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# MANAGEMENT SYSTEMS OF TOMORROW

## GAINING THE ORGANIZATIONS SUPPORT

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# Abstract

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**Keywords:** *Management systems, Quality management, International standards, Business excellence models.*

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Management systems need to be able to stay viable in a changing environment and not become counterproductive because the surroundings have changed. The purpose of this study is to create a concept that can act as a foundation for future management systems. This concept should try to help close the gap between how the management systems are intended to be used, versus how they are actually used in reality. It should provide organizations with the mindset necessary for designing, improving or implementing their management system.

This project aims to answer the following questions:

- How can a successful management system be defined?
- What aspects need to influence a management system so that it will become alive and rooted in the entire organization?

The project uses an inductive approach, following the following methodology: Step 1 of the project was to create a theoretical framework based on previous research. Step 2 was to collect qualitative data through interviews. Step 3 was to analyze the data and compare it to the theoretical framework. Step 4 was to create and finalize the concept.

The findings of this project suggest that a successful management system is a simple system with clear structures and routines for both managers and employees. The system should be available, inspiring and supporting so that both managers and employees feel secure and comfortable when performing their daily work. By making managers and employees feel involved and able to perform to their fullest capabilities, it will increase the chances for the system to be truly rooted and alive in an organization, which will bring value to both the organization and its stakeholders. Based on this the authors suggest the following definition for a successful management system:

*“A management system should aim to provide value to the end customer by creating a systematic way of managing all of an organizations processes. It should help the organization understand its employees in order to create a corporate culture that embraces change projects and enables it to utilize their employees to their fullest capabilities”*

A proposal for further studies is to investigate if it would be beneficial to integrate suppliers into an organizations management system and if so how this integration could look. It would also be beneficial to examine if the general structure of management systems will look differently depending on which industry sector the organization operates in.

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# Chapter 1

## Introduction

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***This chapter will give a short introduction to the topic of management systems, after which the problem statement and purpose of this report will be presented. The chapter will end with the limitations and delimitations related to the project.***

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### 1.1 Background

In order for organizations to stay alive and compete in a market, companies will have to adapt their way of working to be aligned with an ever-changing environment. This led to the realization that a clear and well-defined structure for how to handle the organizations processes was needed (Psomas & Fotopoulos, 2009; Psomas & Fotopoulos, 2009). Through this realization, the concept of management systems was born. A management system is defined by the International Organization for Standardization as “a set of procedures an organization needs to follow in order to meet its objectives”. The management systems are often divided into several sub-systems which can be governed independently. These sub-systems reflect different demands of key-parties within the supply chain (e.g. suppliers, customers and shareholders). A lot of organizations chose to use standards, when developing, improving or evaluating an overall management system (SwedishStandardsInstitute, 2008).

The first international standard, ISO 9001, with some criteria’s linked to management systems came in 1987. The standard was developed in order to get a more comprehensive approach to quality management, which was needed in an ever-expanding global market (Karth, 2004). It became recognized by organizations relatively fast and companies around the globe started to incorporate it into their way of working. The birth of ISO 9000 has brought quality management into what academic literature dubs the “third era” of quality management (Psomas & Fotopoulos, 2009).

The companies who based their quality management system (QMS) solemnly on ISO 9001 would sometimes fall short compared to the ones who followed a total quality management (TQM) approach (Martinez-Costa, Choi, Martinez, & Martinez-Lorente, 2009). Over time, this led to that a lot of people began to criticize the current (1994) version of the standard, mainly because they claimed it was too focused on quality control and lacking in management concepts such as TQM. So with this in mind, another revision of the standard was made, the ISO9001:2000 version (Pheng & Fong, 2002). This update contained several improvements, for example, it contained a more process-oriented management view (Casadesús & Karapetrovic, 2005).

Currently, ISO 9001 is undergoing another revision, which will be released in 2015. Several improvements will be made and the focus on process orientation and value creation will increase even further (Green, Lomas, & Abassi, 2014). It will most likely be a great improvement over the last version, but there still may be room for further improvements.

In addition to the ISO 9001 standard, multiple other views and models regarding TQM and business excellence have been developed over the years. Models such as the Malcom Baldrige National Quality Award (MBNQA) and European Foundation for Quality Management (EFQM) both aim to help improve quality and business excellence. These concepts are not equivalent to the ISO standard, but instead they offer a different perspective on TQM systems. For example, the focus of MBNQA is that competitive advantages are gained through operational performance and customer satisfaction whereas the main focus of ISO 9000 is the compliance to the practices specified in the organizations quality system (Karth, 2004). The business excellence models entail several key criteria or principles

(e.g. leadership, customer focus etc.) that could be used as a foundation for the creation of a management system (Pojasek, 2008).

## 1.2 Problem statement

All of the previously mentioned models for quality management are undergoing revisions on a regular basis; it can almost be viewed as the models are lagging behind reality. This would indicate that in order for a management system to be truly viable for a prolonged period of time, it needs to be proactive. The management systems that are being developed today need to be able to stay viable in a changing environment and not become counterproductive just because the surroundings have changed. Several studies emphasize that the benefits gained from having a well-defined management system is highly dependent on the level of commitment shown by the organization itself (Karthi, 2004), (Casadesús & Karapetrovic, 2005), (Sampaio, Saraiva, & Monteiro, 2012c)). In order to achieve this increased level of commitment, management systems need to be developed/improved into something that can be more easily explained and communicated to the organization. According to Anders Ljungberg at Trivector LogiQ, many organizations today feel that the way their management system is set up versus how things are actually done differs a lot. A system that is not being used as intended is not a good system. Therefore, one can conclude that something more is needed. Management systems have to evolve into something that both managers and employees alike feel encouraged to use in their daily work.

## 1.3 Purpose

The goal of this project is to create a concept that can act as a foundation for “the management system of tomorrow”. This concept should try to help close the gap between how the management systems are intended to be used, versus how they are actually used in reality. It should also provide organizations with the mindset necessary when designing or improving their management system.

This project aims to answer the following questions:

- How can a successful management system be defined?
- What aspects need to influence a management system so that it will become alive and rooted in the entire organization?

## 1.4 Limitations and delimitations

This study will act on the assumption that a management system should be developed based on some key aspects linked to both management and the workforce of an organization. These aspects, given to the authors by Trivector LogiQ, will act as a foundation when trying to define a successful management system and they are categorized based on two perspectives as seen in the following table:

Table 1 Key aspects of a management system, provided by Trivector LogiQ

<b>Workforce perspective</b>	<b>Organizational perspective</b>
<b>Simple</b>	Value creating
<b>Supportive</b>	Strategy enabling
<b>Available</b>	Coordinative
<b>Intuitive</b>	Risk reducing
<b>Interactive</b>	Developing
<b>Inspiring</b>	
<b>Complete</b>	

The different theoretical models brought up in the theory section of this report, e.g. ISO, MBNQA, EFQM and the DP, are chosen with the help of the university supervisor Dag Näslund and Anders Ljungberg from Trivector LogiQ. There are other models that could provide useful information, but because of the time constraint the authors have chosen to focus primarily on those.

This study will primarily focus on what aspects that need to influence a management system rather than what each individual part of a management system should entail. This is because the concept that this report aims to create should provide a general mindset, not a detailed manual, for organizations that wants to design or improve their management system.

With regards to the time limit, the data collection was done by interviewing people with great knowledge and/or experience within the field of management systems, while still trying to diversify between different industry sectors. The supervisor at Trivector LogiQ, Anders Ljungberg, assisted in getting the authors in touch with the right and relevant people. 82 different organizations were asked to participate, but only 14 had time to participate. Out of these 14, only one had their own production, the rest was service or consultant companies. Because of this, another limitation of this report is that the empirical findings will mostly reflect the views of the service industry.

It would have been interesting to be able to collect data by not only conducting interviews, but also by shadowing people during their daily work and getting to see how the management systems are actually used on a daily basis. However, because of the time limitation, the information gathering has to be limited to interviews.

## Chapter 2

### Methodology

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*This chapter will provide an insight into the methodology used during this project. Existing theory within the field of research methodology will be presented, and based on this, the methodology used in this project will be described.*

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#### 2.1 Inductive, deductive and abductive approaches

There are two main types of research approaches available; the deductive approach and the inductive approach. The deductive approach means that the researcher develops a theory or hypothesis and then designs a research strategy in order to test this hypothesis. In contrast to this, the inductive approach aims to develop theories as a result of the data analysis. (Saunders, Lewis, & Thornhill, 2009)

When deciding on which approach to use in a research project, the following table will help bring clarity (Saunders, Lewis, & Thornhill, 2009):

*Table 2 Deductive vs. inductive approach*

<b>Deduction emphasises</b>	<b>Induction emphasises</b>
<ul style="list-style-type: none"><li>• scientific principles</li><li>• moving from theory to data</li><li>• the need to explain causal relationships between variables</li><li>• the collection of quantitative data</li><li>• the application of controls to ensure validity of data</li><li>• the operationalisation of concepts to ensure clarity of definition</li><li>• a highly structured approach</li><li>• researcher independence of what is being researched</li><li>• the necessity to select samples of sufficient size in order to generalise conclusions</li></ul>	<ul style="list-style-type: none"><li>• gaining an understanding of the meanings humans attach to events</li><li>• a close understanding of the research context</li><li>• the collection of qualitative data</li><li>• a more flexible structure to permit changes of research emphasis as the research progresses</li><li>• a realisation that the researcher is part of the research process</li><li>• less concern with the need to generalise</li></ul>

In addition to the two main approaches, a third approach exists; the abductive approach. This approach was created from the fact that most great advances in science have neither followed a purely deductive nor inductive approach. The abductive approach can be viewed as a mixture of deductive and inductive reasoning, where theoretical models and conclusions are developed by iteratively moving between theory and empirical findings.

Both the inductive and the abductive approach aims to develop new theory, while the deductive approach is to test or validate these theories. The primary aim of induction is to generalize the findings of empirical data, whereas abduction aims to develop an understanding of a new phenomenon. (Kovács & Spens, 2005)

#### 2.2 Quantitative and qualitative methods

When it comes to different types of research approaches, researchers will mostly use either a qualitative or quantitative approach. However, the distinction between these two types is not always clear (Denscombe, 2003). Denscombe (2003) goes on to define a few differences between the two types as seen in the table below:

Table 3 Qualitative vs. quantitative approach

Characteristics	Qualitative approach	Quantitative approach
<b>Words or Numbers</b>	Emphasis on words	Emphasis on numbers
<b>Description or analysis</b>	Associated with description	Associated with analysis
<b>Small-scale or large-scale</b>	Associated with small-scale	Associated with large-scale
<b>Holistic vs specific</b>	Holistic focus	Specific focus
<b>Researcher involvement/detachment</b>	Researcher involvement	Researcher detachment
<b>Emergent or predetermined research design</b>	Emergent	Predetermined

To further elaborate on the findings of Denscombe (2003), qualitative studies and quantitative studies can still use the same source of information, but the difference lies in how this information is translated and then used in an analysis (i.e. into words or numbers). The quantitative approach is well suited when it comes comparisons and statistical analyses of gained results, whereas the qualitative approach is far superior describing complex environments and situations. It is because of this that the qualitative studies more often take a holistic approach and tries to not only analyzing the variables independently, but also the linkages between them.

In quantitative research, the hypothesis and experimental details are clearly defined in the beginning stages of the project as opposed to the qualitative approach, which acts on the premise that most of the theory and methodology will emerge during the course of the research, and therefore they will not be specified in the beginning. Furthermore, in qualitative research, theories can and should be developed throughout the course of the research, and they should be tested and evaluated continuously throughout the projects lifespan. Typically in qualitative research, the thoughts and ideas by several participants are both described and compared. These participants are most commonly selected not randomly, but purposely in order to represent different voices and ideas. The participants could be contacted in several stages of the research project in order to ensure that the researchers have interpreted the participants correctly. During the course of the project, the researchers should continuously analyze the data by using an inductive approach and the results of this analysis should be continually tested and the conclusions modified (Savenye & Robinson, 2005). Savenye & Robinson (2005) propose the following approach when conducting a qualitative research study:

- Plan the study
  - During this stage of the project, the researchers will develop an initial list of research questions that they want answered during the course of the project. However, these questions will be refined as the project evolves. The researchers will also develop a logistical plan for the project as well as research strategies.
- Collect data, usually using multiple methods
  - Several approaches can be used for data collection (e.g. interviews, case studies or observations). For interviews, researchers often begins their studies with relatively unstructured interviews and continually analyzing emerging themes in order to finally developing a set of more standardized interview questions.

- Analyze data
  - Analysis activities aim to reduce the data, code the data and finally draw conclusions. When trying to reduce the data, many researchers try to find patterns and themes that they can categorize their data into. By doing this, it enables the researchers to get a more comprehensive view of their data enabling them to refine their initial research hypothesis and finally reach a conclusion.
- Write the research report

## 2.3 Types of data

Researchers need to have a clear understanding of what types of data they are using. Different kinds of data are more suited for different types of analyses.

According to Denscombe (2003), data that in some way can be measured, e.g. height, weight, number of occurrences, is called quantitative data. The collection process of this type of data often results in numerical and standardized data that can be presented in different types of graphs, tables and diagrams

In contrast to quantitative data there is qualitative data. Qualitative data can come both in the form of words or pictures, but it does not become “data” until it has undergone an interpretation process by the researchers. And this is important to understand since qualitative data cannot and should not be presented as facts, but rather how the researcher has interpreted the various statements gained in his/her research. There is no consensus regarding how qualitative data should be analyzed which means that the analysis process itself becomes much harder.

In addition to data being qualitative or quantitative, it can also be classified as primary or secondary. Primary data is data that is collected for the research study at hand, while secondary data is existing data that has been gathered for another purpose prior to the study itself. Primary data could entail data gathered through e.g. interviews, questionnaires or observation, whereas secondary data could be comprised of books, journals, and database records. (Saunders, Lewis, & Thornhill, 2009)

## 2.4 Data collection methods

When collecting data, there are different methods that can be used. Each with its own purpose, strength and weaknesses.

### 2.4.1 Observations

There are several ways to conduct an observational study. The observer could either participate in the examined activity or he could study it from outside. When conducting an observational study, the main purpose is to investigate how things are being done in reality and for this reason it can be a time consuming approach (Paulsson & Björklund, 2012).

### 2.4.2 Literature studies

The data gained through literature studies is secondary. For the researcher this means that he has to be aware that the information gathered could be biased and/or not complete. Despite this, literature studies can be a good approach to gather a lot of information in a relatively short time span. This type of study often aims to map existing knowledge within a certain topic and to generate and develop a theoretical framework that can be used as a basis for the project (Paulsson & Björklund, 2012).

### 2.4.3 Surveys

Surveys are most often used as a way to generate quantitative data. A survey consists of a number of predetermined questions which could either be simple yes or no answers, or they can

consist of the participants grading different statements on a predetermined scale. One problem with this type of study is that the reasoning and behind each answer is lost, which would not be the case during an interview (Paulsson & Björklund, 2012).

