cent of their time on improvement work, 25 per cent as specialists and 50 per cent as coaches. When working with improvement their mission is to create an understanding and willingness for change in the organisation. Managers range from team leaders, with responsibility for about ten employees, via process managers and business area managers to the CEO. One of the ways used to unite managers of the organisation has been Agria's program for leadership development. One day per month all managers of the company get together and listen to speakers and work with cases. As a result, the managers have been able to send a uniform message to the organisation. To be unified as leaders was considered important by the CEO, especially since all people at Agria operate in an open office landscape. In this environment individual behaviour becomes visible and it gets very important as a manager to practise as he/she preaches, and also for all managers to preach the same message. The way the office has been designed helps to give each employee an overview of the company and to understand the relationships between different parts of Agria. It also encourages knowledge transfer and co-operation between disciplines and upholds flexibility as people are switching desks from day to day, even the CEO. The majority of the workplaces are placed in groups of desks in the office landscape, but there are also silent workplaces that can be used when needed.

Employee involvement

At Agria the employees are named associates. The top management group of the company has often highlighted the important role the employees have played in the organisation's striving for success. According to the CEO:

> Satisfied associates lead to satisfied customers.

On this basis, the managers at Agria have worked with creating commitment and involvement from the employees. As a part of this work Agria has used the standards of Investors in People. This is a standard of working with commitment to ensure that everyone in the company develops, feels involved and understands the goals of the organisation. Three times a year a questionnaire is sent to all employees to further investigate how they feel about their work, the environment and the leadership at Agria. The results of this questionnaire are presented as an index of employee satisfaction.

An integral part of Agria's work with involving the employees is the business planning process (see illustration from Agria in Figure 3). A foundation for this process is the balanced scorecard, with customer, associate, process and economy as perspectives. The business planning is a one-year process. In the first year strategies,
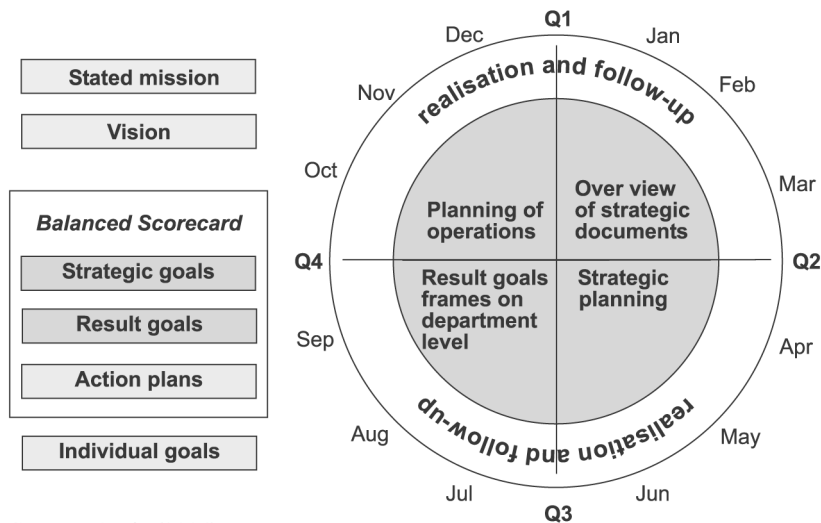
Source: Agria (2004)

Figure 3.
The business planning
process at Agria

goals and action plans are developed. Feedback from the business excellence model
process works as an input to the business planning process. The following year
consists of realisation, follow-up, analyses of the results and, when needed, adjustment
of action plans, parallel with a new planning process.

Long- and short-term goals for the company are established with involvement of all
employees. The monthly breakfast meetings are an important place for discussions. It
is also one of the occasions when the follow-up of the results takes place. The top
management group develops a suggestion for strategic goals for the next period. These
goals are then presented at a breakfast meeting, and during the second part of the
meeting the employees split into multidisciplinary teams to discuss and develop the
goals. The groups present their results on posters, which are displayed at the
workplace. These posters are shown for a week and everyone is encouraged to give his
or her opinion of the proposals. Opinions are given by putting a green mark for a
positive reaction and a red mark for a negative reaction. Then the posters go back to
the top management group for consideration and decisions.

