IMPROVING CUSTOMER FEEDBACK PROCESS WITH PROCESS MANAGEMENT AND LEAN TOOLS

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MEMONEN, TARITA: Improving Customer Feedback Process
                                    with Process Management and Lean
                                    Tools
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ABSTRACT

The study was commissioned by Kaha Oy, the case company, and is part of their ongoing quality development effort. This effort is related to the ISO 9001:2008 quality certificate, which was granted to them in 2010.The purpose of this study is to improve their customer feedback process in coherence with the suggestions of the ISO 9001:2008 standard.

The theoretical basis is formed by the viewpoint of quality being a base for any development work. Furthermore, other areas that arise from the quality management concept are process improvement management and customer orientation, which are also essential concepts with regard to the objectives of the thesis. The selected theoretical framework aims in pinpointing the interconnection between the previous concepts, and showing how all of them have origin in quality thinking. This gives a good knowledge base for developing the commissioner's customer feedback process.

The present state of the customer feedback process of the commissioner was investigated by utilizing a 3-page process modeling technique consisting of different data collection forms to be utilized in focus group interviews. The author organized four rounds of focus group interviews for this purpose. Furthermore, these interviews were supplemented with individual interviews, as well as direct observation of the customer feedback process in practice.

The results of the study indicate that the customer feedback process in its present state has rather low maturity level. Hence, before any improvement procedures can be executed, the process needs to be designed, structured and managed. The process mostly lacks a clear structure and identified responsibilities. Also centralization of all customer feedback would simplify the process. Furthermore, the process requires further analysis on an executive level. It is up to the management to evaluate the process objectives and to connect the customer feedback process to the overall business strategy and make sure of its sufficient communication within the organization.

Keywords: total quality management, ISO 9000, quality management system, process management, process improvement, lean methodology, customer feedback

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TIIVISTELMÄ

Tämä opinnäytetyö toteutettiin tapaustutkimuksena sen toimeksiantajalle, Kaha Oy:lle, osana heidän vireillä olevaa laadun kehittämishankettaan, joka juontaa juurensa heille vuonna 2010 myönnettyyn ISO 9001:2008 laatusertifikaattiin. Opinnäytetyön tarkoitus on parantaa heidän asiakaspalauteprosessiaan, jotta se olisi yhdenmukainen ISO 9001:2008 standardin kanssa.

Opinnäytetyön teoreettinen viitekehys perustuu näkemykseen laadusta kaiken kehittämisen pohjana. Laatuajattelusta juontaa juurensa myös muut opinnäytetyön teoreettisen viitekehyksen osa-alueet, joita ovat prosessien parantamisen hallinta ja asiakassuuntautuneisuus. Valitulla teoreettisella viitekehityksellä pyritään osoittamaan näiden käsitteiden yhteiset juuret laatu-ajattelussa, koska se on tietoperustana myös opinnäytetyön tavoitteille. Viitekehys antaa näin hyvän tietopohjan ja näkemyksen toimeksiantajan asiakaspalauteprosessin kehittämiseen.

Toimeksiantajan asiakaspalauteprosessin nykytila kartoitettiin käyttämällä prosessien 3-sivumallinnustekniikkaa, joka koostuu erilaisista tiedonkeräyslomakkeista, joita käytetään hyödyksi tähän tarkoitukseen kootuissa ryhmähaastatteluissa. Näitä ryhmähaastatteluja täydennettiin lisäksi henkilökohtaisilla haastatteluilla, sekä havainnoimalla asiakaspalauteprosessia käytännössä.

Tutkimuksen tulokset osoittavat, että toimeksiantajan asiakaspalauteprosessi on vielä kypsyystasoltaan kehittymätön. Opinnäytetyön keskeinen johtopäätös on se, että se mitä ei ole ensin huolellisesti suunniteltu, rakennettu tai hallittu, ei voida parantaa. Asiakaspalauteprosessin suurimpia ongelmia onkin se, että sillä ei ole selvää rakennetta, eikä sen vastuita ja velvollisuuksia ole määritelty. Jotta nykyistä prosessia voitaisiin yksinkertaistaa, olisi asiakaspalautteen keräämistä keskitettävä yhteen paikkaan. Prosessi vaatii erityisesti ylemmän johdon lisäanalyysia. Heidän velvollisuutensa on arvioida asiakaspalauteprosessin yleiset tavoitteet, ja kytkeä prosessi yrityksen liiketoimintastrategiaan ja pitää huoli yrityksen sisäisestä tiedottamisesta.

Avainsanat: kokonaisvaltainen laadunhallinta, ISO 9000, laadunhallintajärjestelmä, prosessien hallinta, prosessien parantaminen, lean ajattelu, asiakaspalaute

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ABBREVIATIONS

ASQ   : American Society for Quality

BPR   : Business Process Reengineering

DOE   : Design of Experiments

ISO   : International Organization for Standardization

QFD   : Quality Function Deployment

QMS   : Quality Management System

SFS   : Suomen Standardisoimisliitto

SPC   : Statistical Process Control

TOC   : Theory of Constraints

TPS   : Toyota Production System

TQM   : Total Quality Management

GLOSSARY

5S methodology	: A workplace organization methodology based on 5 recommendations: Sort, Simplify, Sweep, Standardize, Sustain
Business process	: A collection of related activities that produce a specific output for a particular customer
Core process	: Process that serves the external customer, based on company core competencies, e.g. a production process
Functional organization	: An organizational structure that follows the principle of specialization based on function or role
Hoshin planning	: Strategic planning methodology
Key process	: Most important processes of an organization, primary development targets
Lean methodology	: A business practice that considers the non-value creating activities as wasteful, and thus a target for elimination
Management by fact	: Key concept of TQM whereby all employees collect data about the work they perform, and use that information to make decisions affecting their work
Process flowchart	: A graphical illustration of a process

Process map : A graphical illustration of the key processes in a company

Process maturity : The level of process maturity that can be ranked with a scale of 1 to 5

Process owner : The person named responsible for the process as a whole

Process team : A team planned and compiled to develop a process

Pull : A system introduced by Lean methodology where processes are based on customer demand

Quality circle : A volunteer group composed of workers trained to solve work-related problems so as to improve the performance of the organization

Six Sigma : A business management strategy seeking to improve the quality of process outputs by removing the causes of defects

Sub-process : Processes in the bottom level of the process hierarchy

Support process : Internal processes, prerequisite for successful core processes, e.g. financial management and HR processes

Waste : All non-value creating activities and features within a business process

1 INTRODUCTION

1.1 Background

Customer satisfaction can be seen as the biggest goal of all businesses. Therefore, businesses should listen to the voice of their customers. It is argued that only with a functional feedback process businesses can better meet their customers' expectations and constantly improve the quality of their services and products. (Fundin & Bergman 2003) These issues were also puzzling the commissioner of the thesis, Kaha Oy, which subsequently led to the idea to launch this thesis process. Kaha Oy is an importer and wholesaler of automotive spare parts, accessories, tools and components for the Finnish vehicle industry. The topic of the thesis was chosen also because of author's personal interest towards customer relationship and quality management issues. Moreover, the case company as the author's employer deepened the cooperation needed for a case study, and brought extra motivation to conduct the study.

The commissioner, Kaha Oy, has recently been granted with the ISO 9001:2008 quality certificate, but the efforts to improve quality still continue. This certificate suggests that company's different operations are modeled into processes so as to support the establishment of a functional quality management system. Moreover, the organization shall "determine the processes needed for the quality management system and their application throughout the organization, as well as the sequence and interaction of these processes (SFS-EN ISO 9001 2008, 15)".

When discussing this issue with Kaha's quality manager, it was decided that a good development area for Kaha would be their customer feedback process as it had not been modeled so far, and ISO 9001:2008 standard specifically suggests that companies should have a systematic process for monitoring and collecting customer feedback. In regard to the theoretical framework of the thesis, it was decided that this thesis would study the philosophy behind quality, processes and customer feedback. Based on the related theories, the thesis would give improvement suggestions for Kaha's feedback process, because the ISO 9001:2008 standard suggests active monitoring of customer satisfaction. After all, it is this par-

ticular process that actually measures the quality perceived by the customers, which is one of the principal foundations on which quality can be further developed. (EN ISO 9001 2008, 34)

Companies in today's demanding competition must ensure that the level of quality is high in all their operations. Well managed quality system and processes can be a strong competitive advantage over competitors. Kaha as an importer and wholesaler has a big responsibility to serve their customers and resellers with quality products and services. Kaha recognizes that investments in quality directly benefit their customers and thus create customer loyalty and value in their organization.

1.2   The objectives, research questions and scope of the thesis

The objective of the thesis is to find suitable and effective improvement suggestions for gathering customer feedback from Kaha's customers in a measurable way. The system should be easy and flexible to use but effective in implementation. The ultimate research questions are the following:

1. What is the present state of the customer feedback process at Kaha Oy?
2. How could the present feedback process be improved and/or re-engineered so that it would be also compatible and coherent with the ISO 9001:2008 quality standard?

As it comes to the limitations of the thesis, customer feedback is a broad concept and the channels for gathering this feedback are various. This thesis focuses on daily customer feedback that can be received via e-mail, phone or face-to-face. This thesis leaves out customer feedback surveys as they can be seen as a separate process from the daily routine. In addition, the company already has cooperation with a firm that provides customer feedback surveys. Finally, this thesis aims to provide suggestions for improvement, leaving the actual planning and implementation of those suggestions at the discretion of the commissioner. This task requires further analysis of the capabilities of the firm and the resources needed to implement change.

1.3   Research methodology

This chapter introduces the research design and the research strategy of the thesis. A research design is the general plan on how to answer the research questions containing clear objectives and the sources from which to collect data. Crucially, it should reflect careful consideration over why a particular research design is employed. (Saunders et al. 2007, 131) Research strategy, instead, refers to the set of methodologies selected for a research. The selection of appropriate research strategy, and its single methods, should be based on the research problem. (Hirsjärvi et al. 2004) The goal of the thesis is to improve and develop a customer feedback process. Hence, the research strategy and methodology should be chosen to support this objective.

Firstly, it is important to choose a research approach that best suites the objective of the thesis. There are three types of research approaches: deduction, induction, or a combination of both. The inductive approach best suites the thesis as it moves from specific observations to broader generalizations. Inductive reasoning is more exploratory and open-ended in nature, and therefore supports the objectives of the thesis. (Trochim 2006; Saunders et al. 2007, 117-19)

Secondly, with regard to the research questions and on how they are intended to be answered; an appropriate research purpose is to be identified. The purpose of this thesis is to gain as much knowledge of the present customer feedback process of the commissioner as possible so as to find the right improvement ideas. An exploratory study helps in this goal as it aims to find out what is happening within a selected context, to seek insights and to form an understanding of phenomena. It can be of great advantage when trying to clarify, understand or pinpoint the precise nature of a problem. (Saunders et al. 2007, 133-4)

Thirdly, the appropriate research methods should be selected to support the process of answering the research questions. Qualitative method is chosen as it aims to comprehensively interpret real-life situations in their real-life contexts, which is why it best suites the objective of the thesis. In short, the goal of qualitative study is to reveal truths, rather than prove or test already existing theories and hypothe-

ses. Qualitative method favours real people as the source of information and utilizes methods that underpin their point of views. In addition, the sample is selected purposefully rather than coincidentally as in most quantitative studies. (Hirsjärvi et al. 2004, 131,155; Saunders et al. 2007, 145; Baxter & Jack 2008)

Finally, a proper research strategy needs to be selected. The strategy to be looked at here is a case study strategy, because it reflects the nature of commissioned studies. Case study is a strategy for doing studies which involve empirical investigation of contemporary phenomena within their real life contexts using multiple sources of evidence. (Robson 2002, 178, according to Saunders et al. 2007, 139) Consequently, the case study strategy also often requires the triangulation of multiple sources of data. As the thesis concerns only a single case and involves the case organization as a whole, it is treated as holistic single case study. (Saunders et al. 2007, 139) Moreover, the thesis will also incorporate features of action research, which aims to "study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction" (O'Brien 2001).

Figure 1 summates the research design of the thesis. The decisions are based on and justified with reviews of related theories. Therefore, within the context of the bachelor's thesis and the nature of the study, the author finds the inductive approach and exploratory qualitative research methods most suitable for the purpose of carefully investigating the customer feedback process.What is more, the thesis is designed as a holistic single case study. With the flexible nature of the previous methods, it is easier to gain more explorative findings and comprehensive knowledge of the commissioner's customer feedback process.
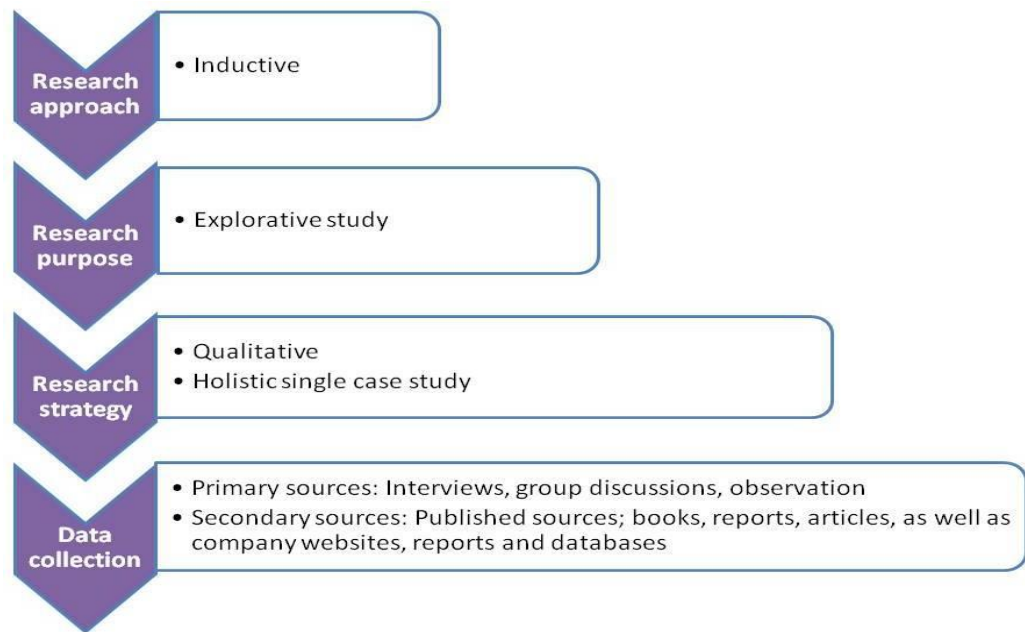
FIGURE 1. Research design of the thesis

The author as an employee of the case company creates a bond between the author of the study and the organization, and hence gives the former access to data that might not usually be available. Through involvement in the organization, the author is able to gain access to a richness of data which might be denied from outside researchers. The every-day interaction with the case organization potentially provides better opportunities for observing many aspects of the situation and for understanding the complexity of the customer feedback process. This study setting is wished to provide a unique chance for conducting exploratory research. (O'Brien 2001)

Four different methods are used to conduct the empirical study: 3-page process modeling and related focus group interviews, individual interviews, observation, and analysis of documents. The 3-page technique is used to model the customer feedback process, as it is an established and recognized approach in the field of process management. The focus group, as well as the individual interviews provide depth and emphasize the feeling of human point of view. The different documents provide the factual basis of the case company and its history. Observation gives the possibility to see the customer feedback process in practice, and can ultimately reveal the differences between what is said and done (Pettigrew 1990, 277).

1.4 Thesis framework and structure

First, in order to create suggestions for improvement with regard to the customer feedback process of the commissioner, it is important to study and understand the basic related theories. In Figure 2, the theoretical as well as the general framework of the thesis is illustrated.
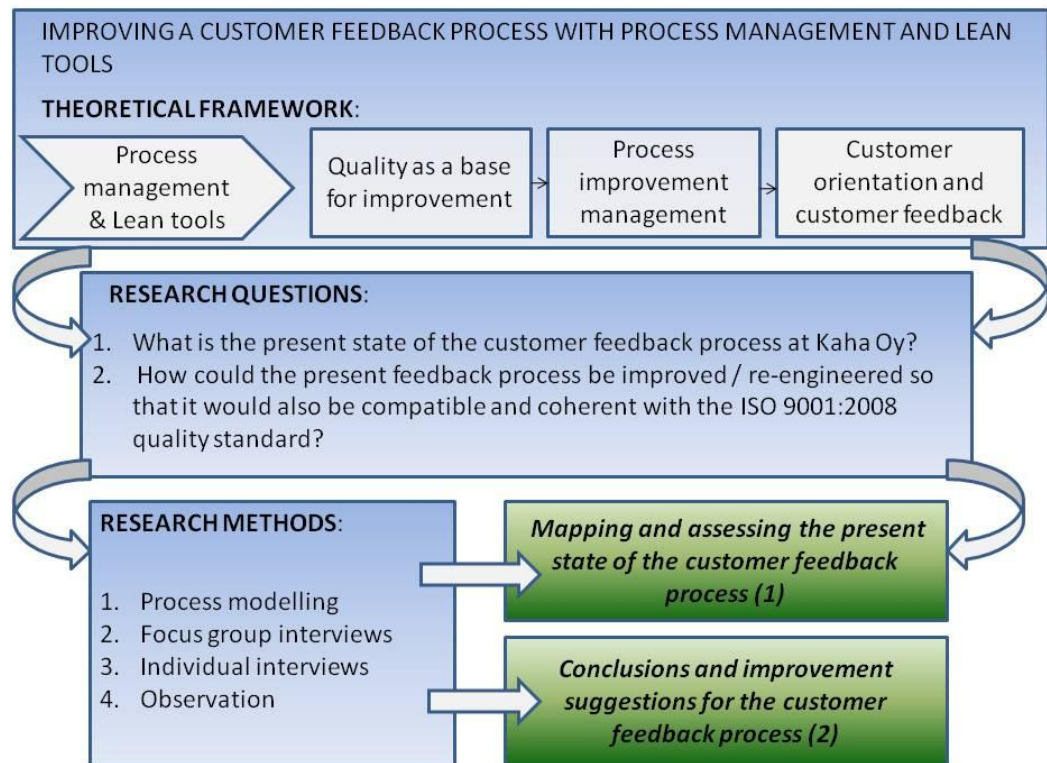
FIGURE 2. Thesis framework

The theoretical part of the thesis discusses only such topics that can be seen as valuable base information for the empirical part. This way the two parts supplement each other and thus creating a more synchronized study. First, it is important to understand why processes need to be modeled and improved in the first place. This need stems from quality management concepts, and more specifically, from the ISO 9000 standards. Therefore the basic related theories need to be introduced so as to explain the deeper context for process based thinking. Furthermore, it is important to know the relevant theories and tools of process management and process modeling before starting any process improvement projects. Also, to be able to understand the customer feedback process of the commissioner, it is im-

portant to understand the nature of customer feedback systems, and what they require from organizations. Therefore, customer orientation and feedback as quality enhancers are included in the theoretical framework. To go back to Figure 2, the related theoretical concepts are illustrated inter-connectively, because all of the concepts have foundation in quality. Quality is discussed first as process modeling and customer orientation can be both seen as parts of the larger quality management concept.