#### 2.4.4 Interview methods

Through interviews, primary data is collected. Interviews can be viewed as different kinds of dialogs between the researcher and either one person or a group of people (Paulsson & Björklund, 2012).

Research interviews are so much more than just a casual conversation. They act on the several premises that a normal conversation don't:

- The interviewee has agreed to participate in the interview
- The interviewee's words can be treated as "on the record" and "for the record"
- The overall agenda for the interview is set by the interviewer

This means that the interviewee knows the topic of the discussion beforehand, they have agreed to talk about it and the researcher can use the information they do share at some later date.

There are three main types of interviews; structured-, unstructured- and semi structured interviews.

Structured interviews are in its essence a survey that is conducted face to face. The interviewer has a predetermined set of questions in a specific order in which the interviewee is offered to give limited answers. This type of interview is most suited for collecting quantitative data.

Semi-structured interviews still follows the interviewers predetermined questions, but more freedom is given when it comes to acceptable answers. The interviewee has more freedom to elaborate their responses and is encouraged to speak more freely and elaborate on the specific topics.

Unstructured interviews places even more emphasis on the interview subject's thoughts. The interviewer should be as unintrusive as possible in order to give room for the subject to really think about his/her answers. This type of interview is well suited when trying to gather data regarding complex matters, and both unstructured and semi-structured interviews both typically aim to discover rather than to just validate. (Denscombe, 2003)

Qualitative research is highly dependent on rich data. Rich data is key for generating credibility and persuasive strength to studies based on qualitative research (Schultze & Avital, 2011). In order to ensure that the data collected is as good as possible it is important to remember that people tend to respond differently depending on how they perceive the person conducting the interview. Conventional advice to researcher for avoiding this phenomenon includes (Denscombe, 2003):

- Present him/herself in a light that don't antagonize the interviewee (clothes, courtesy etc.)
- Remain neutral and non-committal on the statements made by the interviewee

When preparing questions for the interview it is first important to think about the sequence in which the questions are asked. Start the interview by asking for some facts. This allows the participant to engage and get involved in the interview. When the participant feels comfortable, one can start asking more controversial questions regarding the participant's feelings and views on certain topics. At the end of the interview, it could be beneficial to ask the participant if they would like to share any additional thoughts on the matter. (McNamara, 2009)

After the general frame of the interview is created, it is time to start designing the questions. McNamara (2009) claims that there is five points to remember when designing interview questions:

1. Wording should be open-ended.
2. Questions should be as neutral as possible.
3. Questions should be asked one at a time.
4. Questions should be worded clearly.
5. Be careful when asking “why”-questions (might make the participant feel defensive having to justify their response).

The main benefits of conducting interviews are that the information gathered has a direct link to the research question/s, a deep understanding can be received by designing the questions in a way that is suited for the specific participant and lastly, during an interview it is possible to not only elaborate further on certain answers, but to also analyze the body language of the participant (Paulsson & Björklund, 2012).

#### 2.4.5 Choice of interview subjects

In practice it is very unlikely that interviewees are chosen based on random sampling. Instead they are most often chosen because they possess a special insight and can make a real contribution to the study. One thing to keep in mind is that depending on the overall aim of the study, it will require a different type of interviewees. For example, if the aim of the study is to produce generalizable results, then a representative sample of interviewees has to be chosen, but if the aim is to delve deeper into a field and explore new areas, then key players in the field need to be chosen. (Denscombe, 2003)

#### 2.5 Validity, reliability and objectivity

In order for a research project to be credible, the “measures” of its validity and reliability can be used (Saunders, Lewis, & Thornhill, 2009). In addition to this, Paulsson & Björklund (2012) mentions objectivity as another important part of research credibility. These measures can, according to Paulsson & Björklund, be defined as follows (Paulsson & Björklund, 2012):

- Validity - To what degree do the research study what it intends to study?
- Reliability – To what degree can the study be replicated?
- Objectivity – To what degree do the researchers own values influence the study?

One example of increasing the projects validity could be to ensure that only relevant persons are interviewed, and that the questions asked are clear and concise. Asking control questions during interviews, in order to ensure that the researchers have understood the participant’s answers, could increase reliability. Increased objectivity is gained by clearly motivating each assumption that is made and by presenting data in an objective way by not selectively only choosing information that fits the researchers own views (Paulsson & Björklund, 2012).

#### 2.6 Analysis

Since this project will mostly consist of qualitative data, this section aims to explain general procedures for analyzing such data. However, a problem when analyzing qualitative data is that there are no standardized procedures to follow and it requires a lot of involvement from the researcher. Despite of there being no standardized methods for this, the authors will make use of some advice given in previous literature.

The first step is to prepare the data. This could be done by making sure that all information gathered is presented in similar formats and each piece of “raw data” could be encoded with a unique “serial number” or “code” for reference purposes. This means that the information is broken down into specific units for analysis (e.g. based on keywords or short phrases). These units can then be analyzed

and investigated in order to find linkages and relationships as well as trying to come up with generalizations that can explain these linkages. Data collected through interviews has to first be transcribed in order for this categorization to work. (Denscombe, 2003)

The next step is to begin analyzing the data itself, and using an inductive approach, it is important to analyze data shortly after it is collected. This is done in order to find emerging themes and issues to follow up and concentrate on. If this continuous analysis is not done, the danger is that the inexperienced researcher will simply collect the data and not put much emphasis on if the data received is beneficial or even necessary for the research (Saunders, Lewis, & Thornhill, 2009).

The final thing to remember when analyzing qualitative data and coming up with conclusions is that these conclusions have to be verified. This is easier said than done since it is much harder to do a significance test on qualitative data as compared to quantitative data. In order to test the conclusions, alternative explanations and negative examples that don't conform to the conclusion has to be sought. Only by doing this will the researchers be able to develop valid concepts and conclusions.

## 2.7 Methodology used in this project

This project follows the inductive approach. This means that the project started with the development of a theoretical framework based on existing research within relevant fields, then the data collection phase started followed by coding and categorizing of the data, and finally conclusions were drawn and the concept was created.

Using the inductive approach, with the purpose of generating new theories, a qualitative research method was chosen. Interviews were chosen in order to generate the data needed for this method. This is because the topic of management systems is complex, and in order to develop a new concept within this area, experiences and thoughts from different knowledgeable persons were sought. The authors view is that the only viable alternative would be a mix of observation and interviews. But a strictly interview-based data collection method was chosen because of the time constraint. It would be of interest to follow different management systems on different levels of complexity, but due to the time constraint this was not an option.

The method that was used is a slightly modified version of the qualitative approach proposed by Savenye & Robinson (2005).

To increase the reliability of the project the authors sought help from their supervisor when developing the research questions, the interview guide, and selection of the interview participants. Additionally, by reading, analyzing, discussing, and comparing old studies of high reliability within this area the reliability of the report was increased.

The report was created in different stages:

**Stage 1** – The research questions were defined with a helping discussion from the supervisors and a project timeline is developed. During this stage, a theoretical framework was developed by looking into previous research within the related fields of management systems (e.g. business excellence models and international standards). This framework together with the initial interview was used in order to create an initial concept that acted as a foundation for the development of the interview guide needed for the data collection phase. The initial interview was conducted with a person who is an expert within the area. This person was selected with advice from the supervisor at Trivector LogiQ.

**Stage 2** – During this stage, data was collected through interviews with relevant persons within the field of management systems. For this purpose, the interview guide developed during the previous stage was used. If some parts of this guide proved to be inefficient in providing relevant answers and information, it was slightly modified between each interview in order to ensure that the data gained is of use to the project. After each interview, the information received was categorized and coded into several sub-categories based on the key criteria's specified in table 1. That is, the interviews were recorded and later transcribed verbatim. During this step, the authors were able to change and/or delete questions from the interview guide, if the questions were of no value.

**Stage 3** – The transcribed data was analyzed continuously throughout the data collection stage. The initial concept, developed in stage 1, was, if necessary, continuously refined and reworked based on the findings of each interview. When the author's felt that no new information emerged during the interviews, a final, comprehensive analysis was conducted where the empirical findings and the final concept were compared to the theoretical framework.

**Stage 4** – The final stage was to finalize the report by consolidating all received information into a thorough and structured report. The reports' analysis is based on the developed framework from stage 1, the collected data from stage 2, the authors' thoughts and own experience and the supervisors help.

#### 2.7.1 Interview approach in this project

The interviews in this project were conducted in a semi-structured way. An initial interview guide was created that acted as a foundation for the data collection part of the project. This guide contained a predetermined set of questions, but some of the questions invited the participant to give elaborate answers on a specific topic. However, if the authors found that some questions were not providing the desired insights, the questions were reworked before the next interview.

Since this project aims to delve deep into the field of management system theories, interview participants were chosen based on their knowledge within this field. In order to get in touch with the right people, Anders Ljungberg at Trivector LogiQ was of great assistance. Companies and organizations that shows promising results when it comes to managing and implementing management systems were of primary interest, since it is these types of organizations that can provide a better insight into how successful systems are and should be set up/implemented.

82 organizations of different sizes, operating in different industries were reached out to and asked if they would like to participate in this study. Out of those 82, 14 organizations agreed to participate. The following types of organizations were interviewed:

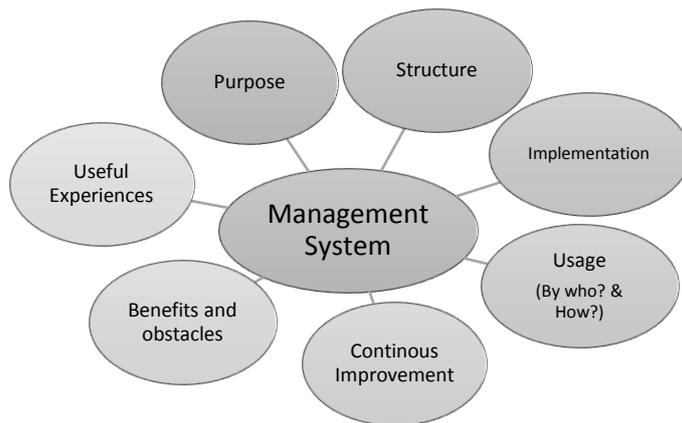
Table 4 Interviewed organizations

Type of organization	Position of interviewee	Number of employees	Will be referred to as
Public healthcare organization	Environmental controller	>5000	Company 1
Transport and logistic consultants	Sustainability Manager	>5000	Company 2
Provider of business assurance services	Lead auditor	>5000	Company 3
Public healthcare organization	Administrative director	>5000	Company 4
Private dental and healthcare company	ISO coordinator	>5000	Company 5
Subsidiary of a large wholesale company	Purchasing manager	>5000	Company 6
Public institute for higher education	Division manager	>5000	Company 7
Technology consultants	CEO for one subsidiary	1000-5000	Company 8
Geriatric care company	Vice President and co-owner	1000-5000	Company 9
Non-profit organization specialized in standards	Project Leader	100-500	Company 10
Non-profit research institute	Researcher	100-500	Company 11
Communication consultants	Co-owner	<10	Company 12
Logistic property company	CEO	<10	Company 13
Auditor of management systems	CEO and owner	<10	Company 14

The first interview was conducted in an unstructured way. The main focus of the first interview was to:

- Get a broad understanding of how management systems are being used in today's organizations.
- Get insights into the main challenges and obstacles that an organization can face when implementing/managing the system.

The authors had prepared a general framework (see figure 1 below) for key areas they wanted to gain insights into.



*Figure 1 Framework for the first interview*

The following interviews followed a semi-structured approach in order to gain enough insights to answer the research questions stated in section 1.3 of this project. In order to be able to answer these questions, insights into both the current structure and aspects of the participants management system needed to be gained, and more importantly the participants own views and feelings towards what a management system should be and what obstacles and improvement areas' he/she sees within the field.

To get this information, the interviews were structured and divided into different parts according to the key aspects specified in table 1. This eased the process of coding and categorizing the data, which in turn helped with the analysis part of the project.

The questions in the interview guide (see appendix 1) aims to investigate not only how the actual system is set-up, but more importantly, to focus on the interviewee's feelings and thoughts on what can be done differently. If the participant gave vague or unclear answers to specific questions, then follow-up questions were asked in order to get clarification.

By dividing the interview into two perspectives, or segments, one management perspective and one employee perspective, the authors were able to more easily control the flow of the interview and additionally it helped during the transcription and coding process.

### 2.7.2 Analysis method used in this project

As stated, in order to be able to analyze the qualitative data gathered through interviews, the data first had to be transcribed and analyzed. When this was done the authors compared the different responses by creating a short summary of the answers given for each question and presenting them in a tabulated form. This was done parallel to the data collection phase in order to find emerging themes or topics not yet thought of by the authors. The data collection phase proceeded until no new information emerged during the interviews.

The analysis was conducted in two steps. First, by using the transcribed data, similarities and differences between the different respondents were found. If any discrepancies were found, these were analyzed based on the explanations given by the interviewed organization. This means that even if the majority of participants gave one answer, the minority's answer could still be the one used in the final concept. If the minority providing the answer had a more extensive explanation or reasoning than the majority was the answer used. After the first analysis step, the qualitative data was summarized. This summary was then analyzed based on existing theory to find similarities and differences between the empirical data and existing theory. If any discrepancies were found, then the authors tried to analyze why this discrepancy exists. This was not easy, but the premise of rejecting or accepting the findings in the empirical data was based on the explanations and experience of the interviewed organizations. If an idea was not supported by existing theory, but has proven to be successful according to the interviewed organizations, then the idea would be deemed valid. In the analysis the authors took out the most eye-catching answers which also often fitted well with the majority of other answers.

## Chapter 3

### Theory

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***This chapter will provide knowledge of existing theory related to management systems. A general introduction to what a management system is will be given, followed by an explanation of international standards such as ISO 9001 and different business excellence models (BEM's) such as; Malcom Baldrige National Quality Award, The European Foundation for Quality Management and the Deming Prize. The last section of the chapter will explain existing theory regarding Self-Assessments and change management.***

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#### 3.1 What is a management system?

In order for organizations to survive in today's competitive market, they need to take the concerns, requirements and expectations of all their stakeholders into account when planning, designing and managing their business processes. This is easier said than done since different kinds of stakeholders will have different expectations and requirements. Some may be most interested in environmental issues, whereas others might have financial results or quality as their top priority. In order to meet every stakeholder's demands, different approaches are necessary. Previously, managers and organizations tried to comply with these requirements based on their own experiences and gut-feelings, but the ever-increasing complexity and scope of these stakeholder requirements have highlighted the need for a systematic approach. As a response to this, the practices of different management systems have evolved. Management systems help organizations take a systematic approach to executing various business functions in order to achieve a specific goal (Asif, Fisscher, & Joost de Bruijn, 2010). The International Organization for Standardization defines a management system as "a set of procedures an organization needs to follow in order to meet its objectives". Small organizations might not have an official system but instead "just a way of doing things". The larger the organization, the more likely they are to have their procedures documented in order to ensure that everyone knows who does what. This process of systemizing how things are done is known as a management system.