As a part of the business planning process, everyone at Agria gets involved in
breaking down the yearly result goals to process, department and individual levels.
The goals become a basis for Agria's target-related bonus system, which can yield up
to ten per cent of annual income. Targets are set on a company level, a department level
and on an individual level (see Figure 4). The bonus system is thought to be a way of
creating incentives to work in the desired behaviour and direction. One of the
employees said:

> The goals on the company level feel distant but the individual goals are easier, they are
> mostly production targets based on how you did last year and then you are expected to
> improve.

One way for the employees to take initiatives is to make suggestions to Agria Online
Ideas. Agria's suggestion system has been developed to store ideas in a database.

Everyone is able to submit, monitor and send feedback on these suggestions. In the beginning, to encourage use of the system, goals were set in the bonus system for each employee to hand in at least a specified minimum of suggestions. At the time of the case study improvement suggestions had become a natural part of the daily work (see statistics in Figure 5). One employee stated:

> If someone has an idea, it is natural to tell him or her to "make a suggestion" and everybody is aware of that.

Suggestions span from preventive and developing to corrective actions.

Process management and control

According to one of the senior managers Agria has been working consciously with "the flow from customer demand to a satisfied customer" since 1995. In 2000 Agria did the first rework of the organisational chart towards a matrix-organisation. In 2002 a second reorganisation was made, resulting in the organisational structure that was present during the time of the study. The processes map of this organisation is found in Figure 1. A former process owner, now in another position, describes how the process orientation supported customer orientation:
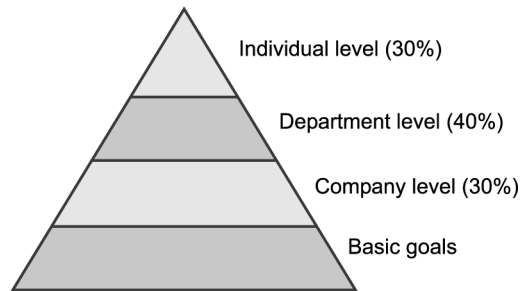
Source: Agria (2004)

Figure 4.
Agria's target related bonus system, the levels where the goals are set
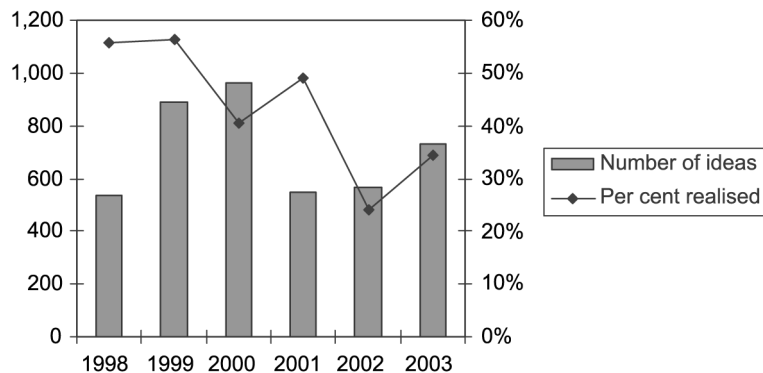
Source: Agria (2004)

Figure 5.
Statistics of Agria online ideas – Agria's suggestion system

> It got clearer how my process delivered something directly to the customer. Another new
> thing is how the process spans over the whole company, with an evident flow through the
> departments.

All of the processes at Agria have process owners assigned to them, accountable for
the performance of their process and for evaluating, developing and improving the
process continuously on the basis of customer demands, needs and expectations. The
business process owners do not take part in the daily operations, nor do they have
responsibility for financial results or staff. All of the process owners report to the
process management group, which consists of the process owners and the CEO. The
process management group is responsible for giving priority of goals, resources and
measures of congruence. To ensure that all employees really understand the
process-based organisation, a part of the training of new employees is set aside to meet
the process owners.

Parallel to the process organisation there is a traditional functional organisation
present, with business area managers responsible for financial results. The business
area managers are aided by team leaders with responsibility for the staff. One business
process owner described the responsibility in this way:

> The process begins at a customer need and continues to the veterinarian, I am responsible for
> that part. Then the matter comes in to Agria and the functional organisation has the
> responsibility but I am still responsible for the whole. As a process owner I have many
> interest groups to take into account. To be successful we cannot only work with the issues
> inside our office, our customers are outside the building.