The thesis consists of two pain parts, the theoretical and the empirical part. All in all, the thesis is divided into eight chapters. The theoretical part consists of three main chapters: chapter two, three and four. These chapters form a theoretical framework that provides improvement models and information to be used later in the empirical section.

Chapter five aims to study and analyze the company and its quality management system. Moving further, chapter six starts the empirical part of the thesis and analyzes the current customer feedback process and tries to find out its main problems. Chapter seven reflects the theoretical framework introduced earlier and applies it to the current customer feedback process of the commissioner, which is aimed to arouse ideas for improvement from multiple angles.

2   QUALITY AS A BASE FOR IMPROVEMENT

2.1   Quality as understood by the quality gurus

Before going further with any development or improvement schemes, it is important to understand the concept of quality. Quality can be viewed from multiple angles and perspectives, which is why it is important to view quality comprehensively so as to form a full understanding of its nature. Furthermore, quality must be viewed and defined carefully in order to build a functional quality management system and better processes. The question "what is quality" might produce relatively diverse answers, which proves that further analyzing is needed especially if those ideas are the foundation for a quality management system. Even more, unclear definitions may lead to insufficient planning and uncontrolled actions in business operations. (Lillrank 1998, 19; Pesonen 2007, 35)

The definitions for quality are numerous and diverse, and they have developed through the years by different quality gurus around the world. The following definitions and theories are not placed on a timeline, but rather grow from the more simplistic views to the more complex and broader views on quality.

The simplistic view sees quality as merely checking and eliminating defects. Genichi Taguchi, a Japanese quality guru, represents this point of view. Taguchi aims to push quality and reliability back to the design stage, rather than inspecting quality after a product or service has already been made. According to Taguchi, it is more effective to design products that are less sensitive to deviation during the manufacturing process, than trying to control all the deviations that might occur later. An American quality management professional, Philip Crosby, views quality as concisely as Taguchi. According to Crosby, quality is about fulfilling the requirements set for a product, rather than it just being "good". Joseph Juran, on the other hand, defines quality a little simpler as "fitness for use", which means that quality is a product or service that meets and fulfills its intended use. (American society for quality 2010; Lillrank 1999, 40; the original quality gurus 2010)

Another Japanese quality guru, Noriaki Kano, develops quality a little bit further and introduces two equal dimensions for quality; the" must-be quality" and "attractive quality". The must-be quality is similar in philosophy with Juran's definition "fitness for use". The latter though, introduces a new dimension to quality, which is the element that customers would appreciate, but which they have not yet thought about it on their own. To find out what those new features might be, Kano has developed a model known as the Kano model. (Zultner & Mazur 2006)

Armand Feigenbaum, an early quality guru and the originator of "total quality control", defines quality in a more complex manner. According to Feigenbaum, quality is the total mix of product and service characteristics, marketing, engineering, production, and maintenance, which bring the product and service features closer to the expectations of the customer. The total quality view point was developed further by the Japanese Dr Kaoru Ishikawa. His contributions to quality also include companywide quality control and the human side of quality. When compared to the earlier Japanese quality experts, Ishikawa broadens the concept of quality and views quality control as a lifestyle rather than as a quick fix. Also, the leading American quality guru, Edwards Deming, puts high responsibility on management, and believes that management is responsible for the majority of all quality problems. According to Deming, quality can be accomplished through better management of design, engineering and testing procedures, as well as by improving processes. (Original quality gurus 2010; Lillrank 1999, 40-1)

Also, different international organizations have come up with their own definitions for quality. The American Society for Quality, for instance, takes a more flexible view on quality by stating that quality is a subjective term, for which all people have their own definitions. Also, the concept of Six Sigma, which is the quality strategy of both Motorola and General Electric, sees quality as a goal and an aspiration to perfection. It aims to measure the number of defects in a process in order to eliminate them, and thus make the end-result more satisfactory for the customer. (General electric 1999; Process quality associates 2010) However, the most known definition for quality may be the one given by the International Organization for Standardization, which well summarizes the previously introduced definitions. According to them, quality is "the degree to which a set of inherent

characteristics fulfill requirements" (International Organization for Standardization 2005).

The quality gurus discussed previously have each made major contributions to quality work and customer service as it is known today. The different definitions have varied during time, but they still have common characteristics that are widely accepted. Especially "quality as perceived by the customer" has become a vital aim for many companies, and Deming's idea of delighting the customer is seen as a way to compete in today's demanding markets. (Bendell et al. 1995) The majority of the definitions and ideas introduced by the different quality gurus culminate in Total Quality Management, which is introduced in the following chapter.

2.2   Total Quality Management

The concept of quality has grown and evolved in time as discussed in the previous chapter. Now quality also includes management activities, strategic planning and organizational development. Quality needs to be managed, because it is a fundamental success factor of companies, and without quality, all there is left for companies to compete with is the price. Quality is a complex concept that does not create itself; it requires constant nurturing and steering. (Lillrank 1990, 87)

The idea of quality coexisting in all business operations has created a broader concept known as Total Quality Management (TQM). The objective of TQM is to increase customer satisfaction, as well as the benefit of the employees and the whole society alike. It can also be described as a management effort that aims to continuous development, and is based on the assumption of quality being a competitive advantage. This method utilizes quality tools and approaches that help in the process of making businesses more efficient, productive, successful and better prepared for the future challenges. (Lillrank 1999, 169; Hölttä & Savonen 1997, 11)

However, according to Soin (1998, 5) a good TQM method should include all of the previous attributes together: efficiency, productivity, customer satisfaction and

loyalty, zero-defect outputs, as well as good management of all the key activities within an organization. Kanji & Asher (1996, 1) add the importance of implementing management by fact, as well as people based management and continuous improvement. For this purpose, Kanji and Asher have introduced a model that illustrates the principles of TQM as a pyramid.

UNDERSTANDING TOTAL QUALITY MANAGEMENT

Continuous improvement cycle
Customer satisfaction
Prevention
Measurement
Internal customers are real
Teamwork
All work is process
People make quality
Management by fact
Continuous improvement
T Q M
People-based management
Leadership
Delight the customer
Leadership
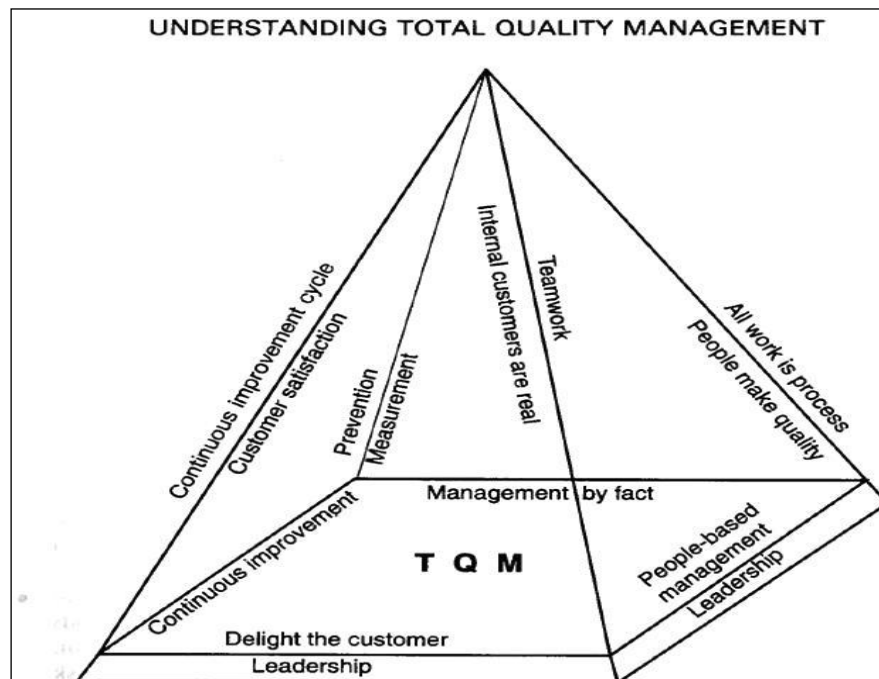
FIGURE 3. Pyramid model of TQM (Kanji & Asher 1996, 7)

Figure 3 illustrates the Total Quality Management pyramid. The base of the pyramid focuses on the four main principles of TQM and two core concepts correspond to each side of the pyramid. Below the four main concepts, leadership is depicted as a base, because top management leadership is seen essential in creating a TQM organization. This way, the Figure presents how the organization has to be guided with the TQM principles by top management leadership. (Kanji & Asher 1996, 6)

Soin (1998, 7), similarly with Kanji & Asher, categorizes TQM concepts into five important sections: customer satisfaction, business planning, management of improvements and breakthroughs, process management, and employee participation. First, customer obsession includes all the activities needed to keep customers satisfied. This includes, for instance, creating a systematic process for monitoring

customer feedback. Second, business planning is needed, because it is a way to show management's commitment for their customers, employees, quality improvement goals and future plans. Third, the management of improvements and breakthroughs ensures an effective way to improve processes. Fourth, process management aims to create efficient and predictable processes, which subsequently results in lower costs and a better managed business. Finally, employee participation is important for implementing total quality. Hence, employees must be educated in the TQM principles so as to create a common goal for the whole organization.

Lillrank (1999, 170) defines the main concepts within TQM as follows:

Quality: The costs of bad quality are significant, and therefore it is the most cost-effective to make things properly already the first time.

Customers: A satisfied customer is the criteria for quality, and customer satisfaction the most important measurement.

Employees: The employees should care about the quality of their own work.

Managerial role: The management is responsible for quality in general.

Change management: Process thinking, continuous development, variation analysis and management, customer need measurement, customer satisfaction follow-up, supplier cooperation, statistical method utilization, process development tools, as well as employee participation and authorization.

Quality management has evolved into being a managerial philosophy that highlights the importance of understanding customer needs, as well as the continuous improvement of all operations according to the requirements of the customers. In all the forms of quality management, processes are a fundamental element. Hence, quality management has created a set of practical methods to improve quality and processes: statistical process control (SPC), Quality Function Deployment (QFD), Design of experiments (DOE), Hoshin planning, problem solving, quality circle, ISO 9000 standards, auditing, benchmarking, self-assessment and continuous improvement. Quality management has also created further, more comprehensive methodologies, such as Six Sigma, Lean methodology and theory of constraints, which all aim to improve processes by reducing nonconformities. (Laamanen & Tinnilä 2009, 26)

2.3   Customer-oriented quality

The concept of quality can be viewed from four different perspectives: produc-
tion, design, system, and customer's perspective. This chapter discusses the cus-
tomer-oriented quality as they are always the final judges of quality. Hence, Total
Quality Management should always be customer-oriented. Quality thinking, in
general, views customer concept very broadly. In this light, customer relationship
always exists when the customer has any contact with the business, whether it was
through a single person, a product, an office or an advertisement. (Lecklin 2006,
79)

A Japanese quality guru, Noriaki Kano, depicts the relationship between product
or service characteristics and customer satisfaction with a paradigm illustrated in
Figure 4 below.
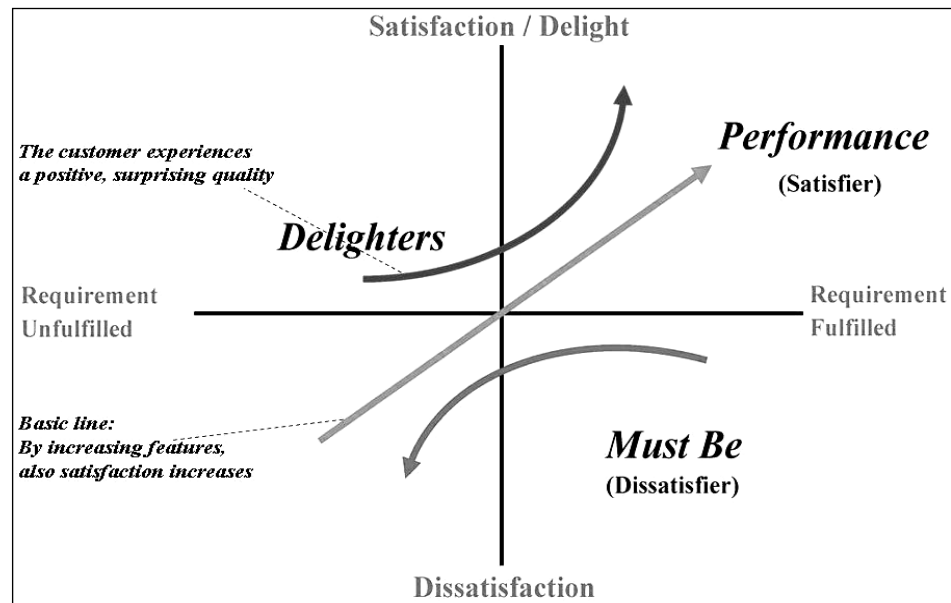
FIGURE 4. Kano Model (Pesonen 2007, 40. Translated by the author)

In Figure 4, the product features grow from the left to the right corner, and the
satisfaction of the customer grows from the bottom to the top. In the middle, the
figure presents a basic model, in which the customer's satisfaction increases when
the customer purchases a product or service that has many features, or in which
the features constantly increase. For instance, if car owners purchase aluminium

wheels to replace the standard pleat rims, they become more satisfied. Moving on in Figure 4; below the basic model there is a situation illustrated with a curved line, in which the customer satisfaction decreases steeply into the left. This is because the promised product or service features are not fulfilled. Going back to the car owner example; cars are easy to switch on today, and if this feature is still possible to be enhanced, it may not affect customer satisfaction significantly, because this feature is already self-evident. However, if the car engine starts running poorly or not at all, it results in fast and steep decrease in customer satisfaction. This is most of all an example of a subconscious expectation: the car should start running effortlessly. This kind of compulsory, self-evident feature is referred to as the "must be" quality. (Pesonen 2007, 41)

Moving further again in Figure 4, above the basic model, an opposite situation is presented, in which the customer satisfaction increases. This situation occurs when a customer receives something positive and unexpected. This extra something could be, for instance, an extra accessory or a surprise gimmick received when purchasing a car. The argument in Kano's paradigm is that only surprising, positive and attractive features increase customer satisfaction significantly, and that performance on certain categories of attributes creates higher levels of customer satisfaction than others. Hence, organizations should consider how quality is defined within their organization, services and products. (Pesonen 2007, 41; Zultner & Mazur 2006, 109)

Lecklin (2006, 91) completes this view by stating that customers always have certain expectations about the products and services of companies. These expectations are influenced by earlier experiences, company image, needs of the customers, as well as competing suppliers. Furthermore, the expectations are often related to the quality of products, functionality of solutions, company expertise, credibility, know-how, as well as their cooperation skills. However, Lecklin reminds that the customer expectations are constantly fluctuating and tend to grow higher as time goes by. Therefore, businesses should be able to continuously fulfill or exceed those expectations in order to guarantee customer satisfaction.
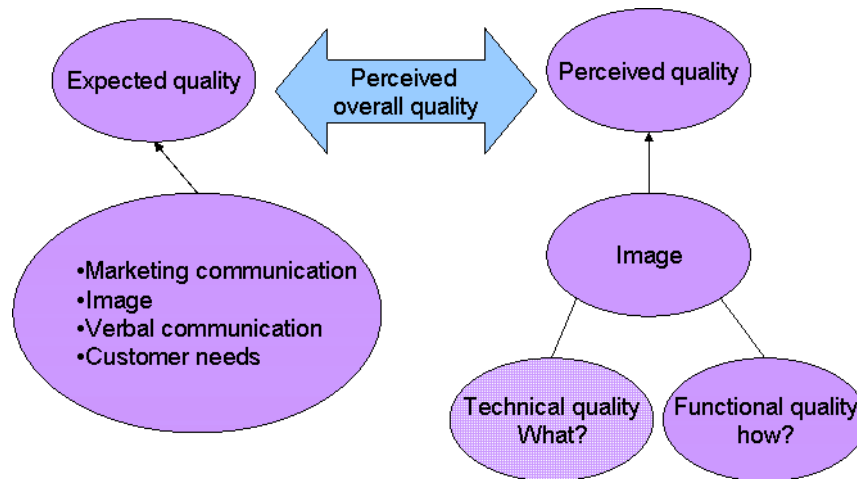
FIGURE 5. Perceived overall quality (Lecklin 2006, 94. Translated by the author)

Figure 5 illustrates the overall quality perceived by customers. The principal assumption is that customers always have certain expectations about the quality of their purchases. These expectations are influenced by the marketing communications of the seller, as well as other direct or indirect information the customer perceives. The final output consists of two sides: technical quality and functional quality, which refer to what the service includes and how well the service is executed. These two sides create the perceived overall quality that customers compare to their expectations. The goal is to create services that increase customer satisfaction and subsequently the possibility of customers continuing the customer relationship. Finally, the actual measurement for quality is ultimately the choices of the customers. (Lecklin 2006, 94; Lillrank 1997, 36)

2.4   Quality improvement: quality management systems and ISO 9000 standards

There are numerous methods and techniques to improve quality. The most known tools are the ISO 9000 standards, quality certificates, quality awards and benchmarking. Moreover, businesses also build and utilize complex quality management systems, as well as different quality techniques and problem-solving tools. The following sub-chapters describe the most known quality improvement concepts: ISO 9000 standards and quality management systems.