The purpose is mutual for all management systems, to help organizations to manage the risks that are associated with the product or service the organization provides, as well as establish objectives and a policy. It is important to realize that everything that is needed to attain the objectives are included in the system (Persson, 2006).

All organizations have a management system. It doesn't matter if the organization is large or small, simple or complex, makes profit or not, all of them have a management system, be it formal or informal. The system is often divided into several sub-systems, which can be governed independently. These sub-systems reflect different demands of key-parties within the supply chain (e.g. suppliers, customers and shareholders). A lot of organizations chose to use standards or different business excellence models when developing, improving or evaluating an overall management system (SwedishStandardsInstitute, 2008).

Imagine what a professional football team would be like without a Management System focused on a regimen of practice drills. To make it more complex, take away their playbook and player statistics and try to make something good out of it. The team would probably manage to win a game or two, but in the long run is the team condemned. What you have in this extreme scenario are highly talented individuals participating in organized chaos. And the professional football team is like most of the organizations in the world, they want to win, they want to be the best team/company in the

league/business sector, they want to be top notch (Anderson C. , 2014). This tries to illustrate the point of why organizations need to examine the existence and effectiveness of its management systems. If there are weaknesses or holes in your management system you will want to take corrective action. In order to achieve success, the organization has to avoid chaos and operate in a structured way.

The International Organization for Standardization (ISO) states that the general structure of a management system should entail the following parts:

- **Purpose and goals**
  - All organizations should strive towards specific goals. In order to reach these goals, the organization is highly dependent on several different stakeholders. So if an organization is to reach its goals, they need to develop a strategy that incorporates the different stakeholder requirements.
- **Product, market and customers**
  - In the end, it is an organizations products or services that should enable them to satisfy their customers' demands. For this to be true, the organization needs to understand both their current market (including competitors) and customers. They need to know what their competitors are doing/offering and what their end customers are really looking for. No company can survive in the long run by not, at least to some extent, analyzing their current surroundings.
- **Stakeholders**
  - As previously mentioned, the different stakeholders of an organization will shape the structure and information included in the management system. Really understanding different stakeholders' demands and expectations, mapping them and then including them in the management system, will greatly increase the chance for organizational success.
- **Organizational structures and resources**
  - No matter what the product or service the organization is offering, several resources are needed in order to provide it. These resources should be an integrated part of any management system, and it should include e.g. personnel, materials, information and financial assets. How these resources are visible in the management system will depend on both the size and purpose of the organization. The smaller the organization, the less need for a general structure.
- **Processes**
  - When the appropriate resources are allocated, it is the different processes that actually help create the product or service. Therefore, the processes can be viewed as the backbone for any management system. An organization needs to understand both the process itself and how it relates to other processes. An output from one process often becomes the input of the next process, and it is this link that is crucial for many organization to understand.

### 3.1.1 Integrating management systems into the organization

In many organizations today, management systems are implemented in order to structure the organization. However, after the implementation is done, the management system is often stowed away as a document and forgotten. As a result to this, (Antonsson, Sjöström, & Östlund, 2007) claims that organizations need to create "living management systems". By this they mean that the

management systems should provide direct support for the daily work that is being done in an organization, and that everyone in the organization should use the system. In order to create a living management system, they present several key aspects that need to be taken into consideration. Below follows a few examples of these aspects:

- The whole organization is aware of what the management system aim to achieve and realizes the benefits of it.
- Continuous improvement work is crucial.
- The participation from management will help motivate the employees, which results in increased loyalty.
- Processes should be developed gradually.
- All tools, routines and checklists in the management system should aim to find solutions and produce results.

### 3.1.2 Integrated management systems

Currently, many organizations have different systems in place when it comes to different stakeholder requirements (e.g. environmental systems, health and safety systems etc.), which together act as the organizations “overall management system” (Pojasek, 2008). As previously mentioned, these sub-parts of an organizations overall management system is often governed and developed independently of each other, resulting in a sub-optimal overall system. By instead trying to integrate these sub-systems into one coherent and holistic system, several benefits such as cost savings, operational benefits and enhanced customer satisfaction is gained. But in order to achieve these benefits, there are obstacles that need to be conquered (Asif, Fisscher, & Joost de Bruijn, 2010). The obstacles could entail the difficulty of not attributing the right level of importance to each variable such as quality, environmental or safety and the problems arising from trying to structure these variables into a holistic system (Salomone, 2008).

### 3.1.3 Definitions of a management system

Trying to find previous research that has touched upon the matter of how to define a management system is not easy, very few research papers present a general definition of what a management system is. Because of this, the information below is gathered from different sources available online, but still trying to use sources that carries weight and reliability within the world of business management.

What can be concluded from looking at the different definitions (presented in table 5) is that the existing definitions view a management system as a strategic tool for managing an organizations various business processes in order to achieve the corporate mission and vision. Most definitions seem to stem from a management perspective, where it should be used as a tool for aligning and implementing the corporate strategy in order to meet the demands and requirements of the customers.

The following table (table 5) outlines the most common definitions found as to what a management system actually is:

Table 5 Definitions of a management system

Author / Organization	Definition
<b>Chartered Quality Institute</b>	An integrated management system is a management system which integrates all components of a business into one coherent system so as to enable the achievement of its purpose and mission (Chartered Quality Institute, u.d.)
<b>Business Dictionary</b>	A management system is a set of policies, practices, procedures, and processes used in developing and deploying strategies, their execution, and all associated management activity. (Web Finance Inc., u.d.)
<b>Mary Lewinson (2010)</b>	A Business Management System is a set of tools for strategic planning and tactical implementation of policies, practices, guidelines, processes and procedures that are used in the development, deployment and execution of business plans and strategies and all associated management activities. Business Management System provides a foundation for successful implementation of both strategic and tactical business decisions regarding current activities, processes, procedures and tasks for the purpose of meeting existing goals and objectives of a profit organization and satisfying customer needs and expectations. (Lewinson, 2010)
<b>The International Organization for Standardization</b>	A management system is a set of procedures an organization needs to follow in order to meet its objectives
<b>Assif, Fisscher &amp; Joost de Bruijn (2010)</b>	Management systems helps organizations take a systematic approach to executing various business functions in order to achieve a specific goal (Asif, Fisscher, & Joost de Bruijn, 2010)

### 3.2 Different kinds of management systems standards according to ISO

The ISO 9000 quality management standard, is just one of 19500 standards that ISO have published. Other standards are for e.g. environmental management (ISO 14000), Information security management (ISO/IEC 27001), Energy management (ISO 50001), and country code (ISO 3166). Below is a description of three standards so you more easily can understand the difference between different standards.

#### 3.2.1 ISO 9001 – Quality management system

ISO 9001 sets out the criteria for a quality management system. It can be used by any organization, large or small, regardless of its field of activity. By using ISO 9001 organizations ensure that customers get consistent, good quality products and services, which in turn brings many business

benefits. The standard consists of 58 requirements which in turn is based on eight principles: leadership, customer focus, involvement of people, process approach, system approach to management, continual improvement, factual approach to decision making, and mutually beneficial supplier relationships. ISO 9001 is implemented by over one million companies and organizations in over 170 countries. There are around 6000 certified organizations in Sweden (ISO9001, 2014).

### 3.2.2 ISO 14001 – Environmental management system

ISO 14001 sets out the criteria for an environmental management system. It can be used by any organization regardless of its activity or sector. The benefits of using ISO 14001 include: reduced cost of waste management, savings in consumption of energy and materials, lower distribution costs, and improved corporate image among regulators, customers and the public. It can also provide assurance to a company management and employees as well as external stakeholders that environmental impact is being measured and improved (ISO14001, 2014).

### 3.2.3 ISO/IEC 27001 – Information security management system

ISO/IEC 27001 helps organizations to keep information assets secure. Any organization in any sector can use the standard. Using it will help your organization manage the security of assets such as financial information, intellectual property, employee details or information entrusted to you by third parties. ISO/IEC 27001 provides requirements for an information security management system (ISMS). An ISMS is a systematic approach to managing sensitive company information so that it remains secure. It includes people, processes and IT systems by applying a risk management process (ISO, International Organization for Standardization, 2015a).

## 3.3 Motives for implementing the international standards

The International standards provide benefits, mostly in the economic, technological and societal sectors. They help to harmonize technical specifications of services and products making industry more efficient and breaking down barriers to international trade, in other words standards helps to reassure consumers that services and products are safe, efficient and good for the environment.

ISOs standards benefit every level within an organization. For employees the standards should be supportive, simple and inspiring. The management uses the standard to e.g. create value, enhance customer satisfaction and give them access to new markets (ISO, International Organization for Standardization, 2015b).

The intend of ISO 9001 is to provide confidence to customers of an organization, so that organization understands who the customers are and what they want so they consistently can provide a product or service that meets the customer needs and expectations (Croft, 2014).

### 3.3.1 For business

To tackle the demanding challenges of modern business, companies use International Standards. The standards work as guidelines as well as a strategic tools. They help companies to access new markets, increase productivity and ensure that business operations are as efficient as possible.

- Cost savings - International standards help optimize operations and therefore improve the bottom line
- Enhanced customer satisfaction – International standards help improve quality, enhance customer satisfaction and increase sales.
- Access to new markets – International standards help prevent trade barriers and open up global markets.

- Increase market share – International standards help increase productivity and competitive advantage
- Environmental benefits – International standards help reduce negative impacts on the environment.

### 3.3.2 For Society

If a company provides a product and/or a service that complies with the International Standards consumers can be sure that they are of good quality, reliable and safe.

### 3.3.3 For government

International Standards are a vital resource for governments when developing regulations because of the use of international experience and expertise.

- Expert opinion – ISO standards are developed by experts. By integrating an ISO standard into national regulation, governments can benefit from the opinion of experts without having to call on their services directly.
- Opening up world trade – ISO standards are international and adopted by many governments. By integrating ISO standards into national regulation, governments help to ensure that requirements for imports and exports are the same the world over, therefore facilitating the movement of goods, services and technologies from country to country.  
(ISO, Benefits of International Standards, 2015c)

## 3.4 ISO 9000 - Background

The first international standard with some criteria linked to management systems, ISO 9000, came in 1987. The standard was developed in order to get a more comprehensive approach to quality management, which was needed in an ever-expanding global market (Karthia, 2004). It became recognized by organizations relatively fast and companies around the globe started to incorporate it into their way of working. The birth of ISO 9000 has brought quality management into what academic literature dubs the “third era” of quality management (Psomas & Fotopoulos, 2009).

The companies who based their quality management system (QMS) solely on ISO 9001 would sometimes fall short compared to the ones who followed a total quality management (TQM) approach (Martinez-Costa, Choi, Martinez, & Martinez-Lorente, 2009). Over time, this led to that a lot of people began to criticize the current (1994) version of the standard, mainly because they claimed it was too focused on quality control and lacking in management concepts such as TQM. With this in mind, another revision of the standard was made, the ISO9001:2000 version (Pheng & Fong, 2002). This update contained several improvements, for example, it contained a more process-oriented management view (Casadesús & Karapetrovic, 2005).

Currently, ISO 9001 is undergoing another revision, which will be released in 2015. Numerous improvements will be made and the focus on process orientation and value creation will increase even further. The visibility of a risk based mindset will become much more apparent in the new standard (Green, Lomas, & Abassi, 2014). This risk-based mindset will highlight the need for conducting risks assessments and to take appropriate action in regards to the findings of these assessments. The standard also says that the organization has to create documents explaining the procedure used to find and take action against risks.

These are improvements, but no new requirements are being introduced, instead it will standardize the language and the approaches to management (Oddy, 2014). According to the International

Organization for Standardization, the ISO 9000 family aims to provide guidance and tools for organizations that want to ensure that their products and services meet customer's requirements, and that quality is consistently improved.

### 3.4.1 Structure

According to ISO, the ISO 9000 standard provides companies and organizations with the fundamentals and the necessary vocabulary used in the entire 9000-series. It act as a foundation for understanding the basic key elements of the series.

The ISO 9000 standard is based on eight quality management principles:

- **Customer focus** – Because the survival of organizations depends on their customers, it is important to not only understand their current and future customers' needs and expectations but to meet and exceed them.
- **Leadership** – Develop a company culture with clear directions in which employees can become fully involved in achieving the company's goals and objectives.
- **Involvement of people** – Realize the importance of the employees and make sure to use their capabilities to their full extent.
- **Process approach** – By structuring activities and related resources as coherent processes, companies will more efficiently achieve their desired goals.
- **System approach to management** – By understanding how different processes are linked together, and by managing them as a complete and integrated system, companies can achieve their objectives in a more effective and efficient manner.
- **Continuous improvement** – Continuous improvement should be a key part of an organization overall objective.
- **Factual approach to decision-making** – Analyses based on factual information should act as foundation when making key decisions and in order to increase the chance of success for improvement projects.
- **Mutually beneficial supplier relationships** – Organizations and its suppliers both benefits from a close collaboration through increased possibilities of synergies when creating value. (ISO, 2012)

Management who wants to steer the organization towards continuous improvements can use these principles.

ISO 9001 is to be used by organizations that want to develop and implement a QMS that will enhance the capabilities for providing value to the customers. It is against this standard that organizations can seek certification, and it recognizes that the term "product" can be applied to services as well. The standard contains five key sections that specifies which activities that needs to be considered when implementing the QMS:

- Overall requirements for the QMS and documentation.
- Management responsibility, focus, policy, planning and objectives.
- Resource management and allocation.
- Product realization and process management.
- Measurement, monitoring, analysis and improvement.

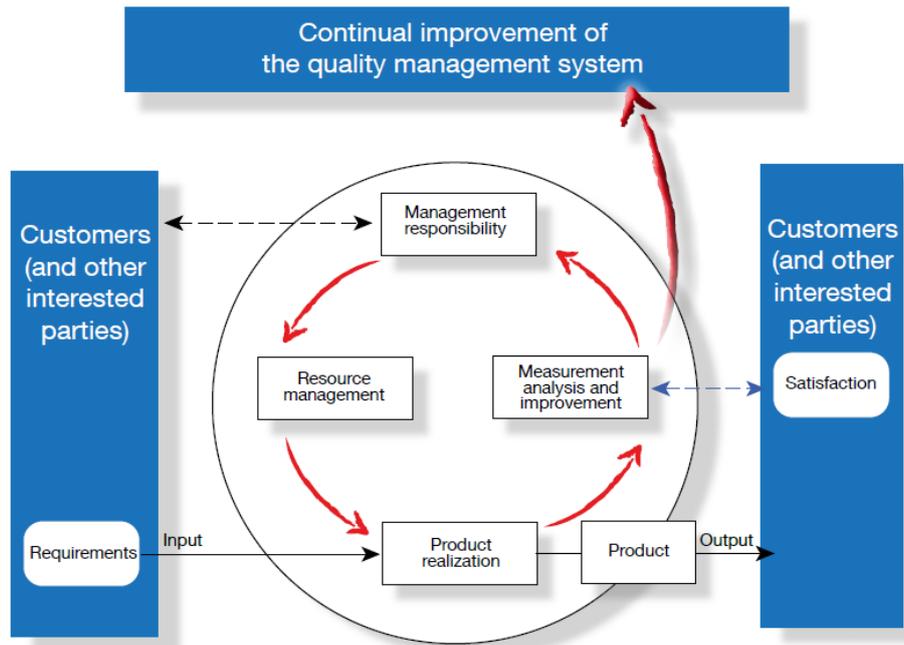


Figure 2 ISO 9000 process approach

All sections except for “Product realization and process management” should be applicable to all types of organizations, whereas the last one can be tailored to fit your specific organization. As viewed in the figure above, the standard provides a framework for how to continually work with improvement of the QMS in order to constantly meet the customers’ needs and expectations.