He went on to describe how the employees look at the process orientation:

> It depends on whom you ask about the organisation. From some people you get the functional
> organisational chart and from others the process map. But it is in the relation between the
> functional and the process organisation that the dynamics occurs that gives the company lots
> of energy. But if you cannot separate the two parts of the matrix, the process orientation will
> probably die out.

He stated that it is the culture and the basic values that make the relation work and
help to avoid conflicts. Another important part of the process orientation, according to
the process owner, is that everyone takes part in the business planning process and
agrees on common goals for the organisation.

The goals are set and the results are measured through balanced scorecards and
collected in an in-house developed data warehouse. Since 1998 Agria has been certified
according to ISO 9001 and, since 2000, Agria also has been certified according to ISO
14001. The management system is looked upon as creating order among the processes.

Continuous improvement
To improve the company's operations Agria has used the criteria of the Swedish
Quality Award (The Swedish Institute for Quality, 2004), a tool for customer orientated
operational development, to evaluate its operations on a yearly basis since 1998, see
result levels in Figure 6. As an output from the award process Agria each year receives
a feedback report (The Swedish Institute for Quality, 1998, 1999, 2002, 2003) that gives
input to the business planning process.

By continuously working with the criteria of the Swedish Quality Award, and the
phases surrounding it, the employees are included in the work with TQM. Employees
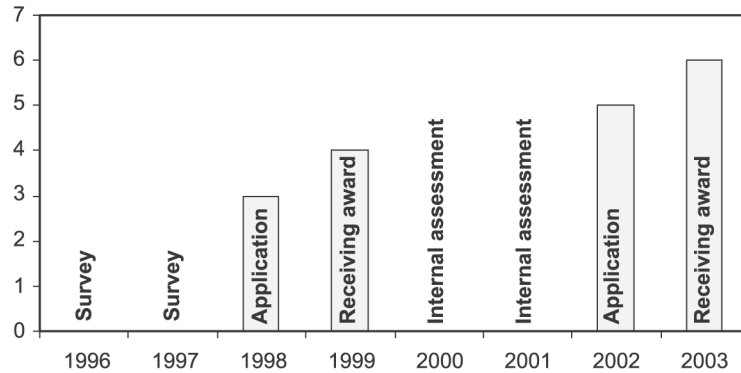
Note: Each year the evaluation results in a final grade on a seven graded scale, see SIQ (2004) for further details. The different ways in which Agria has been working are also written in the diagram. The surveys in 1996 and 1997 were "light-versions" of the instrument, developed by a consultant. In 2000 and 2001 Agria used consultants to evaluate the company and to receive feedback

work in project teams when creating the description of the company on the basis of the criteria. Anybody can be a part of these "writing teams" and the participants shift each year. One illustration of how the importance of the employees has been highlighted can be found at the times when Agria received the Swedish Quality Award. The celebrations included everyone at the company. In 1999 Agria was the first award receiving company to make arrangements to broadcast the award ceremony of the Swedish Quality Award, performed by His Majesty the King of Sweden, directly to the office making it possible for all employees to take part in the celebrations.
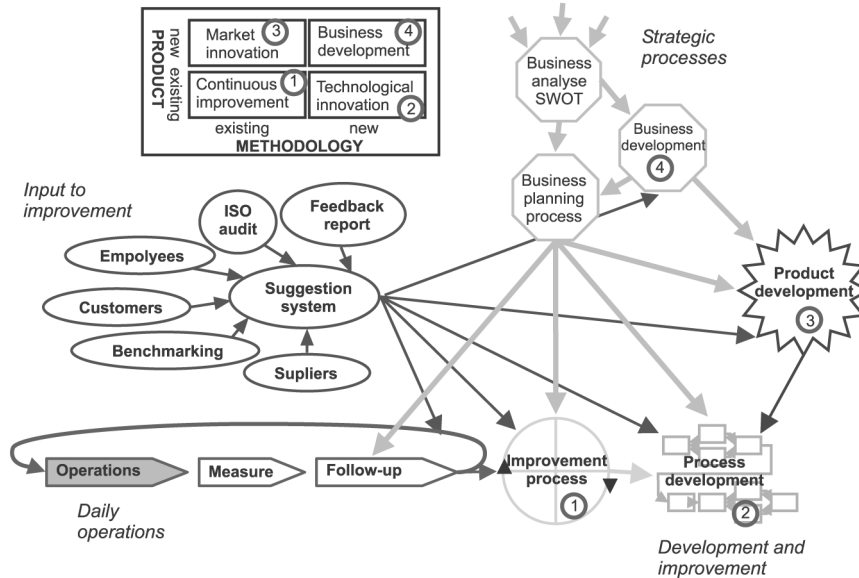
In Figure 7 an overview of Agria's different methodologies and tools is presented.