ISO 9000 Standards

Without satisfied customers, organizations cannot operate. To keep the customers satisfied, organizations need to meet their requirements. The ISO standards provide a toolset for taking a systematic approach to managing processes so that they consistently generate products that satisfy the expectations of the customers. The ISO 9000 standards family stands for an international consensus on good quality management practices, consisting of standards and guidelines relating to quality management systems, as well as related supporting standards. (ISO 2011)

ISO 9000 is an international set of standards regarding quality management. The letters ISO refer to the International Organization for Standardization. In Finland they are represented by the Finnish Organization for Standardization, SFS. ISO 9001:2008 is the standard that provides requirements for a quality management system. The standard can be applied to all kinds of organizations, no matter of their size or the sector they operate in. The other standards in the family cover the supporting aspects of 9001 standard: fundamentals and vocabulary, performance improvements, documentation, training, as well as financial and economic aspects. (ISO 2011; SFS 2011)

The International Organization for Standardization controls that their standards are continuously updated. ISO released a new version of the 9001 standard in 2008. The new version of the ISO 9004 standard was released in 2009. Now the core standards that are still in force are ISO 9000:2005, ISO 9001:2008 and ISO 9004:2009. The 9001:2008 standard is the only ISO 9000 series standard according to which an external organization can certify quality management systems. The certificates are granted by the accredited certification companies. In Finland FINAS accredits certification for qualified companies. SFS does not operate as a certification organization itself. (SFS 2011)

The reasons why organizations strive for certification are various. Sampaio et al. (2008, 45) state that there are numerous motivators why organizations seek quality certification. These motivations can be classified according to two main categories: internal and external motivations. The internal motivations refer to the

goal of achieving organisational improvement. The external motivations, instead, refer to the promotional and marketing issues, customer pressure, as well as improvement of market share. According to Poksinska et al. (2002, 298) ISO 9001 certification is frequently used merely as a marketing tool to attract customers. Other common reasons for seeking quality certification are the belief that it improves efficiency and productivity, as well as produces higher-grade products. (Taylor 1995 according to Poksinska et al. 2002, 298) The different benefits of quality certification are summarized in Table 1 below.

TABLE 1. Most commonly stated ISO 9001 certification benefits. (Sampaio et al. 2008)

External benefits	Internal benefits
• Access to new markets • Corporate image improvement • Market share improvement • ISO certification as a marketing tool • Customer relationship improvements • Customer satisfaction • Customer communication improvements	• Improvements in productivity • Product defect rate decreases • Improvements in quality awareness • Better definitions of staff responsibilities • Improvements in delivery times • Internal organisation improvements • Nonconformities decrease • Customers' complaints decrease • Internal communication improvements • Product quality improvement • Competitive advantage improvement • Personnel motivation

Quality management systems

Quality management system can be defined as a steering mechanism, or as a management system to maintain and manage the overall business. It is also referred to as the memory of an organization or simply as a set of process descriptions. Important parts of a quality management system are to evaluate the present operation of a business: why and how things are done. Subsequently those procedures need to be documented, and their results recorded, which subsequently proves those procedures have been executed. (Moisio 2011, 10)

Quality management system can also be seen as a structure, through which business management can reflect their will systematically throughout the organization. The goals of quality management systems might be, for instance, to create systematic operations for controlling and monitoring purposes, to ensure customer satisfaction, to ensure high and stable quality of products, services and processes, to improve the productivity of labor and create cohesive practices, to support the staff by promoting training and coaching, to help the management with their development efforts, as well as to document the approved procedures (Lecklin 2006, 29-30; SFS 2011)

A functioning quality management system benefits the every-day business routines in many ways; first, the repetitive work tasks can be done similarly each time, because they are not dependent on people or time. Second, everybody in the company knows the customers and their needs. This is because customer complaints are being collected, responded to and systematically documented, which gives the possibility to learn from mistakes. Third, there are specific objectives for everybody and they receive feedback for their performance. Fourth, all the necessary tasks are being provided with instructions that are easily accessible and the personnel knows how to apply them. Finally, the past events can be tracked down and there are clear and identified procedures to handle situations when problems or deviations occur. (Moisio 3/2011, 17)

There are no common standards for the structure of a quality management system as long as it suites the needs of an organization. However, often a multilevel model is used as a guiding base structure. (Lecklin 2006, 31)

The structure and the content of a quality management model can be seen in Figure 6. The figure helps to analyze and describe the main content of quality management system in general. The top level of the pyramid, the steering model, is often gathered together and compiled into a quality handbook. The second level is the cooperation model pinpointing that all of the companies' operations are seen as processes, and the most important processes are described in more detail with the help of process flowcharts. Finally, the third level, referred to as the action model, contains all the resources of a firm. (Moisio 3/2011, 18)
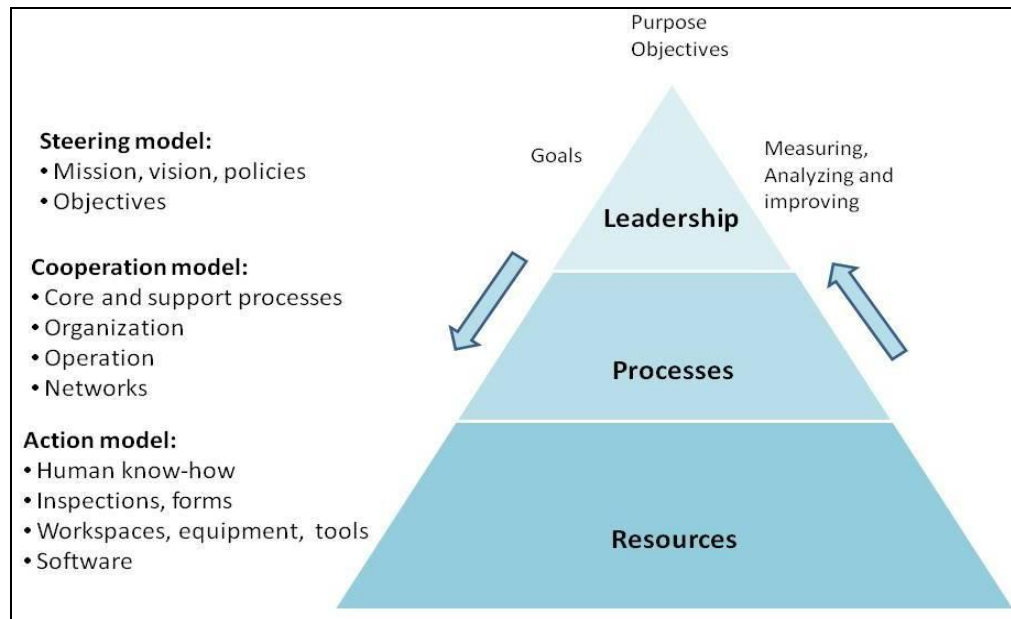
FIGURE 6. Quality management system structure example (Moisio 3/2011, 18. Translated by the author)

Compiling a quality handbook is not mandatory, but in practice, it is a fundamental part of a quality management system. Moreover, also the ISO 9000 quality standard requires that companies should compile their own quality handbook that would match the requirements of the standard. The quality handbook includes a short introduction to the company, the company's main values, as well as their quality strategies and quality policies. The quality handbook, according to the ISO standard, ought to include the procedures and guidelines regarding the company's quality management system. Also, the structure and methods of documentation should be defined in this handbook. (Lecklin 2006, 31-32)

The standard requires that companies should have a well documented and easily maintained quality management system, which utilizes a quality handbook as its base. There are no strict rules or requirements for the procedures themselves, which ensures flexibility and applicability. However, a good quality handbook is workable and can be used as practical tool. This feature can be further enhanced if the handbook is made into an electronic form so that everybody in the business can access it from their own work stations. (EN ISO 9000:2001, 8)

Both Lecklin (2006, 33) and Savonen & Hölttä (1997, 19) point out that quality management systems have their own pitfalls: they can easily become merely a set of rules that increase bureaucracy and restrict daily operations, and which with all the required updates only increase the amount of work in a company without bringing any extra-value. The effort put into quality audits and monitoring might be time consuming and as a result only increase costs. The poor use of quality management systems might lead to frustration among the personnel, decrease the level of motivation, and might even change the general opinions about quality work into negative and involuntary direction.

However, a well planned and used quality management system can be a strong tool for the upper management in their effort to share strategies and plans throughout the organization in an organized manner. It can also facilitate management and planning, as well as the execution and monitoring of all the operations in a company. (Finnish standards association 1997, 12)

3   PROCESS IMPROVEMENT MANAGEMENT

3.1   Process based thinking

A series of procedures are always needed in order to create an output. These series of actions are referred to as processes. In process-based thinking, the operations of a company are seen as processes, and the goal of these processes is a high-quality output and a satisfied customer. Process-based thinking is about understanding how single, separate procedures affect the chain of activities that create an output. Process-based thinking is about understanding the everyday cause-effect relationships within an organization, estimating whether the final outputs meet the requirements of the customers, and whether the outputs generate extra value for the business and the customers alike. (Savonen & Hölttä 1997, 89; Laamanen 2008, 51; Lecklin 2006, 135) In Figure 7 the nature of a basic business process is presented.
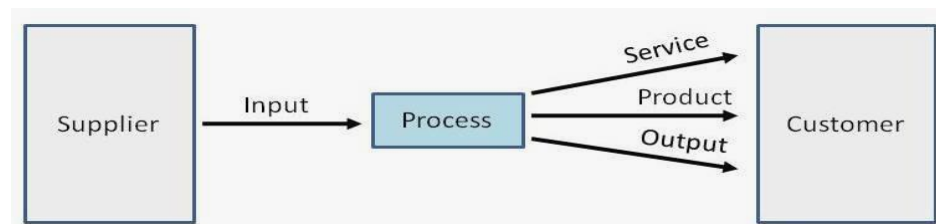
FIGURE 7. Process is a series of actions and resources (Laamanen 2003, 20-21. Translated by the author)

Process-based thinking is gaining popularity as achieving good result is increasingly important in any company. Often good results are seen as an indicator of a company doing well. However, according to Soin, mere good results are a lagging indicator of performance. Companies need to be able to predict good results and hence process-based thinking is seen as a solution, because well-managed, monitored and measured processes can become leading indicators that give predictable results. (Soin 1998, 163)

3.2   Process maturity and development

Before developing processes, understanding the maturity levels of processes is needed. These levels describe the different stages or starting points for any process development work.
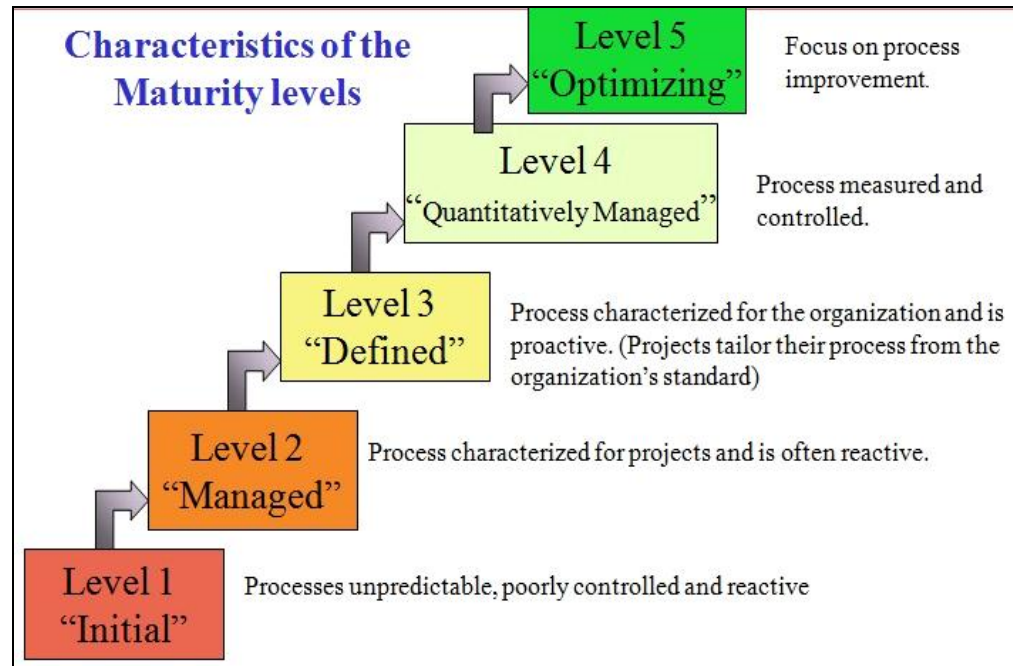
FIGURE 7. Characteristics of process maturity levels (Hickman 2009)

Figure 8 illustrates the characteristics of different process maturity levels. The processes on the first level are not functioning at all or do not fulfill the set requirements. Developed further, the second level processes can be managed and are repeatable. This means that the work flow can be executed according to the plans, the earlier successes can be repeated, the set requirements are fulfilled, and the personnel is capable for doing the work they perform. The third level processes are already defined and stabilized. This has been done by describing and identifying processes in detail. Also, the performance and results are well maintained in processes on this level, and the processes are speed up by solving problems and by other corrective procedures. The fourth level processes are identified as predictable, because they are measured and the results are used for improvement. Finally, the highest level processes are already optimizable. This means that process information is collected and analyzed, the processes are evaluated and

new innovations and technologies are used to optimize the processes. (Moisio 9/2010, 5)
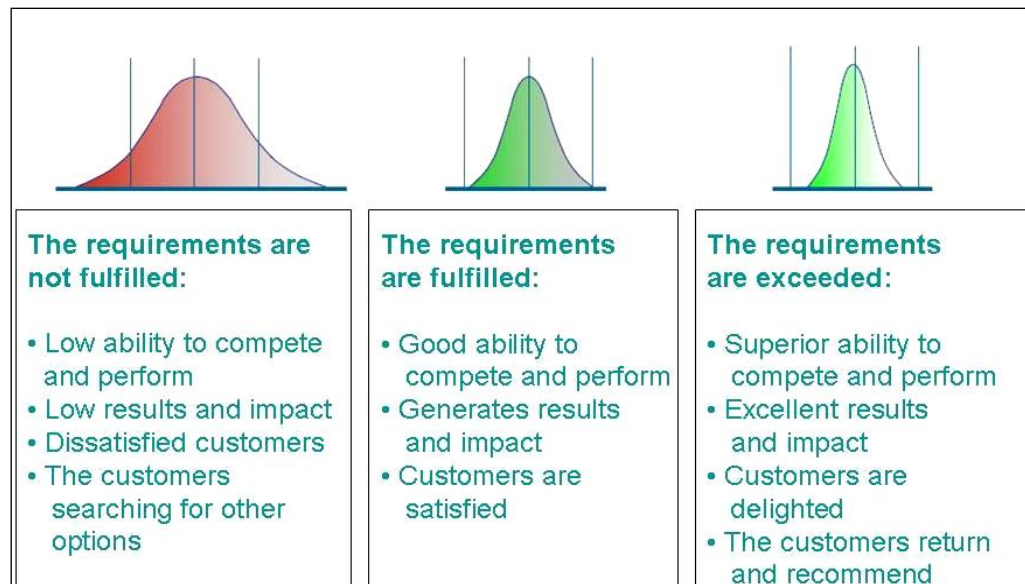
FIGURE 9. Process development results in better processes (Moisio 9/2010, 7. Translated by the author)

Figure 9 illustrates how processes improve through process development. The processes that are not fulfilling requirements, or i.e. the low maturity level processes, can be improved further into high maturity level processes that can be optimized. Moisio continues by stating that process development benefits businesses in many ways: reduces process costs, decreases defects and deviations, shortens lead times and amount of unfinished work, cuts the time and money spent on training, reduces support requests, decreases the number of customer complaints, and improves predictability (Moisio 9/2010, 6-7)

3.3   Process improvement

Businesses are developed by regenerating those business processes that create the outputs or products of a company. Lecklin (2006, 134) introduces a 3-phase development model for improving processes in a systematic way.
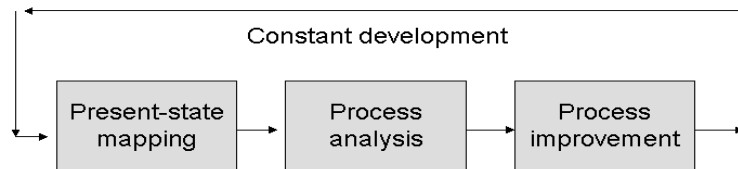
FIGURE 10. Process development (Lecklin 2006, 134. Translated by the author)

Figure 10 illustrates the three steps of process development. Present state mapping is the first step of any development projects: it is important to know the present situation thoroughly before a proper direction can be identified. Process analysis step includes solving problems within a process, analyzing quality costs, benchmarking comparisons, selecting improvement tools, selecting measurements as well as assessing different development options. Finally, the process improvement step draws an improvement plan by which the process is to be developed with. (Lecklin 2006, 134)
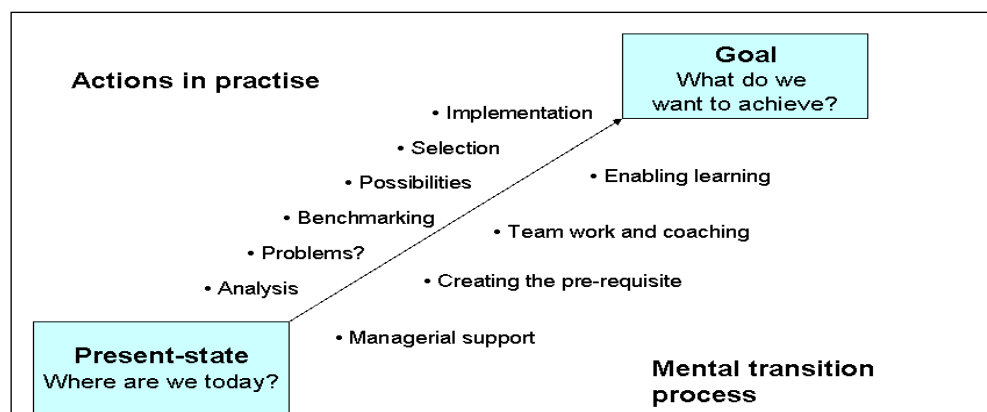
FIGURE 11. Process development process (Lecklin, 2006, 135. Translated by the author)

Figure 11 summates the development process and illustrates the necessary resources and steps to improve the process present-state into the desired state.

Present state mapping

In order to develop a process, it is necessary to know its present situation. The main tasks of this mapping phase are organizing the process work, compiling process descriptions and process flow charts, as well as assessing the functionality of the process. Present-state mapping is an important part of building a high-quality management system. Furthermore, developing processes is easier, if it is done in an organized way, and certain issues defined already in the beginning. Before starting to map the present-sate of a process, the most important processes should be identified, named and placed on a process map showing their inter-connections. Furthermore, a process owner is to be named and the responsibilities divided among the process team. (Lecklin 2006, 134-136)

Burlton (2001) calls present-state mapping as "the understand phase", because in this phase the companies are trying to gain an understanding of the current situation, so as to create a baseline for change. In this phase, a company documents and validates its current situation and pinpoints its improvement priorities. This phase, however, does not have to give perfect knowledge, but just enough to be able to move into creating solutions. (Burlton 2001, 150) Laamanen & Tinnilä add that this phase is important for an organization to understand the activities that are critical in creating value. As a result of well mapped process, the customer needs are better understood within an organization, and therefore their impact on development decisions increase. This, subsequently, results in better products and services that create value for the customers. (Laamanen & Tinnilä, 2009, 52-53)

3-page process modeling technique

The basis for process modeling is that the management of an organization has identified processes and their responsible process owners. These processes should also be illustrated as a process map. The structure of a process modeling technique includes different blank forms that are helpful in gathering information: process basic information- form, process explanation page- form, process cover page-form and the process assessment- form. Also, the process flowchart is an important part

of this technique. A process modeled with the 3-page technique includes the basic information of the process gathered on a process cover page, a process flowchart, as well as a process explanation page that deals with the different process steps in more detail. Figure 12 below illustrates how a selected process can be modeled and assessed with the process team and other people involved.