The purpose behind ISO 9004 is to provide top management with the tools necessary to take the QMS set up through ISO 9001 to the next level. It provides guidelines and structure for a structured approach to a systematic and continuous improvement of the organizations overall performance. It is used to extend the benefits of ISO 9001, not only for your organization but for all parties involved in your supply chain. (ISO, 2009)

When implementing and developing the ISO 9001-based QMS, the International Organization for Standardization suggests the following approach:

1. Identify the ISO 9001 requirements’
2. Map these requirements with your implemented QMS where applicable
3. Make a gap analysis: identify where in your existing system where the requirements are fulfilled and where they are not
4. Include in your QMS processes the activities, procedures and controls needed

Once the system has been created, ISO also suggests that the organization should consider implementing business excellence models into the company operations.

### 3.4.2 Benefits and criticism

To what degree the ISO 9001 standard benefits an organization has been debated amongst some researchers. But a consensus can be found stating that there is a strong relationship between companies’ certification motives and the attained benefits (Sampaio, Saraiva, & Monteiro, 2012b).

According to Sampaio et al. (2012), the authors who did find a positive correlation between the implementation of ISO 9001 and received benefits would classify these benefits into two categories; internal and external. Internal benefits are those linked to marketing and promotional aspects,

whereas external benefits are related to organizational improvements. The most common benefits derived from being ISO 9001 certified can be seen in the table below:

Table 6 Benefits of ISO 9001

External Benefits	Internal Benefits
Access to new markets	Productivity improvements
Corporate image improvement	Product defect rate decreases
Market improvement	Quality awareness improvements
ISO 9000 certification as a marketing tool	Definition of the personnel responsibilities and obligations
Customer relationship improvement	Delivery times improvements
Customer satisfaction	Internal organization improvements
Customer communication improvement	Nonconformities decreases
	Customers complaints decreases
	Internal communication improvements
	Product quality improvement
	Competitive advantage improvement
	Personnel motivation

(Sampaio, Saraiva, & Rodrigues, 2009)

These results are compatible with those gained by other studies, for example one study indicates that an ISO 9000 certification will provide organizations with a good first step towards TQM (Kuo, Chang, Hung, & Lin, 2009).

Based on this, it is then strange as to why most companies still view ISO 9001 mainly as a marketing tool (Poksinska, Jörn Dahlgard, & Antoni, 2002). One reason might be that the external benefits are more easily quantified and measured as a direct result of being certified. It is easy to notice if customers are choosing the competitors over you because they have a certification and you don't.

Other factors that might come into play regarding the perceived benefits are that the systems needed for implementing and maintaining a good QMS are costly, and therefore a lot of smaller companies might regard the certification process as a "necessary evil" (Heras, Dick, & Casadesu, 2008).

A study analyzing if the ISO 9004 is a valid path to business excellence show that an organization should not make a move towards a complete result-based management system in one turn, but instead this transition should be done gradually. The study's findings goes on to suggest that while ISO 9004 can be used as a steppingstone towards business excellence, it is not yet sufficient to be used as a full-fledged business excellence model (Boys, Karapetrovic, & Wilcock, 2004).

### 3.5 Business excellence models

The increase of customer expectations and the evolvement of performance improvement initiatives, the term quality evolved from having a product specific focus towards a more organization-wide effort (Sampaio, Saraiva, & Monteiro, 2012a). In order to pursue this organization-wide quality, many companies have, during the last two decades, started using differed business excellence models in the hope of achieving business excellence (Talwar, 2011). These business excellence models, or BEM's, represent a framework that can be used for assessing or developing high-performance management systems (Singh, Khan, & Grover, 2012).

### 3.6 Malcom Baldrige National Quality Award – Background

The Malcom Baldrige National Quality Award (MBNQA) was first introduced in 1987. The United States congress wanted to promote quality awareness, recognize quality and business achievements, and share these success-stories among other U.S. companies. It marked the start of a slowly growing U.S. quality movement. After its introduction, the award has become more and more recognized, not only by companies in the United States, but amongst companies and organizations worldwide (NIST, 2012). The model is not only used in order to win the award, but instead it should be viewed as a powerful self-assessment tool (Talwar, 2011). According to the National Institute of Standards and Technology, the main purpose behind the award is to help organizations to:

- Reach their goals
- Improve results
- Become more competitive by aligning plans, processes, decisions, people, actions, and results

#### 3.6.1 Structure

MBNQA has evolved from a simple tool to identify and promote exemplary quality management practices in the United States to a comprehensive framework and model for quality improvement used in companies and organizations around the globe (Sun, 2011). The MBNQA criteria's are divided into seven major categories and several sub-categories. The main focus lies in customer focus and performance excellence. These criteria's are re-evaluated and revised on a systematic basis in order to improve clarity and quality, whilst making sure that they are up to date and fit to reflect the globes current situation (Kartha, 2004). They should provide a system perspective, or in other words, they look at the alignment and integration of processes across and organization. They are divided into process and result based categories that should cover all aspects of a performance management system. More important than the criterion itself, is how it is linked and relates to the others. It is these links that defines the success of an organization and its overall management system (NIST, 2014). The seven main categories of the MBNQA are (NIST, u.d.):



Figure 3 Baldrige Education Criteria for Performance Excellence Framework

- **Leadership** - A strong leadership and management is essential for providing an organization with the motivation and energy needed for continuous improvements and innovation. According to the US Department of Commerce National Institute of Standards and Technology, MBNQA defines leadership as “the guidance and visible participation that senior leaders provide in setting the organizational values, directions, performance expectations and social responsibilities. They further states that role-model leaders are those who can establish a corporate culture of customer engagement and rewarding employees for valuable contributions to the organization.
- **Strategic Planning** – By integrating and aligning quality improvement plans into the organizations corporate competitive strategy, the organization is one step closer to achieving quality and business excellence. This criterion also aims to evaluate how the organizations develops, implements, and if necessary, changes these plans to fit their current circumstances.
- **Customer focus** – This criteria aims to examine how effective a company’s processes are when it comes to analyzing changes in their market, customer requirements and new approaches to improve customer relationships. It takes into account how you as an organization get information from your customers and how you put this information into use.
- **Measurement, Analysis and Knowledge Management** – This criteria aims to measure an organizations processes in terms of information and knowledge management but also how the processes are linked to the performance of the overall structure in terms of scope and validity. It acts as a brain-center for the performance management system where all relevant information regarding results and outcomes are to be found. It is a very useful tool not only for realizing what areas’ needs to be improved, but can also provide valuable information on how the organization is performing in the market through benchmarking and comparisons with competitors.
- **Workforce focus** – Achieving business and quality excellence is highly dependent on the employees, therefore it is of importance to implement and develop structures and practices that enables an organizations employees to grow and develop their skills either through individual training or through knowledge transfer between employees throughout the organization.
- **Operations focus** – This criteria evaluates an organizations approach to value creation and quality management processes. It is important to not only focus on individual processes but to ensuring that the linkages between the processes are taken into account as well.
- **Results** – This dimension act as an overall score for quality management. It considers the outcome and results based on all the above-mentioned criteria’s. (Lee, Zuckweiler, & Trimi, 2006).

### 3.6.2 Benefits and criticism

According to NIST (2014), organizations that have won the MBNQA can see a median growth in jobs that is nearly 20 times greater than matched industries and time periods. Talwar (2011) mentions that companies who have implemented MBNQA have reported improvements in the process orientation, customer orientation and improvement orientation. By using the MBNQA criteria’s as a self-assessment tool, companies can get an objective framework for analyzing their organizations processes. This analysis can then act as a foundation when improvements of the processes and internal procedures are to be made. The criteria also help companies when it comes to communication. Both internal communication and external communication, with supplier or other companies with whom a strategic exchange of ideas and practices are to be shared, are

strengthened. It provides a focus on what to communicate and a framework for comparing strategies, methods and benchmarks (Evans, 2002).

Despite the benefits that can be gained by using the MBNQA criteria, some critique is given to it as well. For example, some say that the structure is too rigid and don't provide enough flexibility for organizations to adapt the model to fit their specific needs (Talwar, 2011). The model is also found to be too focused on results and not enough on quality (Schonberger, 2001). He states that there has been a shift in the criteria from quality management towards general management. In addition to this, he further claims that the award has moved away from a "what you should do"-criteria's towards a more open-ended approach which could invite practices that weakens rather than enhances competition.

### 3.7 European Foundation for Quality Management – Background

The European Foundation for Quality Management (EFQM) excellence model was first introduced in 1992. Its initial purpose was to evaluate and assess those organizations that wanted to run for the European Quality Award. Throughout the years, it has evolved into the most widely used organizational framework in Europe and across the world (Dodangeh & Yusuff, 2011). According to the European Foundation for Quality Management, the EFQM excellence model aims to help organizations generate sustainable success by helping them understand the linkages between their results and their processes. The EFQM model was developed and designed with the TQM principles in mind. The model's success stems from the fact that it offers a clear framework, terminology and methodology. The EFQM model assumes that in order for an organization to be successful, independent of organizational size or business sector, it should have a good management system. In this sense, it can be viewed as a good tool for structuring and developing an organization's management system through self-assessment (Gomez, Costa, & Lorente, 2011). In addition to this, Dodangeh and Yusuff (2011) mentions that the model can also be used as a benchmarking tool, as a guide to identify areas for improvement or as a common basis for a company's vocabulary and way of thinking.

#### 3.7.1 Structure

The EFQM model is a framework based on nine criteria. Five criteria are "enablers" and four are "results". The enablers are those linked to what an organization does, and the results are those linked to what an organization achieves (Martin-Castilla & Rodriguez-Ruiz, 2008). Or to put it in another way, if you would like your results to be different, you have to change something in the enablers. The model recognizes that sustainable excellence can be achieved through several approaches, and it is based on the premise that results are gained through partnerships, resources and processes (Gomez, Costa, & Lorente, 2011). The figure below illustrates the framework of the EFQM model (EFQM, 2012).

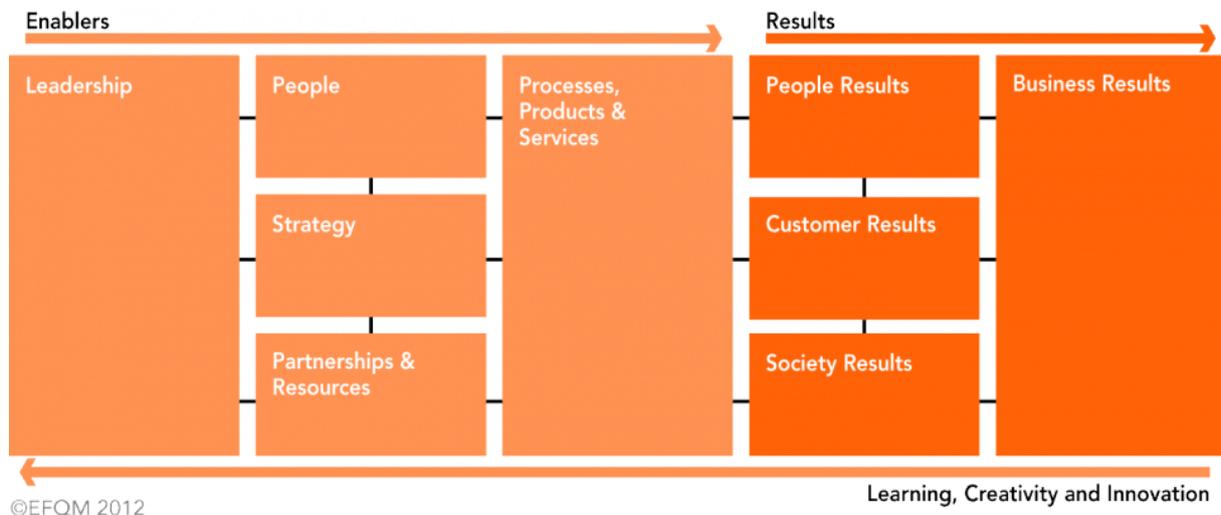


Figure 4 EFQM model criteria.

The arrows in the figure above visualizes the general flow and dynamics of the model. By studying the results, the organization can gain valuable insights that can be used to improve the enablers (Martin-Castilla & Rodriguez-Ruiz, 2008). Below follows a short explanation of each criterion according to Martin-Castilla and Rodriguez-Ruiz (2008):

- **Leadership** – Leaders have an important role to play within the organization. It is their responsibility to listen to the stakeholders and try to satisfy them. Leaders should be the voice of change within an organization, and therefore it is important that they are good communicators. Shortly put, the leadership criteria could be viewed as a way to monitor and manage the human and social capital of the company.
- **Strategy** – When developing an organizations strategy it is important to balance the interest from different stakeholders. To do this, information has to be gathered from stakeholders, other sources of information and performance indicators. All of this data should then be evaluated and incorporated into the policies and strategy of the company. Strategies should be aligned with the company’s mission-vision-values and, when possible, promote the creation, storage and diffusion of knowledge within an organization.
- **People** – The welfare of organizations employees is of great importance in the hunt for business excellence. This means that in order for an organization to thrive, its employees must be challenged both on a personal and professional level. They must develop a corporate culture that is based on transparency, integrity, mutual trust and participation.
- **Partnerships & resources** – An optimized value chain is gained through collaboration and alliances with agents throughout the supply chain. In addition to this, organizations have to develop procedures for controlling expenditures defined in the annual budget. Other resources such as buildings and equipment must be managed with the environmental protection criteria in mind. All these sub criteria’s are closely linked to the leadership criteria, i.e. it is the responsibility of management to ensure compliance to them.
- **Processes, products and services** – A process-oriented mindset is an enabler for business excellence. The processes need to be developed with internal and external customer satisfaction in mind. These processes should be designed in such a way that they increase customer and stakeholder value. Each process should be developed with these four questions in mind:
  - Who are the suppliers?
  - Who are the customers?

- What performance indicators describe the effectiveness/efficiency of the process?
  - Are the right control loops in place?
- **Customer results** – The EFQM model propose that customer results should be evaluated based on different aspects:
  - Customer satisfaction towards products and services
  - Reliability of products and services
  - Perception of the social impact
  - Organizational reputation
- **People results** – This criteria should be evaluated based on the following:
  - Peoples’ motivation in regards to career opportunities, responsibilities, learning opportunities, communication and involvement.
  - Peoples’ satisfaction with management, working conditions, salary and benefits, change management etc.
  - Peoples’ motivation and involvement in teamwork.
  - Measurement of peoples’ satisfaction (i.e. complaints, people turnover, labor disputes etc.)
- **Society results** – Organizations should strive towards taking responsibility for the society’s development. They play an important role in the sustainability of their market and should try to be part of its future. This is the foundation for corporate social responsibility.
- **Business results** – Evaluated through:
  - Financial and economic results.
  - Non-financial results that have bolstered the company’s image.
  - Optimal and sustainable management aligned with the mission, vision and strategic objectives of the company (e.g. improvement of internal and external processes).