Daily operations. Results are measured as a part of daily operations. By evaluating the results it is possible to discover if a process meets preset standards, or to find trends that indicate that a change is needed.

Strategic processes. To be able to evaluate the results of the operations goals are regularly set up for comparison. This is done in the strategic processes, primarily in the business planning process, where the frames of the company are set and where the priorities of improvement projects are developed. The arrows from the strategic processes in Figure 7 represent directions given to other parts of the company.

Input to improvement. To be able to work with improvement of processes there has to be some kind of input of needs. One input could be an inconsistency or negative trend in the operations. At Agria input to improvement also comes from a number of other sources: the feedback report from the process of the Swedish Quality Award each year, audits of the ISO 9001 and ISO 14001 management system, employee suggestions, customer feedback, benchmarking and input from suppliers. The suggestion system has been developed as a means of distributing ideas and inputs further on to the different improvement and development processes.

Development and improvement. To be successful in competitive environments, companies must work continuously on improving their processes to meet the ever-changing conditions. This work may consist of either big and extensive changes

Source: From Palmberg (2004)

or small ones in day-to-day operations. The matrix in the upper left corner of Figure 7 describes different kinds of improvement going on at Agria (Horn, 2003):

- *Continuous improvement.* If, on the basis of present routines and existing products, someone makes a change, it could be considered a continuous improvement. Something is done within existing frames, but in a new, and hopefully better, way.

- *Technological innovation.* Technological innovation is when making an improvement in the process but still with the same product or service as the output of the process. The purpose is to satisfy a known need with a new method. It is often a major change that requires budget and resources in the form of competence and a project team.

- *Market innovation.* Creating new products or services that can be delivered by the existing processes, in order to satisfy new customer needs, is called market innovation (in the matrix) or product development (in the figure). At Agria it is primarily in the product committees that the development of new products and services takes place, in close cooperation with customers and suppliers.

- *Business development.* Finding new areas that require new routines is called business development. The division Agria International is an example of this, working with spreading the way Agria operates on a franchise basis to insurance companies in other countries.

The different types of improvement of operations and processes, number 1 and 2 in Figure 7, are debated further in the conclusions and discussion.

Case analysis

In a literature review by Edwards and Sohal (2003) some of the key issues concerning the implementation of TQM programmes are presented:

- education and training of employees and not letting production demands undermine the benefits of training;
- employee participation and positive view of the impact of TQM; and
- the role of middle management in conveying messages to lower levels of the organisation.

The extensive training in the "Agria-School" of all new employees has ensured that everyone working at Agria is aware of, and understands, the basic values and principles of the organisation. The health game is another way of training, where employees, being away from their normal day-to-day operations, get time for reflection.

The top management of the company have been continuously working to include everyone in the quality-related work. At the monthly breakfast meetings all employees are encouraged to participate in the strategic development of the company. At Agria we found it to be widely believed that by involving employees and other interested parties in a relatively slow decision process the implementation period could be shortened.

By including the whole organisation in the work with TQM through the criteria of the Swedish Quality Award, through the business planning process and through other methodologies and tools described in the case study the top management group at Agria has been able to create strong driving forces for change.

The monthly meetings in Agria's program for leadership development bring managers together to discuss the messages that should be conveyed to lower levels of the organisation. By including all managers; team leaders, process owners, business area managers and top managers, in the same group and working with the same issues concerning leadership, there are no formal leaders left out at Agria to criticise the work of "those upstairs". Instead managers at all levels have become agents of change.