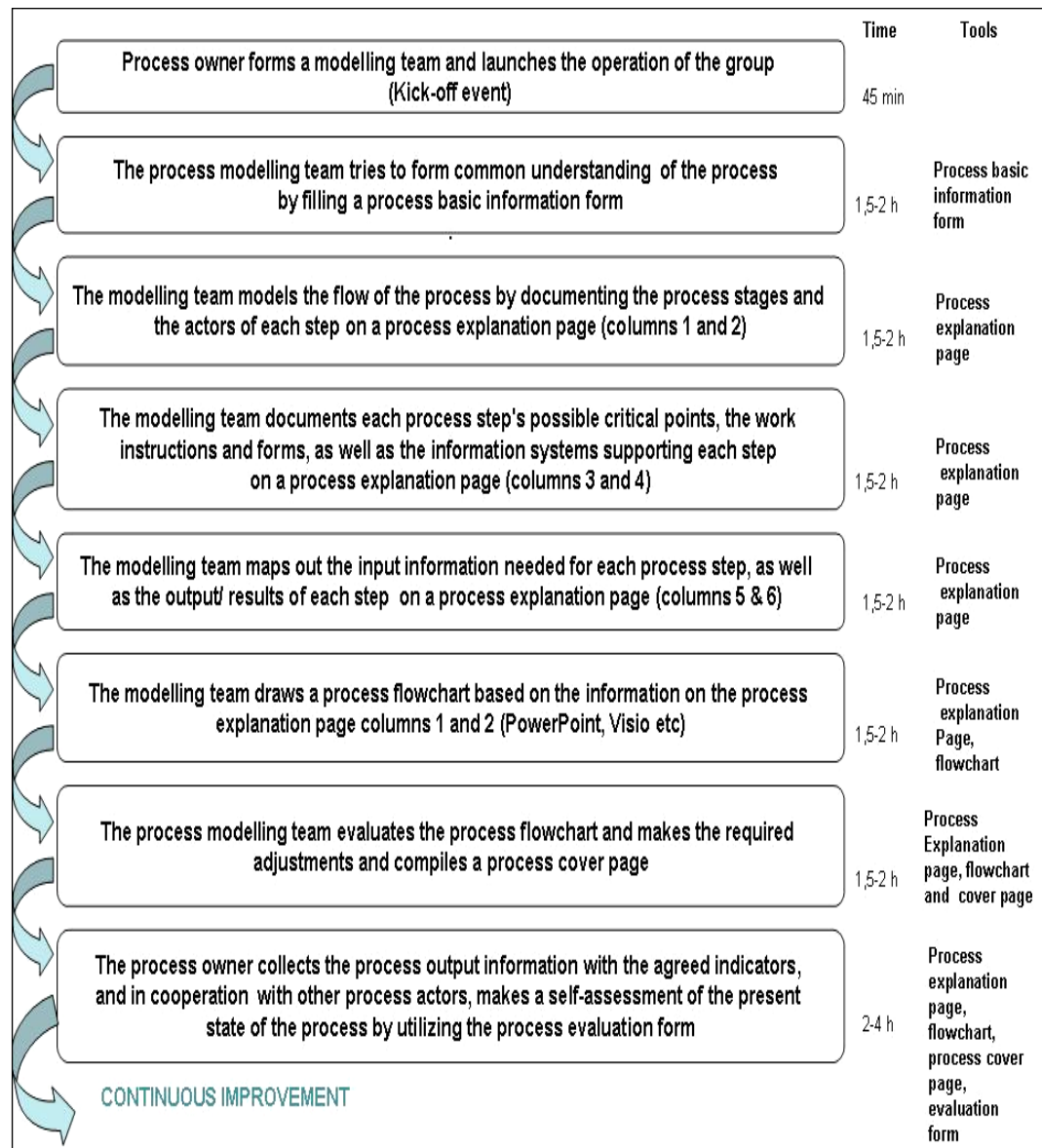|	Time	Tools
Process owner forms a modelling team and launches the operation of the group (Kick-off event)	45 min	
The process modelling team tries to form common understanding of the process by filling a process basic information form	1,5-2 h	Process basic information form
The modelling team models the flow of the process by documenting the process stages and the actors of each step on a process explanation page (columns 1 and 2)	1,5-2 h	Process explanation page
The modelling team documents each process step's possible critical points, the work instructions and forms, as well as the information systems supporting each step on a process explanation page (columns 3 and 4)	1,5-2 h	Process explanation page
The modelling team maps out the input information needed for each process step, as well as the output/ results of each step on a process explanation page (columns 5 & 6)	1,5-2 h	Process explanation page
The modelling team draws a process flowchart based on the information on the process explanation page columns 1 and 2 (PowerPoint, Visio etc)	1,5-2 h	Process explanation Page, flowchart
The process modelling team evaluates the process flowchart and makes the required adjustments and compiles a process cover page	1,5-2 h	Process Explanation page, flowchart and cover page
The process owner collects the process output information with the agreed indicators, and in cooperation with other process actors, makes a self-assessment of the present state of the process by utilizing the process evaluation form	2-4 h	Process explanation page, flowchart, process cover page, evaluation form

CONTINUOUS IMPROVEMENT

FIGURE 12. Process modeling and assessment phases (Savonen/ Tykes 2010)

Process flowchart

A process flowchart is drawn when the flow of a process is to be illustrated in detail. A process flowchart illustrates the different phases of a process, as well as the people and functions involved with the process. The purpose of a flowchart is to exemplify the process description.
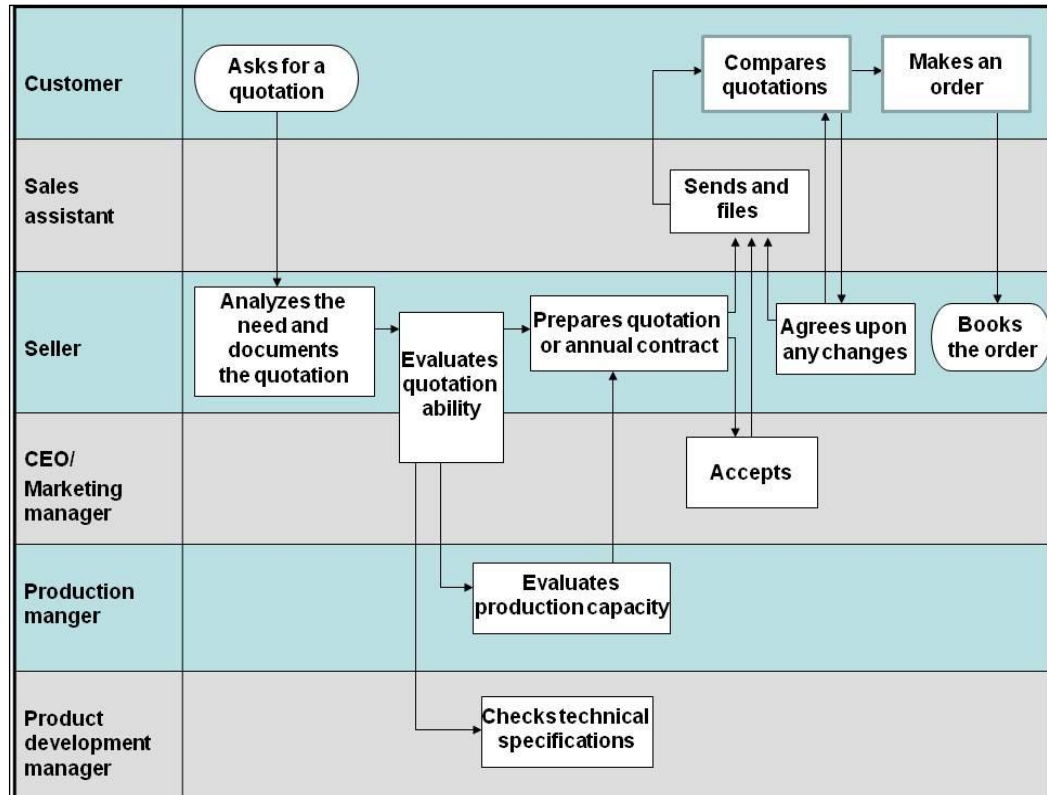
FIGURE 13. An example of a quotation process flowchart (Laamanen 2008, 162)

In Figure 13, an example of a quotation process flowchart is illustrated. The parties involved with the process are marked in the left corner in order of appearance. The tasks of the process are marked in the right order next to the person responsible for the process step. The quotation process begins from the top left corner, moving on to the right, and ending to the submittal of the quotation. If there are several participants involved with a particular process step, then that step is marked next to all of them. The person in charge of a certain step can also be marked with a specific color. The customer is drawn on top, because those moments involving the customer are always critical, and therefore should be easily

detected from the process flowchart. This approach emphasizes the importance of the customer, which potentially increases the company's image in the eyes of the customer. (Laamanen & Tinnilä, 2009, 97; Laamanen 2008, 161)

It is of great importance to mutually agree upon the proper process description techniques, because if people speak different languages, it is difficult to understand one another. (Laamanen, 2003, 79) Figure 14 below illustrates the most commonly used and acknowledged process flow chart symbols.
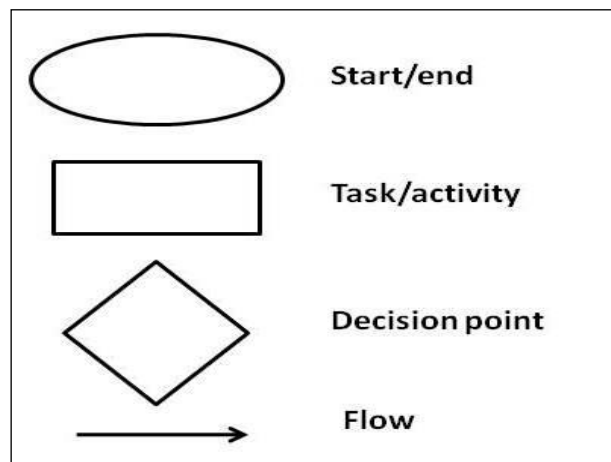
FIGURE 14. Simple flow chart symbols. (Peppard & Rowland 1995, 171)

For better readability, the process flowchart should be fitted on a single page. With a single-page length the number of tasks within a process usually amounts from ten to twenty. Only the main tasks and phases should be selected and drawn on the process flowchart, and the possible deviations described in the work instructions. This is done to ensure that the flowchart remains as simple as possible. Furthermore, drawing up a clear process flowchart is important, because it is often the first step in improving processes, and is usually followed by process analysis. (Laamanen, 2003, 79)

Improving processes with Lean tools

Lean thinking is a management philosophy that focuses on the elimination of different kinds of wastes from processes. This is believed to help increase customer satisfaction and overall quality, as well as to minimize costs and lead times. Lean thinking derives from the success story of the Toyota Production System (TPS) in Japan. Lean thinking is about recognizing what creates extra value from the customer's perspective, identifying and improving value streams, letting the customer pull value from the processes, identifying the flow of materials and information, and finally, practicing visualization in all operations. In short, the shorter the lead times of a process, the leaner the process. (Lean enterprise institute 2011; Moisio 3/2011, 3)

According to Liker (2010, 7) the Toyota Production System is a unique approach to manufacturing and a foundation for a large portion of the Lean movement that dominates, along with Six Sigma, the trends of industrial manufacturing today. Elimination of waste is the core idea of Lean methodology, which originally stems from the Toyota's Production System. Toyota has identified seven wastes in business and manufacturing processes that do not generate extra value. These wastes are over-production, waiting, unnecessary transportation, incorrect processing, unnecessary inventory, unnecessary movement, and defects. Liker also includes an eighth waste type, which is ignorance or miss-utilization of personnel's creativity by not integrating them into the process or not listening to them. (Liker 2010, 28-9)

There are numerous other issues causing waste in processes as well: long distances, low maintenance, poor working methods, lack of training, poor management skills and decision making, unreliable indicators, departmental interface problems, excessive control, absence of capable substitutes, un-even workload, poor cooperation skills, as well as unclear roles and responsibilities. (Moisio 3/2011, 66)
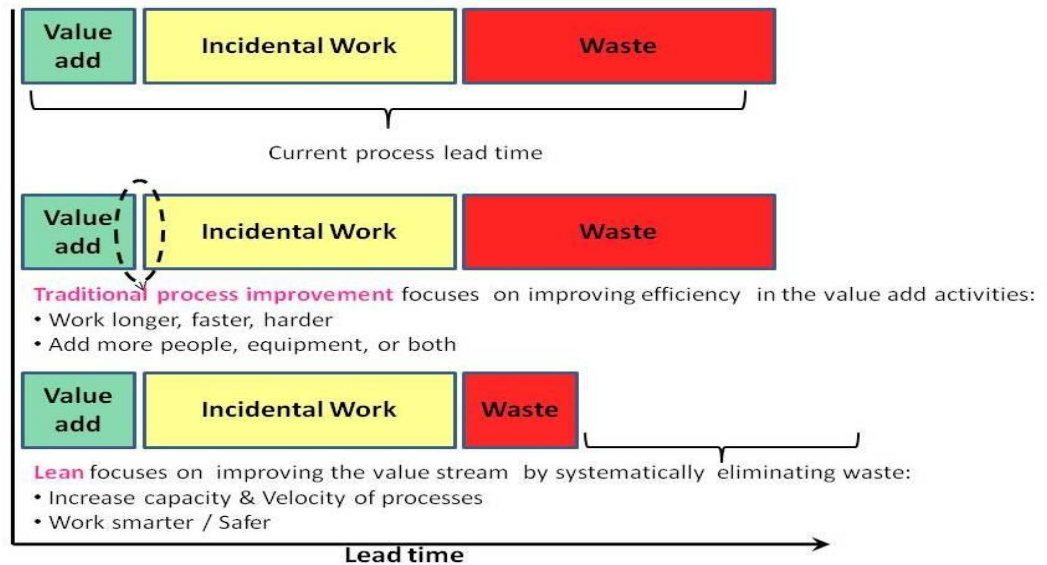
FIGURE 15. Lean versus typical process improvement methods (Moisio 2010, 54)

Like illustrated in Figure 15, lean improvement method brings more depth to the traditional process improvement method. The traditional process development focuses on local efficiencies and their identification. This may result in substantial improvements regarding that specific process step, but may have only little effect on the overall value stream. In the lean improvement method, instead, much of the development is created by eliminating those steps that do not generate extra value, and also the time that is creating extra-value is reduced. (Liker 2010, 31)

The Toyota Production System, and subsequently Lean methodology, has also introduced a methodology known as 5S, which is a helpful tool for analyzing the processes running on a workplace and is used to create an organized, clean and effective work place. In Figure 16, the stages of 5S, Sort, Simplify, Sweep, Standardize, and Sustain, are illustrated. The first one, *Sort*, requires examining the production environment of the service: which equipment, machinery, systems, information or database are needed most often, and which are needed rarely. It is also important to identify unnecessary things that can be eliminated completely. Second, the *simplify* stage encourages to organize the service production environment, for example, the work space, equipment, information, applications, registers, materials, systems, database, and archives. They should be organized in such a way that the service production flows efficiently and rapidly without obstacles

or delays. This is the creative phase of the 5S, and therefore visualization is encouraged in the Simplify phase. (Liker 2010, 151; Michalska & Szewieczek 2007)

FIGURE 16. The phases of 5S methodology (Moisio 2010, 53. Translated by the author)

Moving on in Figure 16; the third step, the *sweep* phase is about agreeing on the procedures, with which everybody can support and maintain the service production environment smooth and undisturbed. This can be done by deciding, for instance, the state the process needs to be left in before leaving work. The *standardize* phase is examining how the first three steps can be integrated to the whole organization, because not all people can be involved in the creative phase. This phase ensures that other people become involved, for instance, through training. Finally, the *sustain* phase tries to find out how the improved service production environment can be maintained and sustained, for instance by motivation, inspiration, auditing, managerial example or other similar methods. (Michalska & Szewieczek 2007)

Liker (2010, 151), however, points out that the original 5S, the Toyota's method, is not just about organizing and re-labelling materials, tools, and waste with the 5S so as to create a clean and shiny work place. At its best, the 5S can function as a tool that helps to visualize problems and hence be used a part of the visual steering mechanism of Lean systems.

Process improvement versus process re-engineering

Sometimes mere process improvement is not enough, and the process requires a complete change. This is where it needs to be decided whether to improve the old process, or to create a completely new process from the beginning. This is where the possibility of process re-engineering comes along. Process re-engineering does not try to fix an old process that is not functioning properly and then leaving its basic structures intact. It means starting over. Reengineering a process requires abandoning long-established procedures and looking for fresh new ways of delivering the output and value to the customer. Re-engineering gives space for new innovation as it involves going back to the beginning and inventing better ways of working. (Hammer & Champy 2001, 34)

Nyman & Silén (1995, 30) also describe process reengineering as a fundamental approach that requires re-planning of tasks so that they appear in a logical order thus reducing their amount. The tasks are done in the right place, at the time it is reasonable and by those people that, logically, are best equipped for the task. The goal of process re-engineering is to gain improvements in efficiency, lead times, quality, as well as customer satisfaction. In larger scale development schemes also the organization, their job descriptions, corporate culture, IT systems and the management infrastructure are re-designed systematically.

Both Nyman & Silén (1995) and Hammer and Champy (2001) discuss the relationship between Business Process Reengineering and Total Quality Management, as they both encourage focusing on processes. According to Hammer & Champy (2001, 239) reengineering and TQM are neither identical nor in conflict, but are complementary concepts. Both concepts share a focus on customers and processes, but they do have some important differences. For instance, reengineering is a far more fast-paced than TQM, which aims for the same direction, but with slower steps. Moreover, reengineering aims for making a radical change, whereas TQM involves subtle adjustments that are continuous in nature.
Nyman & Silén (1995, 28) illustrate the fundamental differences between process re-engineering and continuous process improvement encouraged by Total Quality Management in Table 2.