If the implementation of the EFQM model is to be effective, studies have found that there are some key elements on which the success is dependent on (Davies, 2008):

- Setting up clear objectives and outlining the expected benefits.
- Gaining the commitment from senior management.
- Demonstrating the senior management commitment
- Education and training.
- Activities to maintain momentum in the implementation process.

### 3.7.2 Benefits and criticism

Once the model has been integrated and implemented into an organizations way of working, several benefits within the field of business excellence, knowledge management can be achieved (Martin-Castilla & Rodriguez-Ruiz, 2008):

- Reduction of capital loss stemming from the loss of employees.
- Reduction of development costs for new products/services.
- Increased productivity among employees through knowledge sharing.
- Increased employee satisfaction.
- Provide the organization with a powerful tool for self-assessment that can be used to improve existing processes.

Despite these strengths, researchers have put presented some critique against the model. One researcher (Conti, 2007) mentions that the EFQM model has become an “informal standard” for managing quality. He mentioned that when something becomes a standard, stability is far more

important than being cutting-edge. Because of this, its users have rejected some improvement proposal of the model. He goes on to critique that the model is trying to cover both the award and self-assessment with the same criteria's and because of that, the self-assessment part is sub- par. Others, (Gomez, Costa, & Lorente, 2011) , claim that the model is not behaving in the way that the EFQM designers want it to. They say that two of the result variables (people and society) are not sufficiently linked with the others, and by removing them the model would be useful for the classic core objectives of a company; customer satisfaction and financial results. However, if they are removed, the linkages between the enabler criteria's fail since there is no connection between people, strategy, partnership and resources have no significant effect on processes. They conclude that the EFQM model fails to embody certain aspects that the practice of TQM regards as important.

### 3.8 The Deming Prize – Background

In the wake of World War II, the struggling nation of Japan realized that they could not compete with the U.S. in terms of productivity. Because of this, they invited W. Edwards Deming in the early 1950s to help them improve the quality of their products. They wanted to establish a niche for themselves, niches were they weren't producing more, but producing better (Knouse, Carson, Carson, & Heady, 2009). This resulted in the Deming Prize (DP), which was introduced in 1951, and it is the oldest quality award in the world. Initially, the prize was only focused on Japanese companies and organizations, and still today, the on-site examination is conducted in Japanese although English handouts are available (Kumar, 2007). According to the Union of Japanese Scientists and Engineers, the Deming Prize aims to be used as a tool for improving and transforming organizations business management.

#### 3.8.1 Structure

Unlike the MBNQA and EFQM awards, the Deming Prize does not provide a well-defined framework for how to organize and prioritize the criteria (Vokurka, Stading, & Brazeal, 2000). The Deming Prize criteria has been criticized for not providing a clear definition on how the prize was awarded (Kumar, 2007). Because of this the Union of Japanese Scientists and Engineers (JUSE) presented both the evaluation and the judgment criteria. However, even though these criteria's are presented, JUSE remain their policy that the prize should take each organizations current situation under consideration, i.e. no two organizations are the same so they cannot be evaluated based on exactly the same criteria (Union of Japanese Scientists and Engineers, 1997-2004). The evaluation criteria for the DP consists of "basic categories", "outstanding TQM activities" and "roles of top management".

The basic categories' criteria (JUSE, 2014):

- **Management policies and their deployment regarding quality management**
  - The organization should have developed policies that reflect their management principles, scope and business environment. They have implemented quality-oriented and customer driven business objectives and strategies.
  - The policies should be implemented in such a way that they are visible throughout the entire organization
- **New product development and/or work process innovation**
  - New products (including services) or innovative work processes are being actively developed within the organization.
  - New products must be developed with customer requirements in mind. Work process innovation should greatly benefit the efficiency of business management.
- **Maintenance and improvement of products and operational qualities**

- *Daily work management* - Education and standardization leads to that troubles in the organizations daily work will be minimized and major operations in each department should be stabilized.
- *Continuous improvement* – Improvements on quality and other business aspects are conducted in a planned and continual manner. The customer satisfaction rate has been improved and the organization has been maintaining low rates of defect problems in the market or the succeeding processes.
- **Establishment of systems for quality, quantity, delivery, safety, costs, environment etc.**
  - Necessary systems have been implemented and the organization is using and utilizing them effectively.
- **Collection and analysis of quality information and utilization of information technology**
  - Information is collected, both from the market and from within the organization itself, and utilized effectively. Information technology and statistical models are used in order to effectively utilize the information when developing new products or improving operational qualities.
- **Human resources development**
  - The organization educates their human resources in a structured way which results in the maintaining and improvements on product and operational qualities.

These criteria's are then evaluated based on four angles:

- Effectiveness – Effective to achieve the objectives.
- Consistency – Consistent throughout the organization.
- Continuity – Continuous from mid- and long-term viewpoints.
- Thoroughness – Through implementation at the department involved. (JUSE, 2014)

#### **Outstanding TQM activities:**

This part refers to the applicant's core quality related activities. How they implement unique ideas through which they achieve their wanted results. The following list contains some examples of activities:

- **Top management vision, business strategies and leadership**
  - A strong leadership should be exerted in order to share the vision throughout the organization.
  - Business strategies should be developed with organizational excellence in mind.
- **Creation of values for the customers**
  - The development and implementation of quality management systems should be done with the main focus of generating value for the organizations customers.
- **Remarkable improvement of organizational performance**
  - Quality improvement.
  - Speed and productivity improvement.
  - Cost reduction.
  - Securing environment and safety.
- **Establishment of the management foundations**
  - Enhancement of technological capabilities and core competences.
  - Response to a changing business environment.
  - Strengthened human resources development.
  - Strengthened foundation of information systems.

These activities are evaluated based on three angles, effectiveness, reproducibility and innovativeness, which relates to their overall individual performance. (JUSE, 2014)

### **Roles of top management:**

Executives play a very important role when it comes to promoting the practices of TQM. This section of the award aims to evaluating their participation and mindset towards TQM issues, and it is composed of the following points:

- Understanding of and enthusiasm towards TQM
- Insights into top management leadership, visions, strategic policies and environmental changes
- Organizational strength (maintenance and strengthening core technology, speed and vitality)
- Employee development
- Organization's social responsibilities

These points are evaluated in combination with the results gained from the previous two sections (basic categories and outstanding TQM activities). (JUSE, 2014)

### 3.8.2 Benefits and criticism

It has been shown that companies who have won the DP are more likely to outperform companies that haven't won the award, both in financial and non-financial terms (Fasil & Osada, 2011).

The main critique against the DP is the fact that the time and effort needed to prepare an application is too great. Andrea Garbor mentions in her book "The man who discovered quality", that most contestants spend three to five years preparing for the award. Although, as most researchers agree, since the purpose of entering an award should not be to win, but to improve the organizations processes (Francis, 2010), one can wonder if the efforts required for an application is not an obstacle, but a necessary and worthwhile endeavor.

### 3.9 Comparison of the different models

Several studies has been conducted with the purpose of analyzing and comparing the different types of quality management systems and business excellence models ( (Bou-Llugar, Escrig-Tena, Roca-Puig, & Beltran-Martín, 2009), (Sampaio, Saraiva, & Monteiro, 2012a), (Karth, 2004), (Singh, Khan, & Grover, 2012), (Talwar, 2011) (Vokurka, Stading, & Brazeal, 2000)). Disregarding the ISO 9000 standards, the different national quality awards seems to be the most commonly used methods of implementing, monitoring and assessing TQM ideas into organizations. The MBNQA, EFQM and DP is found to have its own evaluation criteria's, purpose and overall approach to TQM ( (Bohoris, 1995) (Vokurka, Stading, & Brazeal, 2000)). They do share some common ground, for example they all strive for continuous improvements and customer driven quality based on a process mindset. All of the awards are being revised periodically in order to ensure their compliance with the current market situation and to reflect the most current viewpoints on organizational quality practice and improvements.

When trying to compare the different models criteria to each other, a table highlighting the key purpose of each model and their criteria was created:

Table 7 MQNQA, EFQM, DP and ISO 9000 – Key objectives and criteria

	<b>MBNQA</b>	<b>EFQM</b>	<b>The Deming Prize</b>	<b>ISO 9000</b>
<b>Objectives</b>	Aims to help organizations to reach their goals, improve their results and to become more competitive by aligning plans, processes, decisions, people, actions and results.	Aims to help organizations generate sustainable success by helping them understand the linkages between their results and their processes	Aims to be used as a tool for improving and transforming organizations business management.	Aims to provide guidance and tools for organizations who want to ensure that their products and services meet customer’s requirements, and that quality is consistently improved.
<b>Criteria</b>	<ol style="list-style-type: none"> <li>1. Leadership</li> <li>2. Strategic Planning</li> <li>3. Customer Focus</li> <li>4. Measurement, Analysis and Knowledge Management</li> <li>5. Workforce Focus</li> <li>6. Operations Focus</li> <li>7. Results</li> </ol>	<ol style="list-style-type: none"> <li>1. Leadership</li> <li>2. People</li> <li>3. Strategy</li> <li>4. Partnerships &amp; Resources</li> <li>5. Processes, Products and Services</li> <li>6. People Results</li> <li>7. Customer Results</li> <li>8. Society Results</li> <li>9. Business Results</li> </ol>	<ol style="list-style-type: none"> <li>1. Management Policies</li> <li>2. Product development / work process innovation</li> <li>3. Improvement of products and operational qualities</li> <li>4. Collection and analysis of quality information</li> <li>5. Human resources development</li> <li>6. Top management vision, business strategies and leadership</li> <li>7. Creation of values for the customer</li> <li>8. Improvement of organizational performance</li> <li>9. Establishment of the management foundations</li> </ol>	<ol style="list-style-type: none"> <li>1. Customer Focus</li> <li>2. Leadership</li> <li>3. Involvement of people</li> <li>4. Process approach</li> <li>5. Systems approach to management</li> <li>6. Continual Improvement</li> <li>7. Factual approach to decision making</li> <li>8. Mutual beneficial supplier relationships</li> </ol>

Based on this information, the common criteria was identified and table 7 below outlines how the criteria is visible in each model.

Table 8 MBNQA, EFQM, DP and ISO 9000 – Common criteria

	<b>MBNQA</b>	<b>EFQM</b>	<b>The Deming Prize</b>	<b>ISO 9000</b>
<b>Leadership</b>	Leaders acts as role models and rewarding employees for valuable contributions	Leaders acts as role models	Share corporate vision throughout the organization	Set up clear directions, involve and motivate employees
<b>Planning</b>	Integrate quality improvement plans into the corporate strategy	Plans are developed to deliver the goals stated in the organizational strategy	Quality and customer oriented plans in order to meet the corporate strategy	Factual approach to decision making, all plans must be verified using appropriate methods
<b>Customer</b>	How organizations make use of information gained from customers in order to improve processes and products	The results should meet / exceed the customer requirements and the processes should be developed with customer demands in mind	Products, process and strategies should all be developed with the customer requirements in mind	Understand customer needs and requirements, strive to exceed them
<b>Workforce</b>	Develop structures and practices that enables an organizations employees to grow and develop their skills through individual training or through knowledge transfer between	Challenge the employees on both a personal and professional level. Develop a corporate culture based on transparency, integrity, mutual trust and participation	Educate the employees in a structured way that results in the maintaining and improvements on product and operational qualities	Realize the importance of employees and use their capabilities to their full extent
<b>Processes</b>	Focus not only on the individual processes, but the linkages between them as well	Processes needs to be developed with internal and external customer satisfaction in mind	New products and processes must be developed with customer requirements in mind	A desired result is achieved more efficiently when activities and related resources are managed as a process
<b>Results</b>	process, product, customer-focus, workforce, leadership and overall financial performance	customer, people, society and business	Quality, productivity, environment	No specific criteria, but the results gained are used as an indicator for continuous improvements

It can be concluded that the underlying principles for the different BEM's and ISO 9000 are very similar. They are all concerned with continuous improvements, and they all highlight the importance of the involvement of both top management and the employees. And although ISO is less concerned with business results, they are still visible since they act as a foundation for the continual improvement process.

Comparing the commonalities of these different models to Trivector LogiQ's two perspectives of a management system, it could be said that these models are taking a similar approach. Although instead of only two perspectives, they have divided it even further. One could argue that all the aspects besides the "workforce" aspect could be placed under the "organizational perspective", resulting in that the two perspectives provided by Trivector LogiQ holds true as compared to existing theories and models.

### 3.10 Self-Assessment

One key element of all the above-mentioned models and methods are the need for continuous improvement. One way to facilitate this continuous improvement is by using different methods of self-assessment. Self-assessment appears in most of the national quality awards such as MBNQA, EFQM and the DP. Companies' mentions a multitude of different reasons for undertaking a self-assessment process, but one common goal is to not only identify improvement opportunities, but to identify vital business processes that through improvement could help optimize business performance. Other reasons include the need to monitor and measure the progress of improvement initiatives and to facilitate advanced quality planning (Teo & Dale, 1997).

Self-assessment is not only limited to analyzing an organizations management system with a reference model, instead it is a crucial planning activity that requires the commitment from both top management and the employees (Benavent, Ros, & Moreno-Luzon, 2005). It is then strange that most companies uses self-assessment as purely a managerial monitoring process rather than an approach for improvement that involves the entire organization (MacKerron, Masson, & McGlynn, 2010). When initiating a self-assessment project, a data gathering system has to be set up, plans and goals relating each process has to be specified and communicated to members throughout the organization and finally, a reference model for assessment has to be chosen. Most companies opt for the use of standard models such as the MBNQ, EFQM or the DP (Teo & Dale, 1997), but once the organization has gotten used to doing self-assessments, a personalized reference model should be developed (Benavent, Ros, & Moreno-Luzon, 2005). Once this is done, each process should be evaluated based on the criteria mentioned in the reference model, and then scored (qualitatively or quantitatively) based on its performance.

### 3.11 Change Management

As stated in all previously mentioned models, the success of an organization is always dependent on the workforce. So when organizations are to undertake a new project, the benefits of said project will greatly depend on how this change is perceived by the different people throughout the organization. In order to facilitate this change throughout the organization, different practices of change management (CM) are commonly used. CM, could be defined as "a variety of organizational interventions that, when executed properly and in consistency with internal and external organizational events, facilitate the enactment of organizational change processes" (Raineri, 2011). The following section will try to expand on some of the ideas behind different CM processes.