In a longitudinal study of five large Australian organisations van der Wiele and Brown (2002) found a number of factors that had an impact on the development of quality management within these organisations. Some of these factors were found at Agria as:

- *The role of top management.* The charismatic and enthusiastic CEO could be described as a strong driving force and has effectively united the management team as agents of change. Another success factor connected to the role of top management is the deployment of the basic values, the "five always", at Agria. The role of the top management has been significant in the early stages of TQM implementation. As described by one of the top managers, "If the CEO had left after the award of 1999, I'm not sure if the work would have continued like it has. But if he would leave now the work would probably keep on going." The role of the top management has shifted, and now there are structures like the Agria-school or the business planning process that probably would sustain the values and methodologies after a change of CEO.
- *The driving force behind the quality management implementation over a long term.* A primary driving force behind the implementation of TQM at Agria has

been the persistent will of the CEO and several others in the organisation not to become satisfied but to continuously strive to improve with new initiatives of change. According to the interviews, external pressure to implement TQM has been negligible.

The phases connected to the Swedish Quality Award have been used as a framework to direct and review the quality management implementation process. Audits and assessments due to the ISO 9000 and ISO 14 000 certifications have also given inputs to the improvement work at the company.

van der Wiele and Brown (2002) conclude that every organisation "needs to discover and work out for themselves how to apply the core principles behind such concepts in ways which are meaningful to their business operations." That is probably one of the most important explanations to why Agria has succeeded so well. Methodologies and tools have been selected by their end users on the basis of their opinion of what was needed, and have also been adjusted to fit the operations of the company.

On the basis of a study of three Slovene companies, Ambrož (2004) concludes that corporate culture and self-image play important roles when implementing TQM. Through their value-focused leadership the managers at Agria have effectively changed the norms and basic values of the organisation. The corporate culture has also been affected by the recruitment policy of the company, which has favoured applicants with a strong interest in animals and animal care.

The self-image of the company has been strengthened by the largely positive response that has been received from customers in the Agria satisfied customer index. Of course the two quality awards have also had great impact on the self-image. Employees at all levels have been acknowledged for the success of the company. Improvements are described not as a result of work made by a few, but as a result of all efforts made by everyone in the organisation.

Conclusions and discussion

In conclusion, it seems clear that nearly all of the managers at Agria have succeeded in focusing their leadership on values and visions rather than rules and regulations. The basic values, the "five always", are more than just words, they truly characterise operations at the company. The study has focused attention on joint leadership as an explanation to this achievement. Through the program for leadership development leaders at all levels have been able to give a collective, united message and to demonstrate the importance of the basic values. At Agria most leaders harbour the belief that having everybody involved is a key to success. This became evident in, for example, the business planning process with a high degree of involvement by employees at all levels of the company.

It is not uncommon for companies to have close cooperation with their customers or with the groups representing them. What could be more unusual are the extent, as well as the systematic way, in which, for example, the customer surveys of the Agria satisfied customer index are being made. But our contention is that the foremost factor contributing to the deep-rooted customer focus at Agria has been the recruitment policy, which strengthens the employees' commitment to the stated mission of the company, to "use expertise and commitment in order to develop and sell security for animals and people." The fact that all employees can easily put themselves in the

position of the customer having an animal in need of care has probably been the greatest contributory aspect of Agria's customer focus.

Process management is a tool in the work with continuous improvement at Agria. One of the process owners said:

> The process orientation gives the opportunity to discover bottlenecks in the operations and them to improve and develop the processes. It is also a help when prioritising among measures and of course it highlights the customer needs.

Top management at Agria has succeeded in building trust and dynamics between the process organisation and the functional organisation, something that is probably as difficult as it is important.

At Agria goals are set and measured through the use of balanced scorecards. Measurements have become a natural part of the job and the employees that are working directly with customers are measured daily and individually by the number of customer cases handled. In addition to this a great number of production measurements are used. On the other hand, it was not always clear to the interviewees how these measurements have been selected to manage the operations leading towards the stated mission. Therefore, this should be an important area to look further into for the company.

During the action research part of the study we found that Agria has been working with operations improvement on three different levels (see Figure 8). The levels of improvement differ in extent and degree of systematisation and in degrees of how mature the organisation has been in its work with quality-related issues.