TABLE 2. Basic differences between BPR and TQM methods (Nyman & Silén 1995, 28. Translated by the author)

	BPR	TQM
Extent of change:	Radical	Small steps, continuous
Development starting point:	"Clean slate"	Existing processes
Precision of change:	Done once	Continuous
Development target:	Overall processes	Limited, departmental
Objectives:	Radical change (once)	Small, multiple, cumulative
Role of IT:	Essential	Random
Number of participants:	Whole organization	Minimal

Both Nyman & Silén (1995, 28) and Hammer & Champy (2001, 239) point out that the development concepts BPR and TQM do not have to exclude each other, because both are needed. The authors see that process development can be done in relays, in which the more radical changes and reengineering schemes (BPR) are always followed by routine-like and continuous quality development efforts (TQM).

The outcomes of reengineered processes could be anything, because they have been designed freely and innovatively. The reengineered processes, however, do have some identified common characteristics. First of all, often the reengineered processes have several jobs combined into one and the process steps are performed in a natural order. Work is performed where it makes the most sense, which also leads to reductions in the checking and controlling procedures. Another interesting characteristic is that the workers are able to make decisions on their own not having to go up to the managerial level for an answer. The workers are therefore able to do that portion of the job themselves that was formerly performed by the managers. Important also, often the reengineered processes leave standardization behind and have multiple versions for the same process. In the past, traditional processes were intended to provide mass production for mass

markets. But today, in a world of diverse and constantly changing markets, businesses need multiple versions of the same process, each one tuned to the requirements of the different markets, situations and customers. (Hammer & Champy 2001, 54-61)

3.4   Process management

Process management is identifying and monitoring processes, ensuring them meeting their targets, discovering deviations, and preventing their recurrence. In other words, process management is an approach by which organizations operate and are managed with the help of processes. Process management also strives towards improving not only the results, but also the processes, which create value for the customer. (Soin 1998, 164; Lecklin 2006, 126, Laamanen & Tinnilä 2009, 10)
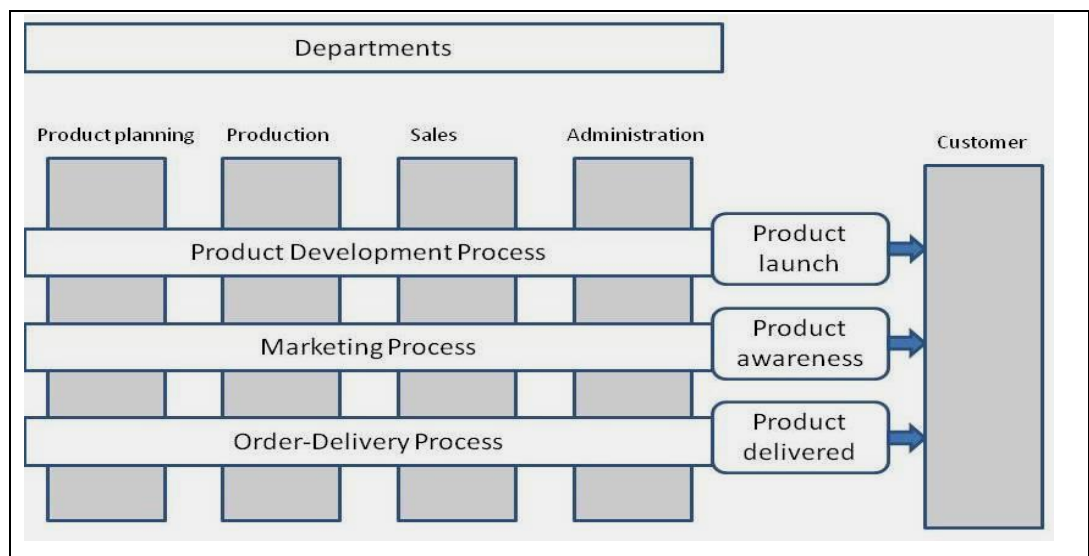
FIGURE 17. Process management (Lecklin 2006, 126. Translated by the author)

In Figure 17, an example of process management is illustrated. The figure depicts three example key processes of a company: product development, marketing and order-delivery process. Also, the functional organization, in which the different departments do not interact, is presented in the figure. However, pure process management requires letting go of this type of organization. The goal is to create a top management that consists of all the key process owners. Another goal in proc-

ess management is to see business operations as a hierarchal process structure, in which different processes form a close network, which constantly interact with each other. (Lecklin 2006, 126-7)

Soin (1998, 163) views processes as activities to which businesses add value, and which therefore become parts of a value chain. Furthermore, if this value chain is managed well, it will result in improved customer satisfaction, customer loyalty, and bigger revenue. In order to improve the quality of a process output, both the value chain and the processes within that value chain must be improved. Soin states that people and managers in companies come and go, but processes stay. Hence there must be a system to ensure that processes are well managed and not too dependent on people.

The benefit of process management is the cohesion between an organization and its practical operations. It gives the process owners better possibilities to run and develop their operation as a whole. What is more, communication between the different process operators can be enhanced and common goals made more known. According to Lecklin, however, pure process management is difficult to implement and is not suitable for all operations. It is the easiest to implement on such processes that always have a clear beginning, a certain order in the chain of activities, as well as a clear outcome, for instance, like in an order-delivery process. However, not all processes go forward in a logical order, which means the tasks need to be done simultaneously. These are complex situations for which businesses need to come up with alternative solutions. (Lecklin 2006, 128-129)

4 CUSTOMER ORIENTATION AND CUSTOMER FEEDBACK AS MEANS FOR QUALITY AND PROCESS IMPROVEMENT

4.1 Listening to the customer

Organizations that are serious about quality and customers must take a systematic approach so as to ensure customer-obsessed operations. Well trained personnel are a good start, but they should also have the right tools. There are three necessities identified that will foster customer orientation: creating a system to manage and resolve customer complaints, organizing customer satisfaction surveys and their follow-up, and capturing the customer's voice with the help of a systematic process. (Soin 1998, 13)

Listening to the customer's voice is essential in any business. Theodore Levitt well summarizes that idea: "*One of the strongest signs of a bad or declining relationship is the absence of complaints from the customer. Nobody is ever that satisfied, especially not over an extended period of time. The customer is either not being candid or not being contacted*". (Theodore Levitt according to Soin 1998, 13). Companies often treat customer service as a necessary evil, but when it comes to customers, it is a poor approach. When a company does not hear anything, positive or negative, they will never know how they could improve customer loyalty. (Kaufman 2011). Soin shares this idea and lists the high costs of losing a customer in Table 5.

TABLE 5. High costs of losing a customer (Soin 1998, 14)

❖ For every customer who bothers to complain, there are 26 others agreeing but remaining silent
❖ The average dissatisfied customer will tell 8 to 16 people about it
❖ Out of all the unhappy customers, 91 percent will never purchase from that company again
❖ If a company makes an effort to make up the customer's complaints, 82 to 95 percent of them will continue their customer relationship
❖ It costs five times as much to attract a single new customer as it costs to keep an old one

Customer satisfaction is one of the central indicators when analyzing the future success of an organization. Tracking down customer satisfaction, however, requires systematic and continuous measurement efforts. Listening to the customers needs requires both customer satisfaction surveys, as well as a so called direct feedback system. Both of them are fundamental in discovering customer satisfaction, and neither alone is adequate enough. (Rope & Pöllänen 1998, 57)

CUSTOMER FEEDBACK LISTENING SYSTEM

DIRECT FEEDBACK SYSTEM

• Directly collected feedback regarding customer satisfaction

CUSTOMER SATISFACTION SURVEYS

• Research methods that collect customer satisfaction information

Marketing system

Development and management system
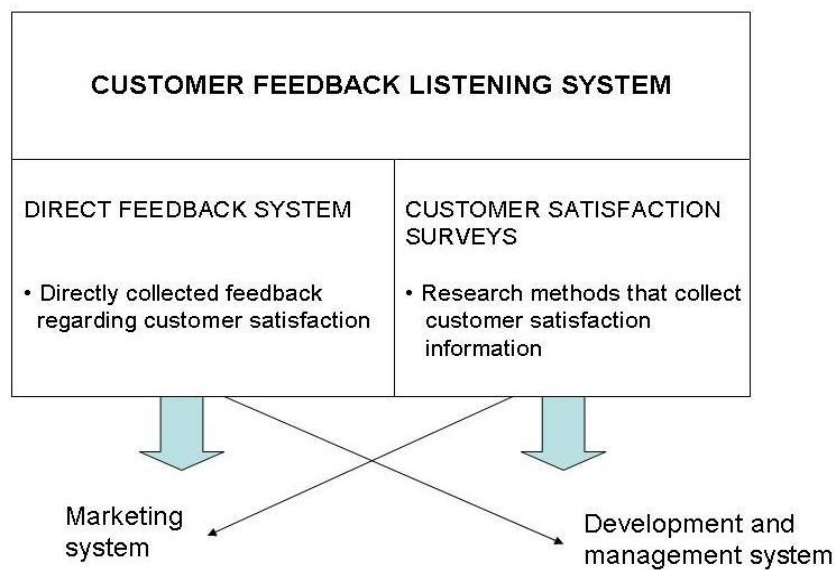
FIGURE 18. Factors of a customer feedback listening system (Rope & Pöllänen 1998, 57. Translated by the author)

As illustrated in Figure 18, the direct feedback system gives impulses primarily to the marketing system, and only secondly to the development and management system, whereas the customer feedback surveys' impulses target the two systems the opposite way. Furthermore, both of the methods give information about customer satisfaction in slightly different ways, and hence they should be treated as complimentary systems and used in combination. (Rope & Pöllänen 1998, 57)

4.2   Designing a system to manage customer feedback that is in coherence with the ISO 9001:2008 standard

All companies are constantly receiving, and will always receive, customer complaints. Some companies simply ignore these complaints, whereas other organizations with well-trained personnel understand the importance of responding to the complaints. Responding, however, is not yet enough. Organizations must keep a record of the complaints: their frequency, intensity, location and so on. This must be followed with analysis of the complaints in order to eliminate the root cause of each complaint. (Soin 1998, 15) To find out the opinions of the customers does not have to be expensive or difficult, it only has to be effective and bring out the truth. (Pesonen 2007, 42)
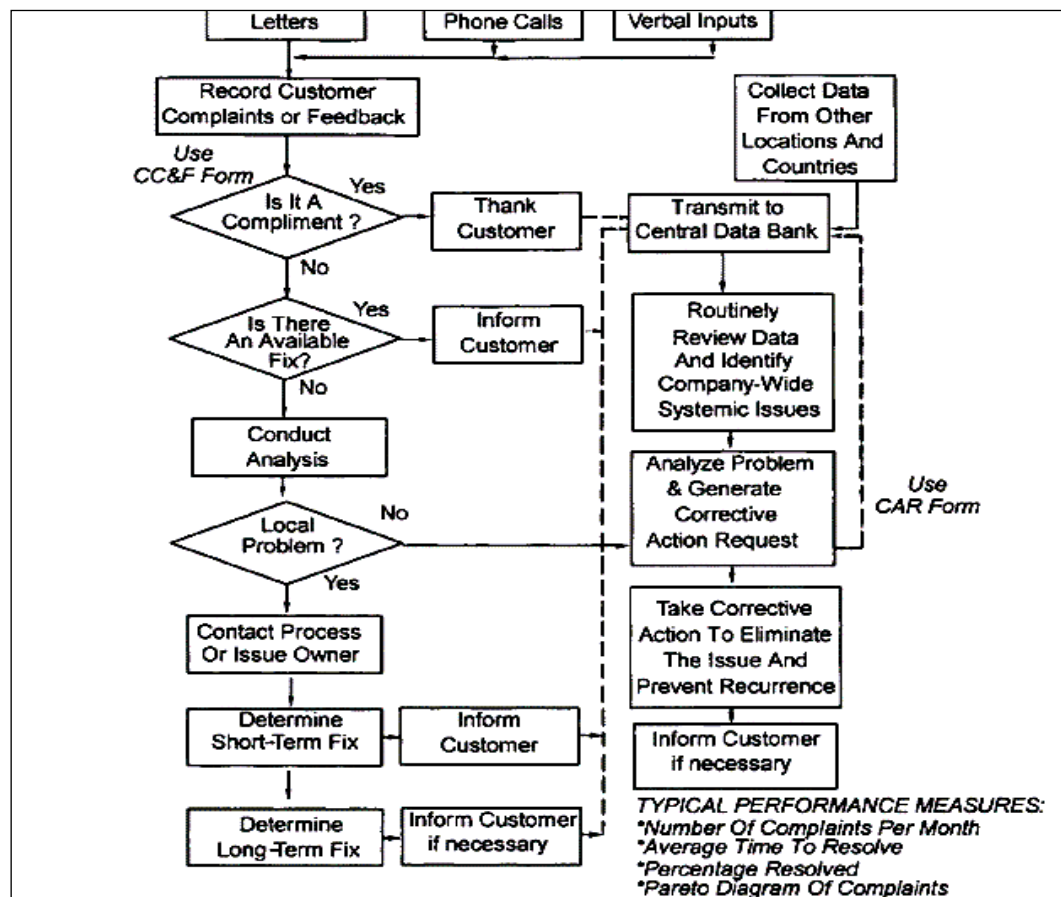

FIGURE 19. An example of a customer feedback system (Soin 1998, 16)

In Figure 19, an example of a customer feedback system is illustrated. In the example, complaints are collected from all possible sources, after which the complaint goes through a quick analysis. All customers receive a response of some

sort. Issues are resolved locally, i.e. within an organization, or issues beyond the control of the local entity are resolved by the organization. Moreover, systematic issues are resolved on a regular basis and performance measures are being indentified and monitored. (Soin 1998, 16)

When planning a customer feedback system, the following issues need to be decided: how often customer satisfaction is measured, which customers will be included in the measurement, which areas are measured and what kind of measurement technique is utilized. All of the previous points affect the content of the feedback data, the preciseness of that data, and the nature of the collection method. However, it should be remembered that the customer feedback system is always a compromise that is based on the resources as well as the overall goals of the system. (Rope & Pöllänen 1998, 62-3)

ISO 9001 requirements for a customer feedback system

The International Organization for Standardization has drawn common principles regarding customers and customer feedback. However, these principals are applied according to the nature of an organization and not as strict rules. The principle one is customer orientation. Organizations are dependent of their customers, and hence should understand the present and the future needs of their customers, and fulfill and exceed those needs and expectations. (ISO 2011) The most important benefits of customer orientation are increased profits and market share, because companies are able to react faster and more flexibly to new market situations. Customer orientation also results in more effective use of organizational resources as well as improved customer loyalty, which leads to sustainable business relationships and recommendations. Customer orientation makes sure that customer needs and expectations are identified and understood, organizational goals are synchronized with the expectations of the customers, customer needs are communicated to the whole organization, customer satisfaction is measured and utilized, and customer relationships are managed systematically. (SFS 2011)

What does the ISO 9001 certificate actually require from a customer feedback system? First of all, customer feedback is part of a quality management system as it measures its functionality perceived by the customer. According to the ISO 9001:2008 standard, organizations should establish and maintain a quality management system and continuously improve it. Second, organizations shall identify the processes needed for the quality management system and choose the criteria and methods ensuring their effective operation and control. These processes should also be measured and analyzed, after which they are to be improved continuously. All of these suggestions are also applicable with the customer feedback process. (SFS EN ISO 9001 2008)

The ISO 9001:2008 standard also encourages the top management to focus on the customers by ensuring that customer requirements are identified in order to increase customer satisfaction. Also, the customer-related processes ought to be determined. Most importantly, as part of the measurements of the quality management system's performance, the organizations are encouraged to monitor information regarding customer perceptions as to whether the company has reached the customer requirements. In addition, the methods for gathering and utilizing this customer information should be determined. However, the methods can be various ranching from customer satisfaction surveys to dealer reports. (SFS EN ISO 9001 2008) This way the standard is rather flexible in nature and does not impose strict requirements for the customer feedback system. The fundamental requirement is that the perception of the customer is being listened to and used as a measurement and guide for the whole quality management system.

Recording customer feedback data

Data about the customers can be recorded on a paper form, or it can be typed into a computer-based form. It will not be easy to record the issue on paper or a computer database. Managers, sales representatives and other important players are busy and may only be able to phone in the customer's complaint. In this case, a busy clerical employee may solve the problem, but may only have time to write down a few words. Some of the more analytical employees, however, might insist

on recording a more detailed history of what happened. Therefore, a flexible system is needed. This system should provide easy ways of collecting inputs. These inputs can be taken, for instance, via telephone to a central voice mailbox, via an electronic mail system, directly to a complaint specialist, or by using a paper form. Moreover, also corrective-action requests (CAR) may be used when dealing with company-wide problems (See appendix 1). The form will be electronically transmitted to a central coordinator or a process owner for further analysis. If this process is done properly, the problem should never occur again. (Soin 1998, 18)

No matter what the information collection tool is, it must be accepted that you can never get feedback from all the customers. However, it has been noticed that the direct feedback system lowers the limit of giving feedback even with regard to the moderate disappointments and successes. Especially the feedback regarding the moderate disappointments is important, because it can be utilized in development and marketing activities. Moreover, when interpreting the customer feedback results, an important indicator is the number of those customers that have not answered at all or sent any feedback. This gives a rough estimate of the number of those customers that have not experienced significant disappointments or positive surprises. (Rope & Pöllänen 1998, 81)

4.3   Facilitating a customer feedback system

A customer complaint and feedback system always requires continuous facilitation and promotion, particularly during the first few years after its launch. This can be done, for instance, by promoting it during new employee training, promoting it at monthly department meetings, as well as by managerial example. (Soin 1998, 19)

The quality managers of companies must help to manage the whole customer feedback process. The quality manager can oversee the system, name a central coordinator, or help to resolve locally generated problems and issues independently. The quality manager should also take care that the organization records all complaints and monitors their status, analyzes the root causes of the complaints,

ensures sufficient routing of complaints to the responsible process owner, and requests follow-up if an employee, manager or entity is lazy to act. It is also his responsibility to inform corrective actions directly to the person, who reported the complaint, list all complaints and corrective actions as part of a monthly quality report, as well as compile Pareto diagrams of the complaints. The quality manager should also take care of reviewing the complaints, especially the distinguishing ones, forwarding the more demanding complaints to upper management, as well as ensuring that customers are informed of the progress of their complaints if necessary. (Soin 1998, 21)

According to Zairi (2000, 333) the most common reasons for organizations to fail in customer complaints handling are the lack of systematic approach to complaints handling, companies not recognizing the importance of customer feedback on a strategic level, the lack of systems and processes for logging in complaints and processing them, problems with measurement procedures, as well as the lagging comprehension over quality management and its related concepts. However, these challenges can be dealt with effective approach to complaints handling through innovation and creativity.