In a paper by (Nasiri, Ansari, & Fathi, 2013), they claim that CM requires two perspectives; individual and organizational. The individual perspective is concerned with how people experiences and responds to change, while the organizational perspective is that in which how a group of people can

be managed throughout a change. They go on to mention that no matter the perspective, in order to make changes successfully, individuals and groups need the following:

- Awareness of the need for the change
- The desire to participate and support the change
- Know-how to change
- The ability to implement the required skills and behaviors
- Reinforcement to sustain the change

So how do we make sure that we can provide our workforce with these aspects? According to (Ibbs, Wong, & Kwak, 2001), the first principle of effective change management is to develop a balance change management culture. This could be done by communicating critical project success factors to the workforce and then documenting them. By clearly defining and communicating the desired outcome of the change, the risks for conflicts can be reduced. The second principle is to recognize the change. Here, employees are encouraged to have an open discussion in order to find areas that will be affected by the change, and, if possible, try to identify alternatives to the change. By identifying changes prior to their actual occurrence, it will be easier to manage and implement the change further down the line. The last principle in their model is to evaluate, implement and continuously improve, and the main critical success factors here are the level of commitment by management and the continued communication to the employees.

Other studies have shown that most organizations that initiates change programs will run into some form of human resistance. For managers to be able to deal with this resistance in a suitable way, they must first of all understand the four most common reasons for people to resist change (Kotter & Schlesinger, 2008):

- A desire to not lose something of value
- A misunderstanding of the change and its implications
- A belief that the change does not make sense for the organization
- A low tolerance for change

Many managers not only underestimate the level of resistance amongst the employees, but also the level of influence that they as managers possess when dealing with these nay-sayers. The most common way of dealing with resistance is through communication and education, be it informal one on one conversations or formal presentation. This most often result in that the majority can not only understand the change, but also see the logical need for it. To sum up the findings of Kotter & Schlesinger (2008); change initiatives often backfire by trying to involve employees in the design of the change, even though they don't possess enough knowledge to provide something useful. Instead, to lead change, provide your employees with education and training before asking them to contribute, this will make them feel more comfortable and appreciated when generating ideas for change. This will increase the "grass root support" for the change, making it more likely that the change will be well grounded throughout the organization. The final thing to remember, is that if speed is crucial for the change, use coercion, making it clear that resistance can lead to firing or loss of promotion opportunities, this can reduce resistance but should only be used as a last resort since it can spark an intense resentment.

But when it comes to change, the employee's personal motivation will play a big role in how they embrace the change. There are four main drives that underline motivation; the drive to acquire, the drive to comprehend, the drive to bond and the drive to defend. For each of these drives, different

actions, presented in figure 7 below, can be taken by an organization to increase the motivation of its employees. (Nohria, Groysberg, & Lee, 2008)

	<b>DRIVE</b>	<b>PRIMARY LEVER</b>	<b>ACTIONS</b>
1	Acquire	Reward System	<ul style="list-style-type: none"> <li>■ Sharply differentiate good performers from average and poor performers</li> <li>■ Tie rewards clearly to performance</li> <li>■ Pay as well as your competitors</li> </ul>
2	Bond	Culture	<ul style="list-style-type: none"> <li>■ Foster mutual reliance and friendship among coworkers</li> <li>■ Value collaboration and teamwork</li> <li>■ Encourage sharing of best practices</li> </ul>
3	Comprehend	Job Design	<ul style="list-style-type: none"> <li>■ Design jobs that have distinct and important roles in the organization</li> <li>■ Design jobs that are meaningful and foster a sense of contribution to the organization</li> </ul>
4	Defend	Performance-Management and Resource-Allocation Processes	<ul style="list-style-type: none"> <li>■ Increase the transparency of all processes</li> <li>■ Emphasize their fairness</li> <li>■ Build trust by being just and transparent in granting rewards, assignments, and other forms of recognition</li> </ul>

Figure 5 Four types of motivators

What this table is trying to point out is that the desire to acquire is best met with monetary measures. The desire to bond is best met with creating a work environment highly influenced by personal growth and the feeling of proudness for working at the company. The desire to comprehend is best met by making sure that the employee’s work tasks are challenging enough, and that the employees can understand where he/she fits into the organization as a whole. The last desire, the desire to defend is best met by creating a clear transparency when it comes to processes and decision making. Even if an employee don’t like a certain idea, if he/she can understand the logic behind it, it is easier for them to accept it.

## Chapter 4

### Key Takeaways from the First Interview

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***This chapter will explain the takeaways gained from studying the existing literature and conducting the first interview. This information acted as a foundation when creating the interview guide for the data collection phase of the project. The chapter ends with the creation of an initial concept.***

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#### 4.1 First interview - Key takeaways

This interview was conducted with a person who had worked with the implementation and management of management systems for several multi-national companies.

He stated that in order for employees to enjoy their work, it is important that they know not only what to do, but why they do it. This is why it is so important to have a good management system in place. The management system should cover everything that a company needs to do in order to survive in their respective markets. The most important thing that needs to work in order for a management system to be successful is the involvement of people throughout the entire organization, employees as well as management. He stated that a lot of the success he experienced in his different projects stemmed from the fact that he managed to “sell” the idea to everyone within the organization. Another important aspect for promoting the involvement and engagement of people is that the system needs to be intuitive. It needs to be easy to find the information you are looking for. Most of the projects he had been involved in, the organizations were very big with several sub divisions within the organization, each with its own way of documenting its work. This created problems when trying to implement a general system for the entire organization. What they came up with was a lot of MS PowerPoint, MS Word and MS Excel files. They covered the important aspects but they were not fun or intuitive, they were not structured according to some process map where you could click your way through different processes. He mentioned that organizations should really think about where the information is made available. No system could be viewed as simple or inspiring if it is not made available on a media suited for the organization.

When working with management systems, it is very important to constantly strive for improvements. He makes a metaphor comparing a management system to walking up in an escalator going the opposite direction:

*“As long as you keep the same pace as the escalator, you will keep your position. But if you want to advance, you need to be going in a slightly higher speed”*

This is something that makes standardizations sometimes becomes a problem. The standards can sometimes provide a security when talking to top management; you can point towards the standard and say “but look here, according to ISO we need to do this”. The danger is that sometimes the customer perspective is lost. The more projects the interviewee was involved with, the more comfortable he became with initially stepping away from the standards and instead started by answering questions such as: “What is our mission?”, “According to what criteria are we evaluated?”, “What regulations do we need to comply with?”. In other words, he started to create management systems based on the specific organizational structure and environment.

The final point is the point of integrated systems. By not consolidating the different systems for quality control, environmental policies etc. the organization runs the risk of creating a structure that

is counterproductive. Instead, if consolidated steering-documents are created, the organizations will receive a more holistic view of its processes and how they affect each other.

## 4.2 Key takeaways from literature and the initial interview

All of the mentioned business excellence models and standards emphasize the need for the processes to be linked to each other and they should be developed with a customer-focused mindset.

The idea of EFQM that the key principles are divided between two categories; enablers and results, is good in the way that it creates an overall structure for how a management system could be set up in terms of processes.

One key take away when conducting the first unstructured interview was that the success of a management system is highly dependent on the overall engagement both of the workforce and top management. The interviewee mentioned that he thought that the success he experienced came from the fact that he was good at “selling” the idea to everyone within the organization which would indicate the importance of a strong project leadership, which is something shared by all the existing standards and BEM’s.

JUSEs points that no two organizations are alike are something to take note of when designing a management system. For example, the danger of just following the requirements of different standards and BEM’s is that it might not be the best fit for your organization. Instead, every organization should create their management system based on their own and their stakeholders’ needs.

## 4.3 Key aspects and their use in management systems - Initial thoughts

The following aspects, provided by Trivector LogiQ, are those that the authors are assuming defines a successful management system. The following section aims to explain the assumptions behind each aspect and how it could be visible in management systems today, and how they can be linked to the common criteria’s of the BEM’s and ISO 9000.

### 4.3.1 Workforce perspective

- **Simple** - A management system should be easy to use for an organizations employees and it should be presented in a language suited for its purpose and users. The information provided by the system should be presented in such a way that it is not open for interpretation, but instead provide clear and concise information regarding a specific topic.
- **Supportive** - A management system should provide an organizations employees and managers with the relevant know-how for how a process or task should be conducted. Important to remember is that it should not only provide information on routine tasks, but it should act as a support system for how to act if something out of the ordinary occurs.
- **Available** - When implementing a management system it is key to investigate how and where it should be available. There is no one solution fits all, instead some companies might find it easier to have all information available on their intranet, and others might have it available in paper form. It becomes even more complicated with today’s new technology and constant improvements on smartphones and tablets. It is easy to just assume that it has to be available and optimized for these types of platforms, but this might not always be true. Before deciding on which media(s) the management system should be available on, it is

important to study the organization and understand its workforce and processes in order to be able to make a decision.

- **Intuitive** - For a management system to be truly successful, its intended users' needs to be able to not only find the relevant information, but to find it fast and with ease. For this purpose, it is once again important for the organization to understand its employees. What might be intuitive and logical for some, might not be that for others. To achieve this intuitive set-up the authors believe that successful management systems are those that are categorized into different sub-systems that together provides a holistic view for the whole system (e.g. process based categorization). One example could be that the management systems sub-systems are based on different sectors within the organization e.g. purchasing, manufacturing and distribution.
- **Interactive** - In order to facilitate a deep engagement and participation of employees in the practices of the management system it needs to be interactive. An interactive system should not only welcome its users to contribute and share information, but it should ease the process. This could be done by for example implementing appropriate channels for the employees to comment on a specific topic, be it through some web-based interface or more analog channels such as suggestion boxes.
- **Inspiring** - To keep the employees engaged and committed to the use of the system it needs to be inspiring. For this to be true, the purpose and benefits of the system needs to be clearly communicated throughout the workforce by the system "champion". The structure of the system should be simple, yet it cannot look too formal or "boring", in other words, avoid long text based documents, and try to incorporate pictures into the documents when needed and possible.
- **Complete** – The management system should be set-up in a coherent way throughout the entire organization. It should cover all aspects of the supply chain, from supplier to customer. It should cover all steps and processes needed for the employees to do their daily work.

#### 4.3.2 Management perspective

- **Value creating** – The purpose of having a management system is to provide the organization with clear guidelines for their way of working in order to enable it to reach its goals. This could be done by making sure that the customer expectations are incorporated into each part of the system. All processes should be developed with a customer-focused mindset and this should be clearly visible in the documents.
- **Strategy enabling** – In order for a management system to be able to create value for an organization, the system has to ease the alignment of the corporate strategy with the customer and stakeholder expectations and demands. The processes should clearly fit into the overall organizational mission and vision and it should be easy to derive the purpose of the process. Another important aspect of this principle is the resource management. The management system should clearly define how it utilizes its resources in order to achieve its goals.
- **Coordinative** – The coordinative aspect of a management system could indicate several things. It could be viewed as the clear definition and descriptions of the linkages between the processes, but it could also be viewed as a method for promoting collaboration and knowledge sharing between the employees. A management system that incorporates these principles into its practice should have clear channels for communication, both between employees but also between employees and management. It should also provide management with a clear picture regarding how the processes are linked to each other (e.g. interactive process maps)

- **Risk reducing** – For a system to be risk reducing the potential risks, both internal and external, first has to be identified. This could be made more visible in a management system by conducting extensive risk assessments for the organization as a whole as-well as for the individual processes. To minimize risks of mistakes in the individual processes, the documentation, guides and manuals should contain not only information regarding how to perform specific tasks, but also offer a way of working when something un-planned occurs.
- **Developing** – As previously stated, all BEMs and standards mentions the importance of continuous improvements. For a management system to ensure that the organization in constantly evolving to meet specific stakeholder demands and expectations, clear guidelines for how it works with improvement issues is of great importance. Self-assessment procedures should be developed, implemented and communicated to the entire organization. It should be noted that the input from the workforce will be extremely valuable when it comes to improving existing processes. The results gained from the self-assessments should be not only documented, but used in the improvement projects that needs to be initiated.

Drawing from the conclusions made by the similarities between the different BEM's and ISO 9000 (see table 7), one can conclude that in addition to the aspects above, the following aspects has to be taken into consideration when developing a management system. Management and leaders within the organization has to not only be highly involved in the process of developing, implementing and managing the management system, but also provide guidance, focus and motivation for the organizations employees. The employees should be challenged on both a personal and professional level, allowing them to grow and further enhance their capabilities and knowledge through systematic training, education and knowledge sharing. This will increase the probability that the workforce sees the management system as a useful tool rather than a bureaucratic demand. When it comes to strategic planning, all plans have to be clearly aligned with the overall mission/vision of the organization. The plans should have a clear purpose that ties together with the customer expectations and demands. If the long term plans are developed in this way, it will be easier for the organization to develop and design processes that will help the organization reach its goals. The processes should also be clearly defined when it comes to the linkages between them, i.e. how one process out-put will become the in-put for another process. This will create a clear and more measurable structure that should help the organization achieve its desired results. By measuring and analyzing the different results, the organization should highlight areas' that needs to be improved.

## Chapter 5

### Empirical Results and Analysis

*This chapter will present the general findings of the data collection. The tables presented consists of a short summary of each interviewed organizations thoughts regarding that specific question. The next section analyses and compares the answers provided with the organizations with each other, and finally with existing theory.*

The answers gained from the interview guide will be summarized, consolidated, presented and compared in the following section. If an organization did not provide an answer for a question, the field will be left blank in the table for consistency.

#### 5.1 Empirical results

##### 5.1.1 Definition of a management system

The following table shows the different thoughts that the interviewees had regarding the definition and purpose of a management system:

*Table 9 Definitions of a management system*

Organization	What is a management system according to you?
Company 1	A systematic way of creating structure and communicating goals and visions based on a customer focus to the employees
Company 2	A tool for managing different business processes
Company 3	A systematic tool for moving from the corporate vision to action
Company 4	A method to achieve the goals.
Company 5	A process oriented tool to achieve the goals.
Company 6	A tool for maximizing sales and profit by making everyone aim for the same common goal
Company 7	
Company 8	A tool to structure the daily business processes, similar to a check list of what needs to be done
Company 9	A tool by employees, for the employees
Company 10	A management tool for getting your employees to do the right things at the right time
Company 11	A systematic way of structuring what you are doing in order to do it better
Company 12	A systematic way of managing and evaluating the quality of your processes
Company 13	A way to ensure compliance to regulations and to create structure of different processes within the organization
Company 14	A praxis for what we should be doing and how we should do it

Even though the interviewees' gives slightly different definitions regarding what a management system is according to them, there is a common viewpoint amongst most of the interviewees.

Several of them talks about a "systematic way of working", or in other words, that a management system should ease the management of various business processes by creating structured routines for how to perform certain tasks. It should also act as a tool for making sure that everyone in the organization not only strive towards the same goal, but that they actually understand why they are working towards that goal.

"A management system should provide all employees with a better understanding of the organization, regarding everything from the big to the small details. The management system should be purpose based and the processes are key. A management system should also help with the translation of the corporate vision into "a way of reaching the corporate vision"

Company 3

### 5.1.2 Value creating

The following table shows the different thoughts that the interviewees had regarding how a management system primarily can create value for organizations:

Table 10 How can a management system create value for organizations?