The third level, which could be found in many companies today, is process development – a discontinuous and often project-based approach with groups assigned to specific improvement tasks. It consists of knowledge of, and systems for, how to run larger development projects. This is the most extensive improvement level, where the problem to be solved requires a major work effort. At Agria a project team is appointed by the process management group and a budget and time plan is developed.
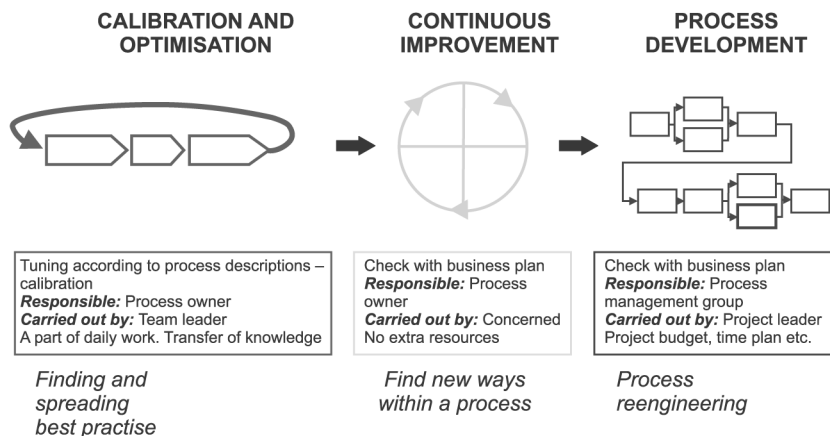

Figure 8.
Levels of change and operations improvement

Source: From Palmberg (2004)

In order to harmonise improvements with the goals of the company, goals of each process development project are set based on the general business plan.

The middle level of this model is continuous improvement – to find new ways on the basis of new ideas or indications of shifting trends in process performance. This is a structured way of working, with tools such as the wheel of improvement (Plan – Do – Study – Act (PDSA), see Deming, 1993), and can often be found in organisations working consciously with TQM. To improve continuously within the existing process map is an expected part of daily work for process owners at Agria. Employees that are affected by changes often assist the process owner in finding new solutions, or even become responsible for the change themselves. To ensure that improvements made are in line with the general goals of the company a comparison is made between the goals of the individual improvements and the goals set in the business plan.

The first level has been called calibration and optimisation. Work of operations improvement at the first level is supposed to ensure that routines and process descriptions are followed as intended, that micro improvements of practice are made within present routines, and that best practise is developed and spread across the entire workplace. Team leaders are responsible for upholding a climate, where ideas are shared among employees and where everyone relentlessly looks for possibilities of improvement by questioning present ways of working. When something comes up that implies a change of routines, it gets formalised as continuous improvement and is transferred to the middle level of the model. If structural changes are needed, a project of process development is initiated (the third level of the model).

The approaches needed are dependant on which type of situation that is present. Therefore it should be important to be aware of the differences between the levels of operations improvement. Organisations should be able to gain from developing knowledge and methodologies regarding the different levels of improvement. It may be argued that it could be fruitful to start with continuous improvement, the middle level, to find ways to handle creativity and improvement suggestions in the daily work of developing the operations. Further on, when facing larger improvement needs, there is a demand for a more comprehensive approach, the third level. In the case of Agria a five-step model with checkpoints for how to operate projects was developed. Having dealt with these two levels of change and improvement the company could proceed with working on the first level, calibration and optimisation. This first level is possibly the one with the highest requirements on employee involvement and corporate culture. When looking at continuous improvement and process development, Agria is in the frontline. Therefore, it is probably at the level of calibration and optimisation that the company has the highest potential of development.

It is significant that Agria has succeeded in deploying a number of basic quality-related values that leaven through the organisation. On the basis of these values the company has been able to develop and implement methodologies and tools that maintain to strive for improvement. Every organisation needs to find methodologies and tools that support its values when working at different levels of change. If an organisation can manage to combine values of continuous improvement, process management and customer focus with methodologies and tools that support these values, sustained quality management should be in reach.

References

Agria (2004), *Nu har vi fått Utmärkelsen Svensk Kvalitet. Igen.*, Igen, Motala (in Swedish).

Ambrož, M. (2004), "Total quality system as a product of the empowered corporate culture", *The TQM magazine*, Vol. 16 No. 2, pp. 93-104.

Dale, B.G., Boaden, R.J., Wilcox, M. and McQuarter, R.E. (1997), "TQM sustaining audit tool: description and use", *Total Quality Management*, Vol. 8 No. 6, pp. 395-405.