There are always two important issues to be covered when receiving customer complaints: the complaint should be handled purposefully with the customer, and the post mortem and the critique should be discussed only within the organization, not in front of the customer. Above all, complaining customers always have to be taken seriously. If a complaint is poorly handled, it may turn the situation from bad to worse: poor service and distastefully taken critique may damage the reputation of the company. Moreover, mishandling a complaint may drive the customer to purchase from a competitor, especially when the customer is not satisfied with the speed and quality of a formal reply. If complaints are received and handled well, it will potentially result in a deeper customer relationship: the customer starts trusting the organization more after his or her complaints have been taken seriously and that they have lead to improvement procedures within the organization. (Pesonen 2007, 48-9; Zairi 2000, 331)

5   CASE COMPANY: OY KAHA AB

5.1   Oy Kaha Ab briefly

Kaha Oy is an importer and wholesaler of automotive spare parts, accessories, tools and components for the Finnish vehicle industry. The company was founded in 1934 and is located in Vantaa, Finland. Kaha Oy has a well-known range of products from the world's leading automotive manufacturers. The product range consists of more than 70.000 items in stock, and they are sold through dealers and workshops around Finland. The turn over in 2010 was 82, 2 million Euros and the number of personnel approximately 140. (Kaha website and intranet 2011)

Kaha Oy is a part of the KGK Group, which is the leading automotive wholesaler in Scandinavia and Baltic countries. The group's total turnover reached almost 500 million in 2007. The parent company is a Swedish family-run company K.G. Knutsson Ab. In addition, Kaha Oy is a shareholder of ATR International AG. ATR (Auto Teile Ring) is a marketing and cooperation chain for independent spare part wholesalers and importers. The chain was founded in Germany in 1967, and internationalized its operations in 1999. (Kaha Oy, 2011)

Kaha Oy is a modern full-service wholesaler: high quality branded products, comprehensive product range, efficient logistics, versatile marketing, well-known and respected suppliers and active product and sales training to its partners. Kaha's product range consists of engine heaters for cars, boats, special vehicles and machines; alarm systems for cars, motor bikes and boats; roof racks and windows and ski boxes; car audio and navigation systems; brake parts, chassis parts, body parts, spare parts, exhaust system parts, fuel system parts, electrical parts and general service parts. Kaha also imports heating and cooling systems, air conditioning, chemicals, tools, test equipment, as well as components and systems for the vehicle industry. Kaha's brand range includes names like Defa, Webasto, Thule, Clarion, Bosch, Varta, VDO, Valeo, Dräger, Sonax and many other top brands. (Kaha Oy, 2011)
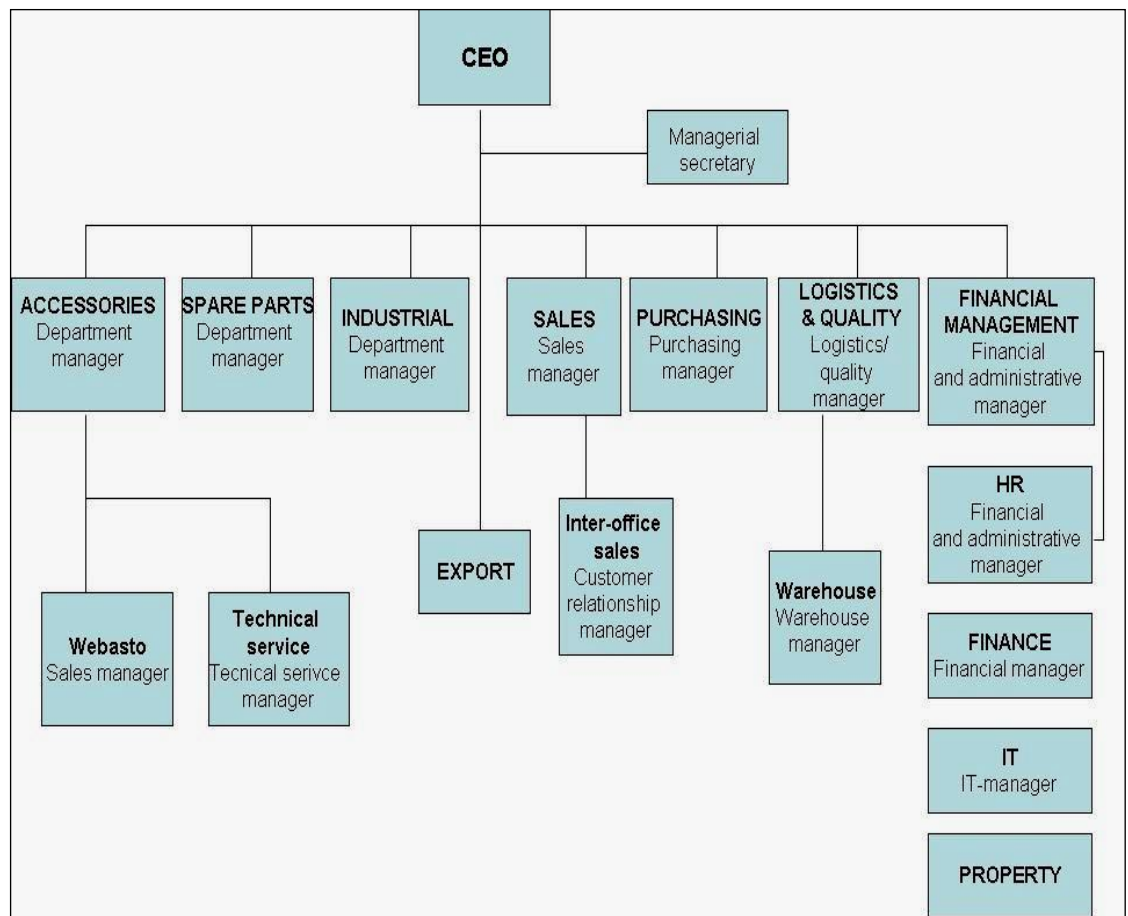
FIGURE 20. Kaha's organizational chart (Kaha Intranet 2010)

The organizational chart of Kaha Oy, in Figure 20, illustrates the hierarchy of re-
sponsibilities within the organization. Like illustrated on the organizational chart,
the CEO together with the executive group is responsible for spare parts', accesso-
ries' and vehicle industry's product groups, as well as sales, purchasing, logistics,
quality, finance and administrative departments. These departments are further
divided into different smaller sub-sections. The executive group consists of the
CEO and the department managers, who all together are responsible for Kaha's
strategy, governance as well as the whole operation of the company. (Kaha intra-
net 2010)

5.2   Kaha's quality management system overview

Kaha has grown significantly during the past few years. Therefore it was essential for Kaha to come up with common rules so as to control business operations and possible further growth. Thus, a comprehensive quality project was launched. The commissioner was aware that in the future customers would ask more and more about Kaha's way of operating in different situations. The goal of the quality project was to give better ability to respond to the questions of the customers. (Kaha Intranet 2010)

The goal of the quality project was to compile a short and practical description of the company's operations that would include operational steering, quality assurance and the vital processes. Moreover, this description should fulfill the requirements of the ISO 9001 standard. The quality management system was to be deployed and the personnel trained to use it. After launching the quality management system, systematic internal audits over operations were initiated. The goal was to receive a quality certificate for the operation as it was seen as a competitive edge and an image booster for the company. The high-quality image would subsequently improve the competiveness and overall quality in the firm. The goals of the quality project were fulfilled in 2010 when Kaha was granted with the ISO 9001:2008 quality certificate by Inspecta Finland. (Kaha Intranet 2010)

During the quality project, the quality policies of the commissioner were identified; In short, the long-term quality objective and vision of Kaha is to serve the needs of their customers, and to market, sell and deliver the products they import, as well as to develop services that guarantee customer satisfaction and profitability. Another vision of the company is to become the best cooperation partner for its clients and to serve their expectations better than the competitors. (Kaha Intranet 2010)

The executive group, i.e. the CEO, the finance director and the quality manager are responsible for maintaining the quality management system. They are also responsible for any development activities as well as for fulfilling the requirements of the quality standard. (Kaha Intranet 2010)

Kaha's quality management system

Kaha utilizes an online based quality management system. Kaha sees that their quality handbook should be available and easily accessible for everybody, and thus be used effortlessly in every-day work. Furthermore, and old-fashioned paper form quality handbook is always at risk of being forgotten. Also, updating a paper form handbook requires more work and effort. This is why Kaha has chosen to use an online-based integrated management system (see Figure 21), which includes their quality handbook. (Isotalo 2011)
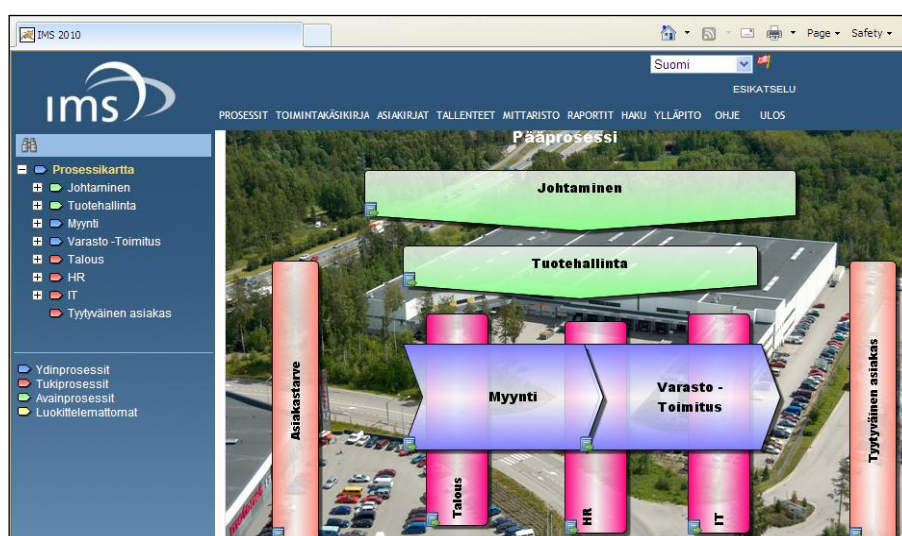
FIGURE 21. Preview of the IMS inter face (Kaha Oy, 2011)

IMS is a comprehensive, process-based and integrated management system, which is used with an online user interface. With the help of IMS, Kaha is able to combine all its process descriptions, instructions, data, feedback and indicators into one place, which supports business steering and decision making. Moreover, this system is easily accessible for everybody from their own work stations. The main task of the system is to increase the transparency of operations in the company as well as to provide everybody with proper instructions. The IMS system provides efficient methods for describing processes and managing documents in a way they can be easily found. Moreover, IMS provides easy-to-use customer feedback surveys and questionnaires, as well as an effective set of indicators by which results can be verified. It also includes operational handbook and commu-

nications section, in which Kaha may compile an overview of the whole management system. (IMS Business Solutions 2011; Kaha IMS 2011)

The quality management system of Kaha consists of all the process descriptions and instructions attached to the IMS software. The system fulfills the set requirements of the company's internal quality policies as well as the requirements of the ISO 9001:2008 standard. All of Kaha's processes are described and explained in the IMS software once they have been modeled. The IMS software also utilizes 3-page process modeling technique as its base structure, which enables the process modeling team to fill the 3-page technique's forms directly in the software, which makes it more convenient and the information easily accessible. Also, the process flowcharts can be directly drawn in the IMS program, and hence they are accessible for everybody and can be easily adjusted later. (Kaha IMS 2010)

Kaha's core and support processes

The process map of Kaha Oy includes the processes of the customer, as well as the main processes and the support processes of the organization. Only the key processes are shown on their process map.
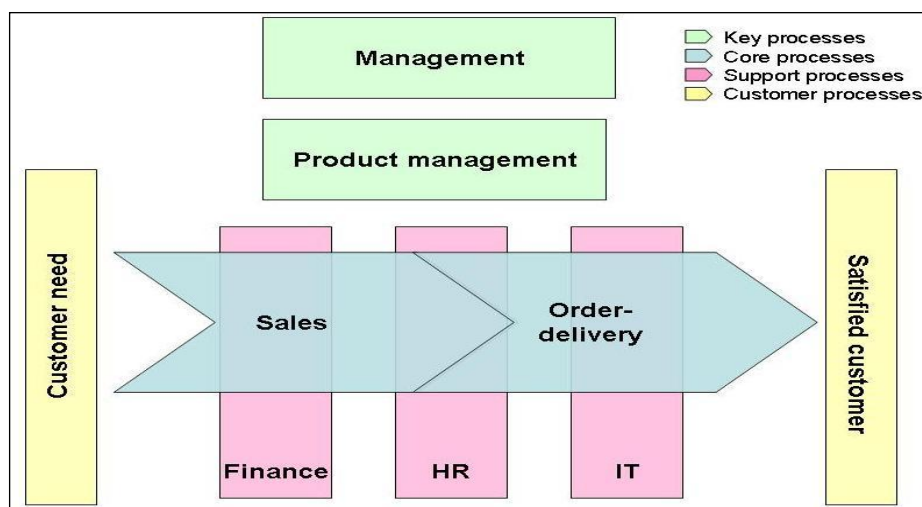
FIGURE 22. A process map of Kaha's main processes (Kaha IMS 2011)

In Figure 22, the most important core and support processes of Kaha Oy are illustrated as a process map. *The Management process* is logically located on the top, because it controls all the operations. *The product management process* is based on a predefined selection process, which the responsible product manager controls according to a predefined budget. *The sales process* functions as a link between the products and the customer. It supports the actions of the customer and benefits the overall trade. *The order-delivery process* is an important core process and fulfills the work initiated in the sales department. Subsequently, the products from the suppliers are forwarded and delivered to the resellers in bulk. (Kaha Quality handbook, IMS, 2011)

6 IMPROVING THE CUSTOMER FEEDBACK PROCESS AT KAHA OY

6.1 Process improvement project background, objectives and starting point

Kaha's quality work and efforts started in full motion when they were granted with the ISO 9001:2008 certificate. This launched the need to recognize, model and improve processes in general. Later it also became evident that Kaha was lacking a functional customer feedback system, which is encouraged and recommended both in quality management literature and the 9001:2008 standard. When looking for a thesis subject, the author turned to the quality director of the company and agreed upon the commissioned thesis project. This agreement benefited the thesis process, because the author as Kaha's own employee gave more detailed and comprehensive knowledge of the company, and also had a deepening impact on the empirical study methodologies employed, such as observation and interviews.

The main objective of the thesis and the improvement project was to recognize and model the present state situation of the customer feedback process at Kaha Oy. This would subsequently give further information and clues on how to improve the customer feedback process so that it would function better and benefit the whole organization. Furthermore, the improvements should be in coherence with the ISO 9000:2008 standard.

The author has worked for the case company, Kaha Oy, since July 2010, and hence the majority of the personnel, the company itself, and the business culture were already familiar in the beginning of the thesis project. This benefited the project in many ways and gave more depth to the study.

Starting point for the process improvement project

The starting point for the thesis project was generally rather good, because the case company, Kaha Oy, already employs functioning quality management procedures, and has an active quality team consisting of members genuinely interested in improving processes and the overall quality in the firm. However, quality operations and process modeling are still new phenomenon in the company, and hence there is still much work to be done regarding process management, even though process modeling should be seen as a continuous work that does not have a precise ending point.

The realization of Kaha lacking a customer feedback system was understood when studying the requirements and suggestions of the ISO 9001:2008 standard. Before this thesis project, there had not been much discussion about customer feedback in the firm. It was seen as something that was there, functioning in the background self-evidently, but which had never been structured or managed. This atmosphere had led to the situation that the customer feedback process at Kaha Oy had no clear structures. Hence, different departments of the firm had come up with their own different channels and methods, but these different views in the firm were not synchronized. In short, Kaha Oy did not have an operating customer feedback system, but it did have pieces of different methods conducted by different individuals.

The task to improve the unstructured and cluttered customer feedback situation was challenging, especially because the new improved system should be made to suit the majority of the organization, and the improvement suggestions constructed so that they take the numerous different operations, as well as the resources of the company into account. Moreover, the author did not have any experience with similar projects before, or with quality work in general. The thesis process was a self-learning experience starting from the beginning with no previous knowledge of the subject of the thesis. However, the support and the overall attitudes and interest of Kaha's quality team helped significantly in the making of this thesis.

6.2   The plan and methodology for conducting the process improvement project

The project was started by discussing the background and the overall objectives of the project with Kaha's quality director and the quality coordinator. The flow and the schedule of the project were roughly agreed, but no strict deadlines were made. It was estimated that the project would be finished in three to four months. This modeling and improvement project was not signed to a specific work group, but was left in the responsibility of the author. However, the quality team helped whenever it was necessary.

The project was to be made by utilizing a 3-page process modeling technique and according to the instruction related with the technique. In practice, this meant that the author of the thesis first formed a work group for this purpose. This work group consisted of the key operators of the process from both the warehouse and the office side. They were selected based on their expertise and know-how with relation to the process at hand.

There were four group meetings altogether organized by the author at Kaha Oy. The group consisted of people from both the warehouse side and the office side. These people were the two reclamation processors, the warehouse manager, the customer relationship manager, as well as the sales manager (process owner). Also, two members of Kaha's quality team were present: a quality coordinator and a product manager. Also the quality manager and the head of the quality team participated in some of the meetings.

The focus group interviews followed the pattern presented in chapter about quality improvement and 3-page technique (chapter 3.3), but the number of meetings was cut down to four meetings due to time issues. In the first meeting, the discussions were started by generally discussing the process and the purpose of the modeling project. Also, a preliminary process flowchart was drawn to be used as a base of the discussions, as it was easier to start discussing about the process when seeing it at the same time on paper. Also, the process basic information form was discussed and filled. The following group meetings focused on filling the explanation page of the process. Finally also the process cover page was filled and the process

flowchart adjusted and finalized. The last meeting focused on the process assessment by filling the process evaluation form together with the work group, the process owner, and the members of the quality team.

6.3   Mapping the present state of the customer feedback process at Kaha Oy

The results of the 3-page modeling process and the focus group interviews are introduced in the following with the help of the three modeling forms.