Organization	How can a management system help create value for the organization?
Company 1	By increasing the quality towards the customers
Company 2	By creating structure among the business processes and by providing the employees with important information
Company 3	By making sure that everyone is on the same path and aiming for the same goals
Company 4	By having a user-friendly management system the communication between different levels within the organization is improved
Company 5	Increased employee engagement
Company 6	By minimizing risks, helping with continuous improvements and creating common goals for the organization
Company 7	
Company 8	By increasing productivity
Company 9	By creating guidelines for what should be done and in what way it should be done, and through that it minimizes conflicts
Company 10	By gathering information making it easier to make fact based decisions, creating structures for continuous improvement
Company 11	By making use of the level of commitment shown by the employees
Company 12	By creating a corporate culture and a work environment that will increase the well-being of the employees
Company 13	By creating routines for follow-ups and risk handling
Company 14	

There are several ways in which a management system can help generate value for an organization. First, it will make sure that everyone strives towards the same goals. Secondly, it will minimize the risk of unnecessary work being done. Thirdly, if executed properly, it will help with continuous improvements by creating routines and structure for how to work with these improvements. Fourth, it will increase the general well-being of the employees, which in turn will make them more productive. There are other common aspects, which will be discussed further in the following sections.

The greatest benefit of having a well-functioning management system is that you can harvest the knowledge and expertise of your employees. Most people are dedicated to their jobs and wants to do them well, but they also possess a lot of ideas on what could be done differently, a good management system enables the knowledge sharing of these ideas and puts them to use. But a good management system also aims to steer the organization in the right direction by prioritizing the right things and making sure that no unnecessary work is being done.

Company 11

### 5.1.3 Risk minimization

The following table shows the different thoughts that the interviewees had regarding how a management system can help minimize risks throughout the organization:

*Table 11 How can a management system reduce risk for an organization?*

<b>Organization</b>	<b>How can a management system help minimize risks throughout the organization?</b>
<b>Company 1</b>	By standardizing how we work with risk assessment
<b>Company 2</b>	By structured risk assessment, each division manager is responsible for conducting his own departments risk assessment
<b>Company 3</b>	By promoting a systematic way of working that enables organization to constantly think ahead and creating routines for identifying the root cause of the mistakes
<b>Company 4</b>	
<b>Company 5</b>	By involving risk in the management system it reduces the chance that some of the risk occur
<b>Company 6</b>	By creating routines and structures for quality controls, being very specific in the steering documents and by integrating suppliers into the risk assessments
<b>Company 7</b>	
<b>Company 8</b>	
<b>Company 9</b>	By setting up clear communication channels for the organization that helps managers to receive feedback and concerns from the employees
<b>Company 10</b>	By creating routines for risk assessments before a change is implementing instead of just putting out fires as they occur
<b>Company 11</b>	By listening to the employees, risks tied to a process should be assessed by the person performing the task
<b>Company 12</b>	By creating guidelines for how the risk assessments should be conducted and who should conduct them
<b>Company 13</b>	By documenting what we do and having regular follow-ups
<b>Company 14</b>	By establishing guidelines for the identification of systematic errors

Almost all of the interviewees share the view that risks are minimized by creating routines for risk assessment and proactive planning. There are some different opinions regarding how these risk assessments should be conducted. Most agrees that the foundation for these risk assessments should be a mixture of employee input, i.e. the person performing a specific task is the one most suited for analyzing what could go wrong, and statistical analysis.

The risk assessments should be based on a mix of data, interviews and just walking around the premises... You cannot do a risk assessment just sitting at your desk, you need to move around in order to fully comprehend what is going on.

Company 2

An interesting point made by Company 14, is that in his experience, the vast majority of mistakes being made in organizations is not mistakes made by the operators performing the task, but rather the mistakes are being made because the system is built in a way that permits these errors to occur. So if the routines that are set-up and explained in the management system are good enough, then the number of mistakes being made will be greatly reduced. This statement is backed by Company 6, who states that “the more we specify our steering documents, the less variation we will experience”.

#### 5.1.4 Continuous improvement

The following table shows the different thoughts that the interviewees had regarding how a management system primarily can help organizations with continuous improvement:

*Table 12 How can a management system help organizations with continuous improvements?*

Organization	How can a management system help with continuous improvements?
<b>Company 1</b>	By systematically working with improvements, and these improvements should, in the end, always be aimed at delivering better quality to the customer
<b>Company 2</b>	By going out into the organization and looking and what’s not working and by having knowledge sharing meetings
<b>Company 3</b>	By creating a vision for where we want to go, and then working with improvements aimed at achieving that goal
<b>Company 4</b>	
<b>Company 5</b>	By having a simple deviation handling system
<b>Company 6</b>	By creating positions within the organization that are responsible for improving the processes
<b>Company 7</b>	
<b>Company 8</b>	By involving the employees and listening to their feedback
<b>Company 9</b>	By devoting time and resources to improvement processes and by making the employees part of these processes
<b>Company 10</b>	By looking at improvements tied to each process, devote resources, mainly time, to work with improvement processes
<b>Company 11</b>	By having quality goals on each level of the organization and by identifying what we are doing well and try to do more of that
<b>Company 12</b>	By helping create a corporate culture that promotes feedback from the employees
<b>Company 13</b>	By creating a very structured way of working and by documenting all changes that are made
<b>Company 14</b>	All improvement measures should be aimed at increasing customer value

The common ground, shared amongst almost all of the interviewees when it comes to continuous improvements is that it is primarily aimed at fixing different things in the organization that is not working 100 %. This is most often done by either a deviation handling system, or by creating specific project groups with the sole purpose of identifying problematic areas.

However, 9 out of the 14 interviewees mentions that all improvements being made should aim to increase the value that is being delivered to the customer. It is not only about correcting and preventing mistakes from being made, it is also about constantly questioning if we can continue to improve on our already working processes.

I think that it is important to create goals tied to customer satisfaction on each individual level of the organization. If the goals are not being met, even though no mistakes are being made, then we have to start to wonder if we can do anything to improve what is already working. We have to continue to do our work well, but we also have to try to do it better.

Company 11

5.1.5 Challenges when developing or implementing a management system

The following table shows the different thoughts that the interviewees had regarding what the biggest challenges an organization faces when developing or implementing a management system:

*Table 13 Biggest challenges when developing or implementing a management system*

Organization	What are the biggest challenges when developing or implementing a management system?
Company 1	To get the entire organization to understand why they should even care about the system
Company 2	To educate the employees of the benefits of the management system
Company 3	To make the employees understand that a good system can actually help them understand what is expected of them
Company 4	To create a simple enough system to use
Company 5	To inform about new legal requirements
Company 6	Understanding that suppliers play an important role in the outcome of our organization, how should the system take this into account?
Company 7	
Company 8	To get the employees to really use the system as intended
Company 9	That people don't want to be told what to do, the challenge is to make the employees see the benefits of the system
Company 10	It is challenging to create a system that both managers and employees view as something useful
Company 11	To create a coherent system that consists of several sub systems, i.e. quality, environment, health and safety
Company 12	To understand your employees and to create a management system that is suited for them
Company 13	To get every employee to feel like they can actually influence things
Company 14	

It doesn't matter how big a company is, when developing a management system they will encounter difficulties and challenges. The largest companies might struggle to get all employees in the organization to understand why they should use a system and the benefits gained by using one. The smaller companies are more inclined to create value for the employees, they want every employee to feel useful.

There were two big challenges that every interviewed company mentioned. First and foremost, it is a big challenge for a company to get their employees to understand why, how and what they should use the system to do their work. The employees often know how to do their work, but they rarely know why they are doing it. The second big challenge is to make the integration of the system so simple that all of the employees understand what to do. If the integration is too difficult the employees doesn't want to work with it.

Quite a few years ago the management systems were documented in stacks of binders. Employees who worked with the systems back then found it really hard to search, find and share important information. Some years ago when e-mails became available the information sharing became easier and thanks to the hard work of continuous improvement are we soon able to share everything via a smartphone device.

5.1.6 Managements responsibilities

The following table shows the different thoughts that the interviewees had regarding what the responsibilities upper management should have in regards to the management system:

Table 14 Managements responsibilities towards a management system

Organization	What should managers responsibility be related to the management system?
Company 1	Managers responsibility is to communicate the message of the system and to make the system available for the employees
Company 2	Main responsibility is to communicate the purpose and benefits of the management system to the employees
Company 3	Managers should communicate the purpose behind the system and they should make sure that the system is being used as intended
Company 4	To communicate between the channels in the organization.
Company 5	Managers should know the system to the smallest detail. They should be able to guide the employees.
Company 6	To communicate and aligning the goals and ideas of upper management to the entire organization
Company 7	
Company 8	
Company 9	Upper managements responsibility is to ensure that the system is actually used as intended and that it is gaining the results wanted
Company 10	To ensure that the organization is working with continuous improvement and to create an environment that promotes employee participation
Company 11	It is about prioritizing and communicating ideas to the employees
Company 12	To show commitment and to explain to the employees what benefits they can achieve by using the system
Company 13	Managements top responsibility is to ensure that the company is not falling behind in its own market
Company 14	

What the main responsibilities of upper management related to the management system is, is shared by all interviewees, to communicate the purpose, benefits and goals of the management system to the employees.

The biggest responsibility for managers is to communicate the purpose of the management system to the employees so that they will actually use the system. A system without users is useless no matter how good it looks on paper... If management are excited about the system, it will echo down to the rest of the organization.

Company 2

5.1.7 Benefits for employees

The following table shows the different thoughts that the interviewees had regarding what benefits the employees could gain by using the management system:

Table 15 Benefits for employees

Organization	Why should employees want to use the management system?
Company 1	The management system should act as a support system for those who wants or needs the support
Company 2	It is a one entry channel for all information that they could possibly need
Company 3	By using the system the employees should gain a sense of security and support related to their work tasks
Company 4	Because they want to do a good job and with a good management system their job becomes easier
Company 5	With a good management system the employees get increased responsibility so they feel that their job is necessary
Company 6	Because they have to in order to get the information they need to conduct their daily work
Company 7	
Company 8	A good system should ease the employees work day
Company 9	Because new employees needs information on how to conduct their daily work, experience employees needs information on how to do difficult tasks
Company 10	In an ideal world, it is an easy way for employees to gather information
Company 11	Because they should feel like they can influence the organization in a real way
Company 12	If the employees by using the system can help shape their own work environment, they will want to use it
Company 13	Because it is their direct channel to the top management, that they can feel involved in the evolution of the company
Company 14	

At first, most of the interviewees' gave an answer similar to the following when asked why employees should want to use the management system; "That's simple, it is to ease the employees work day". However, after a short session of thinking most of the companies wanted to further elaborate on their answer.

If I'm an employee I want to use a management system partly because I must understand that a product must be delivered after a certain quality. And if I think the quality is wrong, that it's too hard or easy to attain, I must know how to change it. I also have to understand that I'm a part of the organization and I want to develop it by erase bottlenecks and frustration moments. As an employee is it important that I feel that I can influence the organization and that there are no barriers high enough to climb.

Company 11

### 5.1.8 An easy management system

The following table shows the different thoughts that the interviewees had regarding what aspects that needs to influence a management system so that it feels easy to use:

Table 16 An easy management system

Organization	What aspects should influence a management system so that the employees find it easy to use?
Company 1	It starts with the definition and description of the processes and the information has to be of interest for the employee who uses the system
Company 2	All information should be consolidated into an one point of access system
Company 3	A simple system has shortcuts depending on what type of information you are looking for
Company 4	
Company 5	The system should be easy to use, easy to navigate in. The structure is important
Company 6	By making sure that the employees quickly can find the information they are looking for
Company 7	
Company 8	That the information available is easy to find and more importantly, relevant to the user
Company 9	Information needs to be broken down into different levels of detail, sometimes simple check lists are enough
Company 10	Information should be quick to find, a search function helps with this, documents should be as short as possible
Company 11	It's partly about presenting each employee with the relevant information, but there also has to be transparency in regards to other parts of the organization
Company 12	Information should be easy to find, either via categorization or by search functions or both, simple documents
Company 13	
Company 14	

The question "why should employees want to use the management system" more or less had the answer "By having a good and simple system it makes your employees to feel more responsibility and they are therefore more driven to do a good job". So what is a good and simple system?

The variation of answers received when asking this question were high, but almost every answer had something to do with the information within the company. Some couldn't define a simple system because it was too early in their process. Some said "if we had the answer to that question our

system would be more or less perfect”. As mentioned, most of the companies talked about the information. They pointed out the information searching and sharing as the biggest and most important aspects of it the system.

The result of this question is that a simple system is a system that works as a support, were the information is easy to find. The information has to be relevant and interesting, the system must be easy to navigate in and it's better with pictures and checklist instead of a lot of text.

A management system always be there for the employee as a support. It’s important to see the management system as a support and not as an administrative burden, and that’s difficult. Some people is used to read process maps and some aren’t. And because of that will you hear different kind of thoughts, both positive and negative about the system. That’s where the manager is important, that he or she are able to sell in the management system to the employees.

Company 1

5.1.9 Feedback channels

The following table shows the different thoughts that the interviewees had regarding what channels the employees should use in order to provide feedback to the organization:

Table 17 Feedback channels

Organization	How should employees give feedback related to either the management system or some other process?
Company 1	This is mainly a matter of setting up clear channels for deviation handling through the intranet, other channels includes mail or by face to face interactions
Company 2	In the knowledge sharing meetings, one person attends from each department, this person should collect feedback from their department
Company 3	It depends on the organization and the people within that organization
Company 4	
Company 5	Feedback should be given to the process owner
Company 6	We have two ways, one "idea bank" tied to each process, the other way is a monthly forum where the entire organization meets and discusses news
Company 7	
Company 8	Commentators field tied to each topic on the intranet
Company 9	Feedback should be given to the manager of the department, he/she should then document and categorize the feedback
Company 10	Feedback should be given to the closest manager or process owner
Company 11	Depends on the organization, there should be a lot of ways for an employee to get his/her voice heard
Company 12	Through regular conversations with the employees
Company 13	Project groups focused on improvement projects is the best way to get feedback from the employees
Company 14	

Most interviewees agree that feedback from your employees are vital in order for an organization to improve and move forward. The way that they try to collect this information differs slightly from organization to organization. Most uses the regular channels i.e. e-mails, meetings or some sort of suggestion boxes. However, a few mentioned that in order to develop the best possible channels for receiving feedback, you need to understand your employees, what is most suited for some is not so for others.

Feedback from our employees can be provided to us in a few ways. Deviation reports or improvement proposals can come in either from the intranet or from the meetings which our department heads conducts regularly.

Company 1

5.1.10 Promotion of feedback

The following table shows the different thoughts that the interviewees had regarding what organization could do in order to get their employees to provide them with feedback:

Table 18 How to encourage the employees to provide feedback?