Deming, W.E. (1993), *The New Economics for Industry, Government and Education*, MIT Center for Advanced Engineering Study, Cambridge, MA.

Easton, G.S. and Jarrel, S.L. (1998), "The effects of total quality management on corporate performance: an empirical investigation", *Journal of Business*, Vol. 71 No. 2, pp. 253-307.

Edwards, R. and Sohal, A.S. (2003), "The human side of introducing total quality management: two case studies from Australia", *International Journal of Manpower*, Vol. 24 No. 5, pp. 551-67.

Eriksson, H. (2004), "Organisational value of participating in quality award processes", doctoral thesis 2003:42, The Division of Quality and Environmental Management, Luleå University of Technology, Luleå.

Eriksson, H. and Garvare, R. (2005), "Organisational performance improvement through quality award process participation", *International Journal of Quality & Reliability Management*, Vol. 22 No. 9, pp. 894-912.

Garvare, R. (2002), "Process management and sustainable development in a quality perspective: implementation and measurement related to small- and medium-sized enterprises", doctoral thesis 2002:35, The Division of Quality Technology and Statistics, Luleå University of Technology, Luleå.

Haupt, C.T. and Whiteman, D.E. (2004), "Inhibiting factors of implementing total quality management on construction sites", *The TQM Magazine*, Vol. 16 No. 3, pp. 166-73.

Hendricks, K.B. and Singhal, V.R. (1997), "Does implementing an effective TQM program actually improve operating performance? Empirical evidence from firms that have won quality awards", *Management Science*, Vol. 43 No. 9, pp. 1258-74.

Horn, A. (2003), "Personal communication", Agria, July.

Merriam, S.B. (1994), *Fallstudien som forskningsmetod*, Studentlitteratur, Lund (in Swedish).

Palmberg, K. (2004), "Förbättringsarbete på Agria Djurförsäkring AB – kartläggning och beskrivning", Master's thesis, The Division of Quality and Environmental Management, Luleå University of Technology, Luleå (in Swedish).

Reed, R., Lemak, D.J. and Mero, N.P. (2000), "Total quality management and sustainable competitive advantage", *Journal of Quality Management*, Vol. 5 No. 1, pp. 5-26.

Stinger, E. (1999), *Action Research*, 2nd ed., Sage Publications, Thousand Oaks, CA.

(The) Swedish Institute for Quality (1998), "Feedback report, Agria", The Swedish Institute for Quality (SIQ), Gothenburg.

(The) Swedish Institute for Quality (1999), "Feedback report, Agria", The Swedish Institute for Quality (SIQ), Gothenburg.

(The) Swedish Institute for Quality (2002), "Feedback report, Agria", The Swedish Institute for Quality (SIQ), Gothenburg.

(The) Swedish Institute for Quality (2003), "Feedback report, Agria", The Swedish Institute for Quality (SIQ), Gothenburg.

(The) Swedish Institute for Quality (2004), *The SIQ Model for Performance Excellence*, The Swedish Institute for Quality (SIQ), Gothenburg.

Yin, R.K. (2002), *Applications of Case Study Research*, Sage Publications, London.

van der Wiele, T. and Brown, A. (2002), "Quality management over a decade: a longitudinal study", *International Journal of Quality & Reliability Management*, Vol. 19 No. 5, pp. 508-23.

About the authors

Klara Palmberg, the corresponding author, is a PhD student since 2004 at the Division of Quality and Environmental Management, Luleå University of Technology, Sweden. Her research focuses on system and process management in service organizations. She can be contacted at: Division of Quality and Environmental Management, Luleå University of Technology, SE-971 87 Luleå, Sweden. Tel: +46 70 727 00 12; Fax: +46 920 492160; e-mail: Klara.palmberg@ltu.se

Rickard Garvare received the PhD degree in Quality Technology from Luleå University of Technology, Sweden, in 2002. He is now working as assistant professor at the Division of Quality and Environmental Management, Luleå University of Technology. His research is focused on process management and sustainable development related to small and medium sized enterprises. He can be contacted at: Division of Quality and Environmental Management, Luleå University of Technology, SE-971 87 Luleå, Sweden. Tel: +46 920 492295; Fax: +46 920 492160; e-mail: rickard.garvare@ltu.se