TABLE 6. Customer feedback process cover page

Name of the process: Customer feedback process
Process mission and objectives: To measure and monitor direct customer feedback and complaints
Process owner: Sales manager
Process customers: External customers (Car importers, spare part and accessories' resellers)
Process essential input information: feedback from the customer
Process output: Report for the customer or a concrete solution
Process participants: The customers, feedback processor, issue owners, the management
First step: Customer gives feedback
Last step: Customer receives confirmation; feedback is solved and discussed further locally or in the executive group meetings
Process success factors: Customer satisfaction, functionality and speed of the process
Units of measurement: The content and frequency of feedback

> **Process connections to other processes:** Sales process, order-delivery process,
>
> management process

The process cover page, in Table 6, presents the key points of the present state of the customer feedback process, and gives a brief overview of its content. The sales manager is named as the process owner as he supervises the inner sales department as well as the field sales representatives. He is also part of the executive group and is therefore able to discuss and analyze customer feedback issues in the monthly meetings of the executive group. The customers of this process are all the external customers of the commissioner: automotive spare parts', accessories', tools' and components' resellers. The principal idea is that the whole staff would accept customer feedback whenever they might receive it, which means that anyone of the personnel could be a feedback processor.
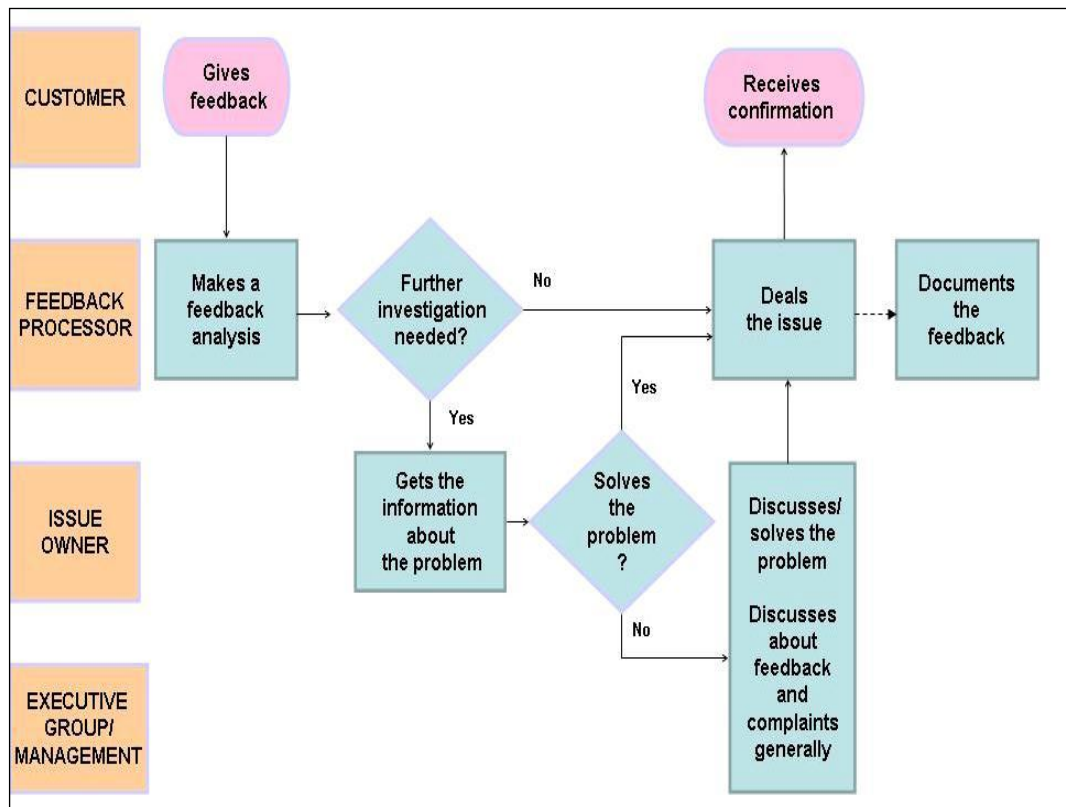

FIGURE 23. Present state customer feedback process at Kaha Oy

Figure 23 presents the flowchart of the customer feedback process of the commissioner. The flowchart is drawn with the help of the filled process basic collection form (see appendix 2). The process begins when a customer gives feedback. This feedback may be either positive or negative, and it can be received via telephone, e-mail, online contact form, or face-to-face. As the feedback may be received from multiple sources, the whole personnel are responsible for accepting it. However, there are certain people that receive feedback more than the other staff. These people are the customer service manager, the personnel responsible for selling, as well as the product managers. From the warehouse side, the people responsible for the reclamation process also receive other general customer feedback. It is worth mentioning here that the reclamation process is seen as its own entity, and hence separated from the general customer feedback process as it is mainly done in the warehouse side.

Moving on in the flowchart presented in Figure 23: the person who receives the feedback makes a quick analysis of it and decides whether it can be solved immediately or whether it needs further investigation. If the problem can be solved immediately by the person receiving the feedback, he or she will solve the issue and inform the customer if necessary. In all cases the feedback does not even require further solving (positive feedback), and it is enough to thank the customer for good feedback. Informing the customer is seen as a factor that increases customer satisfaction in the long term. The feedback process is so polymorphous in nature that the flowchart is drawn as flexible as possible.

If the problem cannot be solved immediately, or it is difficult and requires expertise, it must be sent to the person who is the target of the feedback. The targets of the feedback are referred to as issue owners, and they can be single members of the staff or larger entities, such as different departments within the company.

Finding and identifying the issue owner might require some analysis and investigation, which is to be made by the feedback processor. If the feedback concerns specifically someone, the feedback may also be sent to his or her supervisor. Once the proper issue owner has been identified, he or she is subsequently responsible for solving the problem. If the problem can be easily and immediately solved, it is

done by the issue owner. Informing the customer is done if necessary, but the nature of the problem may not require that. The issue owner tries finding the cause of the feedback, and if possible, resolving it and informing the customer and the upper management if necessary. All the important feedback should be taken to the upper management in order for them to discuss the feedback in the executive meetings. However, the lack of documentation prevents this from happening. Therefore, the feedback documentation step is separated with a dashed line simply because it is only rarely done. That is the major weakness of the process and hence the feedback may be lost before it is even read or analyzed. Only the field sales representatives sometimes document the feedback they receive face-to-face from the customers. For this purpose they utilize Kaha's Customer Relationship Management (CRM) software, Saratoga.

TABLE 7. Explanation page for process steps

Step/ activity	Who	Critical factors	Methods, data software, surveillance	Input data	Output
Gives feedback	Customer	Customer gives clear, sufficient and truthful feedback	By telephone, face-to-face, email or online contact form	Customer relationship experience	Customer feedback or complaint
Makes a quick feedback analysis	Feedback Processor	Misinterpretation, feedback forwarded to wrong people	No clear instructions given: Trusting the discretion of the processor	Feedback or complaint from the customer	Informing the customer, or notifying the right issue owner so as to solve the problem

Step/ activity	Who	Critical factors	Methods, data software, surveillance	Input data	Output
Gets the information about the problem	Issue Owner	Misinterpretation, issue owner not having anything to do with the feedback → feedback left unprocessed	No clear instructions as all situations are different. Aim to find a solution that gives quick satisfaction to the customer	All related information to solve the problem	The feedback is either solved, or remains unsolved. In the latter case it needs further discussion on an executive level.
Discusses about the problem, **Solves the problem**	Issue Owner Executive Group/ Management	Issue owner takes the problematic feedback to the upper management. Executive meetings discuss feedback and try to find a solution.	Utilizing the know-how and knowledge of the issue owner. Managerial decision making procedures as a tool for feedback solving.	The original feedback given by the customer, as well as the analysis history of feedback processor/issue owner	The issue / problem / complaint is discussed and decision reached. Approach selected and procedures selected accordingly by the management.
Deals the issue	Feedback Processor	Constraints and opposition from others, conflicting point of views on how the issue should be solved	Communicating to the staff, training, negotiations and other procedures to fix the root cause of the complaints	Customer feedback, analysis history, instructions from upper management	Informing the customer if necessary

Step/ activity	Who	Critical factors	Methods, data software, surveillance	Input data	Output
Discusses feedback and complaints generally	Executive Group/ Management	Management should find a solution for the problem and fix it	Managerial decision making procedures, executive meetings	Complete feedback history: what has been done so far, why solution not reached	Development areas and targets
Documents the feedback (Rarely done in practise)	Feedback processor (or issue owner)	No time to document the feedback, forgetting, lack of interest	Feedback documenting method and tools not identified or discussed	Feedback from the customer, possible analysis history	Documented feedback (rare)
Receives confirmation	Customer	Finding consensus with customers, increased customer satisfaction	E-mail or telephone confirmation	The issue has been dealt, concrete solution/outcome	Customer receives confirmation

In Table 7, the different process steps are defined and explained further. This was done with the help of the process flowchart and the basic information form that was filled earlier. Already at this point of the present state mapping, it is clear that the customer feedback process is not working the way it should be. Even though the process needs structure and clear responsibilities before anything else, the critical factors will most likely stay the same even if the process is given a new structure and new responsibilities. Hence, these process explanation steps can be used as a planning tool for the new improved customer feedback process. Also, the input data column reveals that the process lacks clear instructions and rules, and as long as there are not any, the personnel does not know how to handle customer

feedback. The danger is that they ignore the feedback completely. This has to be taken into consideration when planning the new customer feedback system.

Subsequently, the present state of the customer feedback process was evaluated in the fourth focus group meeting, and the results of this interview process are presented below in Table 8.

TABLE 8. Customer feedback process evaluation

1. The name and the owner of the process	Customer feedback process Process owner: the Sales manager
2. Evaluate process objectives Have the following issues been taken into account in the process: - Strategy requirements? - Official requirements? - Customer needs?	- Strategy requirements have not been taken into account, the process maturity is still low - There are no specific official requirements for the process - The process is not working properly and hence customer needs have not been taken into account sufficiently enough
3. Evaluate process description (cover page, process flowchart, explanation page) - Does the activity mach the description, have the critical points been correctly defined? - Are there enough instructions for each process step? - Do IT-systems support the realization of each process step?	- The activity does not fully match the description as the system is not working as it should be and there are many misconceptions in the process - The critical points have been accurately defined and are true in most cases - The lack of instructions is notable in the majority of the process steps - It systems have been utilized to some extent and in theory could support the process, but the personnel not fully aware of all the options
4. Evaluate process indicators and metrics	- The process does not have any metrics so far

5. Evaluate the process resource requirements: - Personnel - Equipment and machinery - Systems, software	- The process requires the input of the whole personnel as feedback receivers and processors - The use of IT systems is essential to go through with the process, but they need to be better identified and managed, and most importantly, communicated to the staff
6. Evaluate process ownership and other actors? - Are they correctly identified? - Are authority and responsibility definitions clear?	- Process ownership is accurate: the sales manager being the supervisor of the sales department is the right person to manage a process related to the customers - Responsibilities are not clear nor identified
7. Evaluate process output information, documents and their utilization	- Process output can be either a solution for a problem, or a clear development area - All feedback should be documented and a place for this purpose should be identified! (not done so far)
8. Evaluate process steering, evaluation and improvement procedures	- The process has not been modeled, nor discussed before, and hence it is still immature and needs development

In Table 8, the present state of the customer feedback process is evaluated and its main problems pinpointed. This main evaluation, presented above, is summarized on the following page in the form of a SWOT analysis. The evaluation summary shows that the current process has weaknesses that exceed the number of strengths. When combining the weaknesses and the possible threats, it is clear that the current customer feedback process needs to go under heavy development.

When looking at the opportunities of the process, the situation can be improved with a few simple ways. In this regard, the main responsibility should be on the management as it is up to them to define the long-term goals of the customer feedback system, define its structure and identify responsibilities. Moreover, the

upper management can improve the process by showing commitment and excitement in the system implementation. Kaha Oy has a long history and they have gotten used to operating in a certain way, and hence managerial encouragement towards new working methods should be reflected throughout the organization.

Process evaluation summary (SWOT)

Process strengths	**Process weaknesses**
- The customer is being listened to	- The process is cluttered and unstructured, lacks management
- The process has many different customer feedback channel options	- Too many actors involved
- The process could be flexible and adaptable to many directions	- Too many feedback channels, some of which are not monitored at all
- Supporting IT systems	- Too commonly applicable
- The company has the required resources needed to run the process	- No clear responsibilities
- Useful software options	- Feedback not documented
	- Process maturity is still on the level 1 (unmanaged and initial level)
Process opportunities	**Process threats**
- Support and encouragement of the upper management	- Lack of respect or interest
- Better management of the process	- Negligence and disregard from both the personnel and the upper management
- Identification of responsibilities	- Lack of managerial support and effort
- Centralization of the process channels	- Process excessive flexibility and the attempt to satisfy everybody
- Communication within the organization	- Lack of volunteers to accept responsibilities over the process
- Training the personnel to handle customer feedback	- Time management, prioritizing
- Creating a positive environment for collecting and handling customer feedback (perks, rewards?)	- Feedback disappears before it has been analyzed or responded to
	- Reluctance to change

7 IMPROVEMENT SUGGESTIONS FOR THE CUSTOMER FEEDBACK PROCESS AT KAHA OY

7.1 Applying the Lean tools for the process

As introduced in chapter 3, Lean tools can be used to improving processes by eliminating different kind of wastes that do not generate extra value for the internal nor external process customers. Therefore, by examining the current state of the customer feedback process, there can be multiple wastes identified. The customer feedback process in its present form has the major problem of unnecessary waiting and unnecessary procedures. Waiting occurs when customer feedback stands un-read in different feedback channel mailboxes or the feedback is some other way stuck in the unstructured process. Unnecessary procedures occur, because there are no identified procedures regarding the process, and hence different people apply the system as they see fit. This causes also extra work and procedures that waste time. Over production and over processing are the two wastes identified in Lean thinking, but as such they are the opposite to the situation of the customer feedback process of the case company: the process actually has *under-*processing. This means that the process is still in its early stage and not utilized as much as it could be, and thus the feedback often remains unprocessed, even though there are good resources already available for processing them.

The other general wastes of the process are unclear process steps, lack of training and knowledge among the personnel, too many feedback channels, too many people involved, non-existent indicators, as well as unclear roles and responsibilities. In short, the process lacks structure, frame and management, and before implementing lean to the fullest, the process should be first planned properly.

The different kinds of wastes in the customer feedback process could be removed by planning the system from the beginning with managerial support and commitment. This idea is illustrated and summarized in the following (Figure 24).
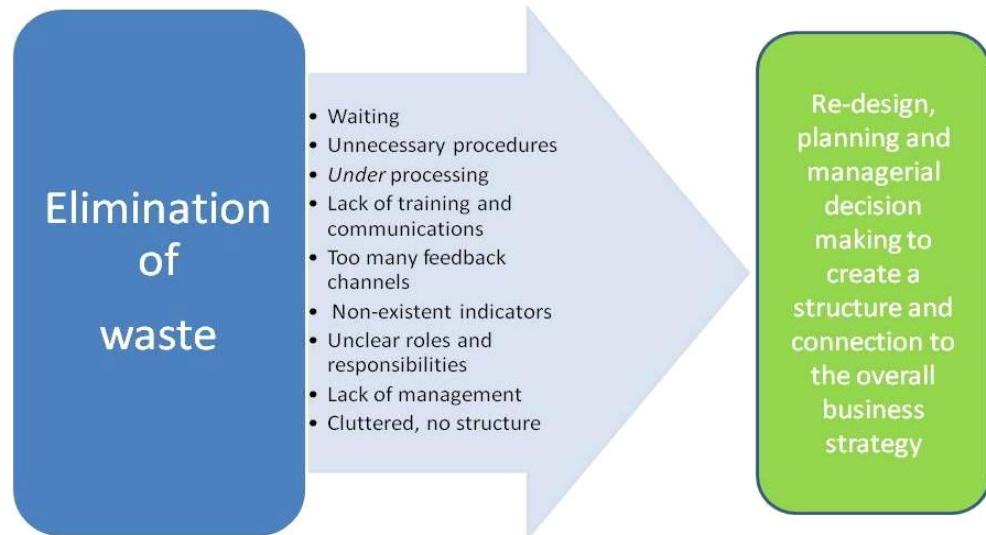
FIGURE 24. Eliminating waste from the process

The process could also be improved by simplifying and cleaning the process. This could be implemented by applying the 5S method in the process. By identifying the essential process tasks and steps, the first S, Sort, can be carried out. The next phase, Simplify, could be completed by analyzing the most convenient method for gathering customer feedback. Now the feedback can be received from numerous different e-mail channels, and therefore its monitoring is difficult. Centralization of the electric feedback would simplify the process significantly.

Sweep and Standardize, the next phases of the 5 Ss method, include documenting the customer feedback systematically into one place, which enables easy access to that feedback if later needed, for instance, by an issue owner or management. This documentation archive should also be kept organized and in accordance with the rules on how and where to document customer feedback. Standardization phase is also about agreeing rules and methods to follow when handling customer feedback. Once the decisions and common conduct has been agreed upon, it is everybody's responsibility to obey that conduct. Lastly, to maintain the achievements of implementing the 5 Ss method, the last phase, Sustain, must be aimed to maintaining the changes with determination. This phase can be made more effective by communicating to the staff and training the employees. It is also as important that the managerial level is committed to running procedures to improve the operation of the customer feedback process.

7.2   Improving the process in the style of TQM and partial reengineering

The question whether or not to completely reform the process became about during the thesis process. The original objective was to improve the process in the spirit of TQM by understanding its current main problems and faults. Improving from the point of view of TQM, the improvements are built on the old process, and the focus is on continuous development. However, during the present state mapping phase, it became evident that the process might need more drastic measures with regard to improvement, because it is too unstructured and does not have much to work with, because it has not been discussed or planned at all before this project.

In this light, the customer feedback process might need complete reengineering that re-creates the process all over again from the beginning, and not save anything from the old unstructured process. Furthermore, the reengineering method would be easy, since the process maturity level is still low. When thinking about the process maturity levels, which were introduced in the process development chapter (3.2), the current customer feedback process could be located on the lowest level 1. This is the initial level, in which the process does not work as it is supposed to and does not meet the requirements. Therefore, with as immature process as the current customer feedback process is, process reengineering is rather easy development method, because there are no clear structures that first need to be abandoned and eliminated.

When analyzing the reengineering option to be used with the process, it seems still rather strong of a method, because the present state of the customer feedback process does have some features that are worth saving, such as some of the customer feedback channels. As a result, the author comes to the conclusion that the best thing for the process would be partial reengineering, which means that some of the features of the present process are saved and integrated into the new one. In other words, the process needs re-designing and structural changes, but the channels and other resources would remain almost the same. Main focus is on developing the customer feedback process into a functional system, because before actual improvement procedures, there must be a clear structure to improve.

7.3   General improvement suggestions for the customer feedback process

Determining process channels and responsibilities

The process currently has too many customer feedback channels that are cluttering and confusing both to the staff as well as the customers. There are at least seven different e-mail based feedback channels in the company, although not all of them are named accordingly. Different departments have their own channels and mail-boxes, and there are different info mailboxes that also collect customer feedback. However, these mailboxes are not regularly monitored, and some of them are not monitored at all. This results in the fact that some of the customer feedback is not even read, nor analyzed any further, and therefore the feedback is simply ignored. This issue was discussed further in the process evaluation meeting and during the interviews, and the results were obvious: centralization of the feedback channels is needed. The ultimate suggestion is therefore that these different e-mail based feedback channels are reduced and centralized. The easiest would be if there is only one mailbox that receives customer feedback, from which it is forwarded to the right issue owners if the nature of the feedback so requires.

Another major problem of the present customer feedback process is that its re-sponsibilities are not clearly defined. And if there are no responsibilities clearly defined, no one feels they are responsible for handling the feedback and thus the feedback is constantly in danger of remaining unnoticed. Therefore, the responsi-bilities first need to be discussed and then commonly agreed upon. If following the customer feedback centralization idea, the most logical decision would be hav-ing a central feedback coordinator. In practice this would mean creating a single e-mail channel for common feedback and complaints, and a single person respon-sible for reading and sorting that mailbox. That central coordinator would subse-quently forward the feedback to the right issue owners if the feedback requires further analysis. It is up to the upper management to decide who would be the most logical person to do this. However, a good option would be the central switchboard and reception agents that already know the responsibilities and people of the whole house based on their job description.

Designing process documentation and metrics

Another major problem of the current customer feedback process is the lack of documentation. A good and functioning customer feedback system always includes documentation of feedback, because without proper documentation the feedback is easily lost or forgotten. This serves neither the external customers nor the internal customers of the firm.

Based on the interviews and discussions with the process owner (sales manager), a good documentation tool would be the CRM system, Saratoga. The software is already utilized by the field sales representatives as some of them document the feedback they receive face-to-face from Kaha's customers all around Finland. Saratoga could be extended and utilized with other customer feedback as well, because it has been purchased for Kaha's use and it enables this kind of usage. In practice this means that both the feedback processors and the issue owners would document the important feedback into Saratoga. Saratoga has all of Kaha's customers listed so the feedback could be written right under the right customer from whom the feedback is received. The software also enables a feature, in which the person or seller that is most dealing with a certain customer can be notified when something is written under his or her customers. This feature matches directly the process step, in which the right issue owner is notified.

The personnel should be trained with Saratoga's usage and also instructed about the content of the feedback that is important and worth documenting. This, however, should be first discussed by the upper management, after which it can be taught to the personnel.

The Saratoga option, however, has some problems that Kaha first needs to overcome and decide the right procedures to handle the deficiency Saratoga as a feedback tool might have. This view is based on the fact that feedback naturally is received from numerous different sources. This feedback may or may not reveal the name of the customer giving the feedback. If the customer refuses to give his or her name, it cannot be documented to Saratoga as information there is sorted by the name of the customers or by trade identification number.

In the case of nameless feedback, an anonymous customer account could be founded into Saratoga. This anonymous customer account would be similar to the concept of a ghost customer, under which all anonymous feedback could be documented. This way the feedback would be kept conveniently in the same archive as the feedback with a name. However, Kaha is an importer and wholesaler, and therefore only operates in the B2B side, in which customer feedback is usually provided with a name and other contact information so as to solve the issue properly. In this light the anonymous feedback may not become a significant problem, but it is still worthwhile to consider the options how to handle possible anonymous feedback.

When it comes to the metrics of the process, it became clear that so far there is none available yet as the process is still so unstructured and first time under deeper analysis. Hence, the process metrics can be discussed, planned and engineered from a "clean slate". The content and the targets of measurement were discussed in the process assessment meeting. The metrics should measure the content and the frequency of the feedback. The feedback content should give information regarding the areas, with which the customers are the most satisfied and which areas they are not satisfied with. For instance, one metric could be measuring which departments receive negative complaints the most.

Another metric should be the frequency of the feedback, and also the percentage of solved feedback when compared to the overall amount of feedback. It would also be interesting to measure which people are the most active regarding customer feedback: which members of the personnel most often solve complaints and document feedback in general. It is also important to measure customer perceptions about the functionality of the feedback giving possibilities. This can be done with the periodical customer satisfaction surveys by adding a question to the survey regarding daily customer feedback giving options. The question should find answers to how the customers feel about the feedback system, and whether they feel it is easy to give feedback, and whether they feel that the feedback they give is being listened to and responded to.

The combination of both direct feedback system and customer feedback surveys could be a strong method to find out the customer perceptions regarding the organization and its operation.

A good way to promote the active documentation and handling of complaints and feedback is organizing some sort of competitions or rewarding systems around customer feedback. In practice, this would mean rewarding someway those who are the most active with the customer feedback process and its related documentation.

The process measurement should be designed in a way that it gives enough information regarding the customers, the actions of the own personnel, process performance and the economy. Furthermore, the process objectives and measurement should be integrated with Kaha's business vision and strategy. When viewing Kaha's overall business policies and strategies, it can be noticed that they are aiming towards customer satisfaction and the idea of Kaha being the best possible partner to all its customers. Hence, the customer feedback process should be organized so that it actually generates customer satisfaction, as well as value to the customers and business operation as a whole.

Customer feedback process is a challenging process, because there is as diverse feedback as there are customers. It is difficult to evaluate the feedback content and which feedback is worth further analysis. Also, the documentation is challenging as it cannot be done in all situations; especially the product managers receive so much feedback over the phone that they cannot document all of it. Hence, some common ground should be agreed upon regarding how to treat the feedback in daily situations.

Also, the content of the customer feedback may sometimes be delicate: the feedback may target a single person in form of a complaint. In these cases discretion is needed to handle these situations without offending the issue owner. These are situations for the management and the whole personnel need to find a common conduct, because this kind of feedback cannot be documented publically.

Managerial role

Before the process can be improved, the upper management needs to take an active role with the development procedures. The improvement needs and suggestions must be discussed and analyzed in the executive meetings so as to find common rules and goals for the process. The management also has the better knowledge regarding the resources available to implement change and the long-term goals for daily operation of the customer feedback process.

After the management has agreed upon the rules, objectives and development procedures of the customer feedback process, they need to systematically reflect their will throughout the organization. Also, they need to decide the central feedback channels, responsibilities, documentation tools and metrics, after which they can start including the personnel into the process. Concrete decisions need to be made, because only after that development can be made. Furthermore, based on the concrete decisions, the technical and IT personnel can start working on engineering the new system and its different tools.

The responsibility of the management is to train the personnel to deal with the customer feedback process, and give sufficient instructions related to collecting and analyzing customer feedback. Corporate communications is in key role in launching the new improved process. Without clear communication and training the process cannot change and remains as unstructured and unmanaged as it is presently.

7.4   New process cover page and flowchart based on improvement suggestions

Based on the previous improvement suggestions, a new process cover page is provided and a new flowchart proposition is drawn. The flowchart illustrates how the new process with the applied improvement suggestions would look like.

The alterations in the new process cover page and the process cover page do not seem significant when compared to their present counterparts. However, the main

issue is that the new customer feedback would operate similarly in practice than on paper. The present customer feedback process flowchart is drawn as flexible as possible, because people implement the process in different ways or not at all. If the present state would have been drawn with all its deviations, it would look a lot longer and would be difficult to comprehend. The main change in the improvement process is not on the process description itself; it is about recognizing the process in practice and making it known in the organization. This way the personnel would know how to handle feedback, and as a result the actions would start matching the description.

TABLE 9. The new process cover page

Name of the process: customer feedback process
Process mission and objectives: To collect, monitor, utilize and measure direct customer feedback and complaints from the customers
Process owner: Sales manager
Process customers: External customers (Car importers, spare part/accessories' resellers) and internal customer are all those that can use customer feedback to improve their work
Process essential input information: feedback from the customer
Process output: Documented feedback, a report to the customer or a concrete improvement solution
Process participants: The customers, feedback processor, issue owners, the management
First step: Customer gives feedback

Last step: Customer receives confirmation, the feedback is solved by the issue owner, or discussed and analyzed further in the executive group meetings

Process success factors: functionality and speed of the process, the handling method and utilization of feedback, customer satisfaction

Units of measurement: The content and frequency of feedback, as well as the target of feedback (departmental differences etc.)

Process connections to other processes: Sales process and order-delivery process, management process

The process cover page presented in Table 9 above has undergone some changes when compared to the present customer feedback process of the commissioner. The most important change can be seen in the process output: the feedback is documented, and based on that documentation it can be discussed further in the executive meetings if necessary. Documentation is an important part of a customer feedback system, and this feature should be integrated into the new system.
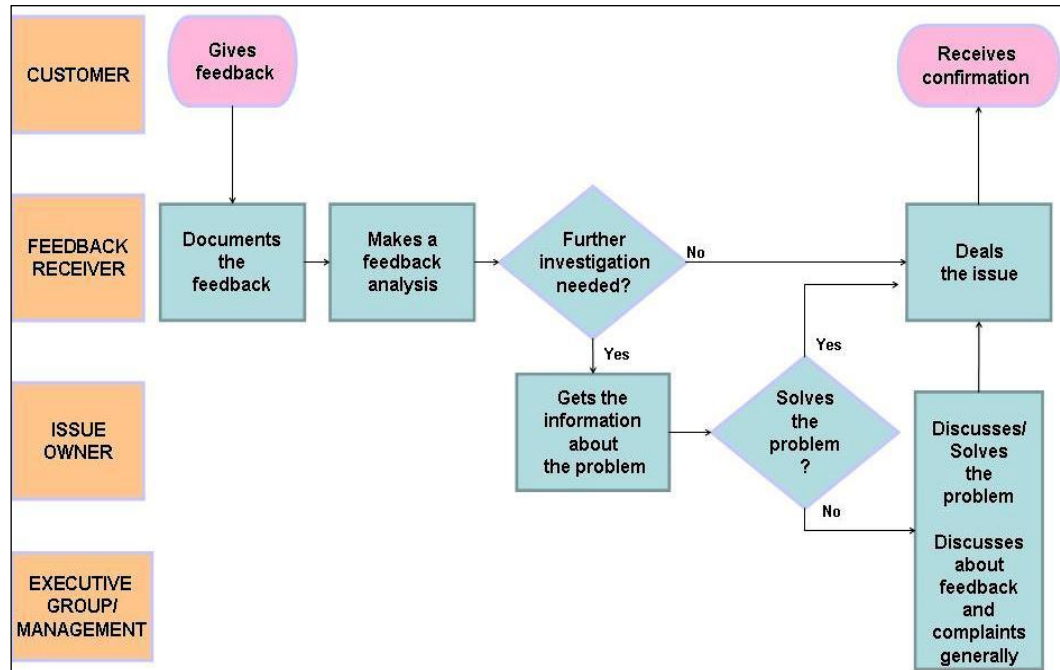
FIGURE 25. Proposition for the new process flowchart

In Figure 25, the proposition for the new customer feedback process flow is illustrated. The fundamental change, when compared to the present state flowchart, is the documentation step, which is also presented in the process cover page. The documentation step is related to the process success factors, and hence it should be done right away by the one who receives the feedback. Documentation cannot always be done. Especially the amount of feedback received over the telephone is so large and that is why not all of it can be documented. However, the principle should be that the feedback receiver, or the issue owner the latest, should document the feedback. Again, it must be decided what kind of feedback is worth documentation, because not all feedback is worth doing so.

The feedback receiver can still be almost anybody in the company, because the feedback may be received face-to-face, via telephone and e-mail. However, the one receiving all the e-mail feedback could be centralized to a single person who then forwards the feedback further to the right issue owners.

8   SUMMARY

The study was conducted for the author's personal interest towards quality and process management issues, and because this project was something concrete to improve the author's own workplace. Also, the case company's need to create a functioning feedback system to match the recommendations of the ISO 9000:2008 standard led to the decision to start working on the customer feedback process.

Another goal was to find out how the customer feedback process could be improved so as to match and be in coherence with the ISO standard. It was found out during the thesis process that the standard requires only that the customer feedback system functions properly and brings out the customers voice. This way the actual planning and implementation is left to the companies. With this regard, the commissioner has numerous different implementation possibilities for the new customer feedback system; as long as they make sure that it actually works in practice.

Building a functional customer feedback system would be a competitive advantage for the commissioner, Kaha Oy, because listening to the voice of the customers potentially increases customer satisfaction. A good customer feedback system does not only help to compete with the possible competitors, but it also helps the commissioner in differentiating themselves in the whole field they operate in.

The theoretical framework was chosen to support the understanding of the overall objectives of the thesis, and to underpin the relationship between the ISO 9000 standards, quality management and process improvement procedures. The thesis can be seen as a summary of all the related theories, which are syndicated together so as to form a comprehensive understanding of this kind of improvement work and all the information that needs to be considered. The thesis tried to underpin the relationship of all the concepts so as to give the reader, and the author, a clear picture of quality and process management issues that would help with the empirical section of the thesis.

The customer feedback process could have been analyzed more profoundly by incorporating more analysis techniques and approaches. Also, by including more people in the process modeling meetings might have produced more detailed information. Another factor which may have decreased the level of analysis was that there was not always the same group of people in the meetings, because these people are the busiest members of the personnel.

The original plan was to also incorporate benchmarking comparison to the customer feedback process, but it became evident, that the maturity level of the current process is not yet ready for such comparison. Also, the lack of time became an obstacle for benchmarking as this kind of comparison takes time and effort. The most important goal was to model the current process sufficiently, from which to collect suggestions for improvement. Therefore, the benchmarking project was left aside at this point, but is recommended for later, when the process is improved and the new system taken into use. This benchmarking project could be done by the quality team of the commissioner, because they already understand the general quality and process management concepts and what this kind of work requires.

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Appendices

APPENDIX 1: CAR-form

CORRECTIVE ACTION REQUEST (CAR)	Reference No:

PRODUCT/PROCESS OWNER: ABX   **MAIL TO:** ABX Operations Mgr

Item   Windshield Wiper
Product: _____ Xetta Automobile _____   Category   All 1984 Models With R.H.Drive
Requested by: _____ CC & F Analyst _____   Date _____ April, 1984 _____

SERIOUSNESS: Is This a Class Problem: ☒ Yes ☐ No   Dealers grumbling and calling in
What is the current impact?   Unhappy customers, sales are slowing down. Estimated loss in Sales:$XXXXX.
What is the future impact?   Loss of reputation, loss of future sales, $ impact unknown.

SUMMARY OF REQUEST: (ADD MORE DETAILS, WHERE APPROPRIATE)

We have received over 350 complaints via the CC&F system from several countries.
(See attached data). For all 1984 models shipped to right-hand drive countries,
the windshield wiper does NOT provide sufficient clear vision during rain.

ANALYSIS:

Our Analysis, and that of dealers and customers is as follows: The windshield wiper is in the
position required for left-hand drive cars (Continental Europe). But the cars are shipped to
right-hand drive countries with right-hand steering. However position of wipers was not
changed. As a result, during rain, the vision is clearer on the front passenger's side, but
poor on the driver's side.

PROPOSAL: (ADD DETAILED PROPOSAL, WHERE APPROPRIATE)

The solution is obvious. We need to retro-fit wipers on current cars to the
correct position. And, ensure future production is done correctly.

COMMENTS BY PRODUCT/PROCESS OWNER (Including $ impact):

This product was designed correctly. However the manufacturing
documentation missed this point. We have done the update.
We estimate retrofit will cost $YYY. And tooling costs of $NNN

ACTION:
Short-Term Fix   Immediate retrofit kit to dealers
Long-Term Fix: Stop R.H.Drive production,until
documentation and tooling
is redone. Estimate is 3
weeks.

APPENDIX 2: Basic information of the customer feedback process at Kaha Oy

1. Process name and purpose – *Why does the process exist?*	Customer feedback process that exists to listen and monitor the feedback coming from the customers. This feedback is then analyzed and potentially used as a guide to improve operations.
2. Process owner – *the person responsible for the process steering, alterations and improvement procedures*	The sales manager is named as the process owner as he is the supervisor of the whole sales team as well as the field sales representatives. He is also part of the executive group so he is able to discuss the customer feedback issues there
3. Process input information – *What information is needed to start the process?*	The input information is the feedback received from the customers. The content of the feedback should be clarified and analyzed. The feedback should give detailed information about the issue, as well as the people or departments involved. This way the feedback can be solved with the right issue owners.
4. The vital resources of the whole process, such as: • *HR* • *Equipment/tools* • *Machinery/ IT systems* • *Premises* • *Electricity, water* • *Materials etc*	The customer feedback process requires the involvement of the whole organization as everybody is responsible for accepting feedback. IT systems are important resources as much feedback is received via e-mail. Also, telephones are essential in receiving customer feedback and complaints.
5. Process customers and other actors involved – *All those who have a role of some sort in the process, or who have requirements related to the process*	External customers are the different automotive spare part and accessories resellers, as well as car importers. Internal actors are all those who receive and accept feedback, as well as the upper management. Reference groups are all the cooperation partners and

External customers *Internal actors* *Reference groups* *Officials etc.*	clients of Kaha: manufacturers, sellers, transportation service providers etc. There are no officials involved with the process.
6. Where does the process start? – *First step, the first concrete action or activity?*	The process starts when the customer gives feedback. This feedback may be received face-to-face, via e-mail, online form, or telephone. The process starts at Kaha Oy when they receive the feedback from the customer.
7. Where does the process end? – *The last step, the last concrete action or activity?*	The process may have several different ending possibilities. It may be solved immediately, it may be delivered to the issue owner, or finally to the executive group. Also documentation is sometimes done last, if it is done.
8. The overall process outputs for the external customer as well as the internal actors: *(Product, service, documents, data etc.?)*	The output of the process is a confirmation to the customer, or a concrete solution to a problem. In some rare cases, data related to feedback history and memorandums/reports of the discussions related to the feedback are the outputs of the process.
9. Process objectives and goals – *What should the process be like from the perspective of the customer? Own personnel? Performance? Finance/economy?* *The process and its output metrics from the customer, HR, performance and econ-*	The process should be effective, but flexible, the customer should have a feeling that it is easy to give feedback, and his or her feedback is appreciated. The personnel should trust that their efforts have a purpose and that the feedback they handle would be used for something concrete. Feedback should be a tool to improve performance and treated therefore as valuable information. This process should ultimately improve customer satisfaction and thus maintain and improve sales. No metrics currently available or developed for the process.

omy perspective. *What is crucial for succeeding?*	Success factors are handling the feedback professionally, giving the customer a sense of ease when giving feedback, and interpreting the feedback accurately.
10. Process evaluation and feedback gathering method; who, what how?	Currently the customer feedback process is not measured at all. In the future e.g. customer satisfaction surveys could be used to find out customer opinions about how they feel about giving direct feedback.
11. Process results´ handling method for improvement purposes	There are currently no metrics decided or developed for the customer feedback process. Thus, this information cannot be used for any improvement purposes, except information based on "feeling" and "memory".