Organization	How to encourage the employees to give feedback?
Company 1	People often want to make their situation better, but if they constantly provides feedback without getting any response, they will stop
Company 2	By making the employees understand that they can actually help improve their own work situation
Company 3	That the process owners shows that they listen and care about what the employees has to say
Company 4	We want to show our employees that we care and consider their feedback
Company 5	We have very dedicated employees that want to improve the organization
Company 6	We have a bonus system, if the company is doing well then a bonus is paid to the employees
Company 7	
Company 8	By providing direct feedback to the employees
Company 9	Our employees want to improve the organization, and we try to give them the tools needed for them to improve their own work situation
Company 10	If employees feel that their feedback is actually making a difference, they will feel more encourage to provide feedback
Company 11	The effort needed to provide the feedback should be minimal, and managers has to show the employees that they are willing to listen
Company 12	Not everyone wants to participate, but encouragement is gained by understanding the different kinds of motivators
Company 13	That top management shows the employees that their feedback is both heard and processed
Company 14	

Almost all interviewees agrees that the prime motivator for employees that will get them to provide feedback is that they feel like their input is both being listened to, but also making a difference. In

other words, it is important for managers to show that they have not only heard the concerns, but also that they will put the feedback to good use.

Company 12 highlights that there are different ways to motivate different kinds of people. Some will be motivated by monetary incentives, other will get motivated if they feel like they have job security, and others could be motivated by creating a work environment that offers the possibility for personal growth.

Only one respondent mentioned that different kinds of bonus systems works best for motivating people to do more than is expected of them.

This is about motivating the employees to perform a task that is outside their regular responsibilities... As a process owner it is important to show that you care and communicate that the work being done by the employees actually matters, if you do that, then the employees will become motivated...

Company 3

#### 5.1.11 Availability

The following table shows the different thoughts that the interviewees had regarding where the management system should be available:

*Table 19 Where should a management system be available?*

Organization	Where should the management system be available?
Company 1	The main point of entry should be via a computer, but there is definitely a value to be gained by making it available via smartphones
Company 2	On the intranet with an online connection so the employees can access it from home
Company 3	Depends on which employee who wants to access it, sometimes computer access is enough, sometimes maybe via your telephone
Company 4	Via the intranet which is accessible from home
Company 5	At their computer at work, but it's also available from home
Company 6	The intranet is available via computers, smartphones and tablets
Company 7	
Company 8	Via the intranet
Company 9	It should be via an intranet which should be available online
Company 10	In addition to computer access, it should be made available via tablets and smartphones
Company 11	On your work computer, home computer or maybe even via a tablet
Company 12	It depends on the organization, but availability via smartphones could be helpful
Company 13	An intranet is a powerful tool, and it should be available online
Company 14	

Most interviewees share the view that the main point of access for the management system should be via an intranet, which should be accessible from both your office and your own home.

When they are asked if they think that the management system should also be optimized for smartphones or tablets, there are some different opinions here, some claim that it is unnecessary whilst others claim that it would be very beneficial.

I think that it would be very beneficial for organizations to make their management systems available via smartphones or tablets... If you are out visiting clients and you quickly need to retrieve some information, then it would be very easy to just pick up your phone and have everything available there...

Company 10

5.1.12 Communication

The following table shows the different thoughts that the interviewees had regarding what channels managers should use in order to best communicate with the employees:

Table 20 What communication channels should managers use?

Organization	What communication channels should managers use?
Company 1	Meetings and intranet
Company 2	Intranet, e-mails and "town hall meetings"
Company 3	
Company 4	Intranet and meetings.
Company 5	Intranet, meetings and e-mail
Company 6	Intranet and regular meetings
Company 7	
Company 8	
Company 9	Intranet and e-mails
Company 10	Regular meetings, intranet and e-mails
Company 11	
Company 12	It depends on your employees, the bigger the organization the more channels are needed
Company 13	Depends on the size and geographical spread of the organization, but intranet and video conferences are good channels
Company 14	

Most interviewees use the normal channels, i.e. intranet, e-mails and meetings for communicating information to the organization. However, some of them make the case that all organizations should think about who their employees are in order to develop the best possible channels most suited for their organization.

I believe that you have to have a number of different channels. In larger organizations, one channel will never be enough since people are different. Some likes to read, some likes to listen, others wants to be able to ask questions. So an organization has to think about who its employees are and what they can do in order to reach them. And then it is important to realize that not everyone wants to participate...

Company 12

### 5.1.13 Thoughts about the future

The following table shows the different thoughts that the interviewees had regarding what they think will be different in the management systems of the future:

Table 21 What will change with management systems in the future?

Organization	How will management systems look in the future?
Company 1	
Company 2	It will be more alive in the entire organization
Company 3	More focused on risks and a greater sense of structure and meaning for the employees
Company 4	The management system will be more simple and user-friendly.
Company 5	More process based, clear procedures and instructions. Simplicity.
Company 6	Better information flows and suppliers will be somewhat integrated into the systems
Company 7	
Company 8	A greater focus on constant improvements
Company 9	More pictures and explanatory videos tied to each process
Company 10	The responsibilities of managers will be more clearly defined
Company 11	Different types of management systems will be even further integrated with each other
Company 12	That management systems will be more tailored depending on the organizations workforce
Company 13	Create systems that further enhances the feeling of involvement amongst the employees
Company 14	

When the interviewees were asked what they think will change or improve in the management systems in the future, they have some different ideas on what needs to be changed. An interesting point was brought forth by Company 6:

In the future, organizations will have to focus much more on constantly improving their own processes. This is because the world is getting smaller and smaller and many companies now face competition from international competitors... A product or service that used to be created or in Sweden can now be developed anywhere, so it is up to our own organizations to face these new challenges head on...

Company 8

### 5.1.14 Additional thoughts

The following table shows the different thoughts that the interviewees had regarding any additional information that the interviewers missed to ask about:

Table 22 Additional thoughts

Organization	Any additional thoughts?
Company 1	A management system has to be developed over time and with the help and input from the organization itself
Company 2	none
Company 3	
Company 4	
Company 5	
Company 6	No matter the quality of the system, there will always be people who openly oppose it
Company 7	
Company 8	That management system has to continue to evolve into something that is of actual value to the organization and not just a bureaucratic tool
Company 9	The hardest part of a management system is the follow-up
Company 10	The documentation has to have a purpose, otherwise it will only increase the organizational resistance towards the system
Company 11	
Company 12	A management system has to be developed with the organization in mind, there is no one size fits all solution
Company 13	
Company 14	

The interviewees who had something to share all touched on the same issue, namely the importance of getting the management system rooted in the organization. One interesting answer was from Company 6:

In every organization there will always be informal groups of people who have the possibility to influence the rest of the employees in a huge way. Out of these people, there will always be “troublemakers”, i.e. those who openly oppose every idea that comes from management. I believe that it is crucial for a management system to take these troublemakers in to account and coming up with structures on how to quell their voices.

Company 6

## 5.2 Comparative analysis of the qualitative data

### 5.2.1 Definition of a management system

Most organizations share the view that a management system should act as a tool to be used by managers in order to steer the organization and generate value for the customers. As company 3 puts it, “a management system is about managing the organization. It is not about conducting detailed audits or creating extensive instructions”. In other words, if a management system is to be a truly useful tool, its main purpose has to be to help manage and steer the organization. This is not to

say that a management system should not incorporate instructions for how to perform certain tasks or other types of documents, but these should be created and used in a way that helps management manage the organization in such a way that it generates value for its customers, and ultimately reaches its goals and visions. These goals and visions can come to change depending on the environment that the organization operates in, therefore, some of the interviewed organizations mentioned that the management system should try to set up a corporate culture that helps the organization quickly adapt to change.

In addition to this, a management system also has to be recognized as something useful by the employees. According to Company 9, a management system “should be a tool by the employees, for the employees”. What this means is that in order for a management system to be truly valuable for an organization, it has to become well integrated and alive in the organization's way of working. In order to achieve this, the employees are the single most important aspect to keep in mind. This view is shared by the majority of organizations who claim that the most challenging task when implementing or designing a management system is to get the employees to accept the idea or purpose behind it (see table 12). As Company 6 puts it, “if you don't get your employee to use the system, then the whole purpose of a management system collapses. No matter how good your system is, it will never achieve the desired outcome if it is never being used”. This is similar to the point made by Company 9, “a management system has to be a tool for the employees”.

The final key take away from the interviews, regarding the definition of a management system, is that processes are key. As Company 14 puts it, “a product is a result of one or several processes. If we want to achieve a desired outcome, then we need to think about how we are conducting these processes, and for this purpose, a management system can be very beneficial”. Company 3 points out that “the management system ensures that the organization will follow its corporate vision by managing its processes in such a way so that the customer gets the right product, at the right moment in the right quality”.

### 5.2.2 Value creating

According to empirical data, the benefits of having a management system could be summarized into the following areas:

- Increased quality towards the customers
- Increased organizational productivity
- Goal alignment within the organization
- Enabling fact based decision making
- Streamlined communication channels
- Continuous improvement
- Employee engagement

Increased quality comes from constantly trying to improve upon the processes and minimizing the risks of production errors occurring by creating a well-structured and defined way of working. By creating well established and streamlined processes, it will also reduce the risk of redundant work being done, so that employees can focus on doing the right things. Company 9 mentions that having a management system will create a clear picture of what should be done, when it should be done and how it should be done. Through this, time can instead be spent on increasing quality towards their customers. This view is shared by Company 5 who says that “a management system should help everyone understand what needs to be done, so that we can fulfill the expectations of our customers”. The majority of interviewed organizations also mention that quality has to be the number one concern for an organization, and that the overall quality goals should not differ

depending on where in the organization you are. So by making sure that each level within the organization has clear quality goals to strive towards, it is easier to establish and define processes in relation to these goals.

Increased organizational productivity comes from clearly defined processes and responsibilities. As stated by Company 2, “all the processes are clearly described, and the responsibilities to each process are very clear. This clear definition of processes and responsibilities is truly essential for the well-being of our company”. The purpose behind each process should be made clear and communicated to the workforce, it is also important that the purpose of each process should be closely linked to the overall strategy/goal of the organization. This view is shared by Company 3 who further claims that in order for a management system to be value creating, each process has to be assigned a KPI closely linked to the organizational goals.

Enabling fact-based decision-making comes from having clear guidelines regarding what to document and how to document it. Company 10 states that “by gathering information in the management system, managers will be able to make decision based on facts rather than gut feelings”. However, organizations has to be careful here and really think about what to document, because it can easily turn into a situation where the documentation process starts to feel like an administrative, bureaucratic and time consuming burden. Company 12 mentions that “some management systems spends so much time on documentation that there is no time left for work that brings actual value to the company”. So then the question then becomes what should then be documented? There is no one answer to this, but according to Company 10, organizations has to ask themselves “what is to be gained by documenting this? Sometimes it might be enough to just document what have been done and why it has been done”.

How streamlined communication channels, continuous improvement and increased employee engagement can be achieved will be further elaborated on in following sections of this report.

### 5.2.3 Risk minimization

When talking to the organizations one thing became apparent, the majority agrees that the primary way a management system can help reduce risks in an organization is by standardizing and creating routines for how the risk assessments should be conducted. When asked how the risk assessments should be performed, there were some slight variations regarding the actual procedure of the assessments. The early interviews yielded some interesting responses regarding who should conduct the risk assessments. Company 2 mentioned, “It should be the responsibility of each department manager to conduct risk assessments for processes tied to his own department”. This caused the authors to further investigate this idea in the following interviews. It became apparent that yes, the management system should clearly define who is responsible for conducting the risk assessments, however, the department manager might not always be the person who is best suited for actually conducting the assessments. As Company 11 puts it, “I think that the manager can be the one consolidating the risk assessments of all processes tied to his department, however the person who should conduct the individual risk assessments are the ones who are working close to these processes every day”. This is further strengthened by Company 9 who states, “it is important to listen to your organization, they are the ones that can easily see what could go wrong, this is impossible for upper management to assess”.

Another important thing to note is that the risk assessments should always try to find the root cause of the problem. If a mistake is made in any of your organization processes, it is important to know that the mistake was not made by the operator, but instead, the operator made a mistake because the system allowed him to make that mistake. It is only by understanding this that risks can truly be

prevented (Company 3). This is in line with the statement made by Company 14, who states that the majority of mistakes is made because the system allows these mistakes to be made. By having this type of mindset influence the management system, it will make the employees more likely to provide feedback if a mistake is made. If they feel that they can tell their manager that they made a mistake without the risk of punishment, then it will be easier to collect the data needed and start an investigation into what to do in order to prevent the same mistake from being made again.

The final aspect in regards to risk minimization, agreed upon by the majority of organizations, is that by creating a structured and uniform way of working in regards to each process, the deviation of the results will be greatly reduced. For this reason, it is important to create guidelines and routines linked to the organizational processes that the employees feels comfortable with to follow.

#### 5.2.4 Continuous improvement

Before an analysis can be made in regards to how a management system can help with continuous improvements, a definition of what constitutes as continuous improvements has to be found.

One of the first interviews (with Company 14) provided an interesting idea in regards to this topic. He claimed that all improvement measures have to, in some regards, generate increased customer satisfaction. He then explained his view that most companies view continuous improvements, as only correcting what is not working 100 %. He believes that by only correcting mistakes, you as an organization will never be able to move ahead of your competitors. He goes on to say that most companies' tries to deliver the product at the right time with the right quality to the customer. But this should be a given, and could be viewed more as taking preventive actions in order to minimize mistakes. Instead he says that continuous improvements should be improving something that are already working satisfactory.

When investigating this idea in the following interviews, it became clear that this view of what continuous improvement is, was shared by 9 out of 14 organizations. However, they also state that improving on processes that are not working 100 % is still a very important part of continuous improvement. So it can be concluded that continuous improvement can be broken down into two sub categories, corrective actions and the improvement of already working processes.

Most organization agrees that the most valuable tool for improving the various business processes is to create an organizational culture that promotes their employees to provide feedback. Other important aspects are that the management system has to create routines for how this feedback should be analyzed and utilized. Time and resources has to be dedicated to these improvement projects, and all improvement projects that are initiated has to in some way be aimed at achieving a specific goal tied to customer satisfaction.

An interesting idea brought forth by Company 11 is that quality-related goals are important at all levels within an organization. If each division, or better yet, each process has its own quality related goals, it will be much easier to evaluate what could be improved upon, and how that improvement will relate to the quality outcome. These quality goals should be closely linked to the overall corporate strategy, so that by achieving the goals at a lower level will benefit the entire organization. This idea is shared by Company 9 who has taken it one step further. To each process, they assign a quality responsible person. This person will in turn create a team who will be work together with the goal of improving the quality tied to that specific process. The reasoning behind this is to create a more quality driven mindset amongst the employees, making them both understand the logic and reason for the necessity of quality improvements, but also so that they will feel included and that they can make a difference.

How should a management system be set up in order to encourage the employees to provide the organization with feedback? Let's start by looking at what channels the employees could use to provide the feedback. What channels that are being used depend on the type of feedback. For corrective actions, a deviation handling system is the most commonly used method amongst the interviewed organizations. Deviation handling systems are developed as a channel for the employees to voice their concern if something goes wrong. Many of the organizations agree that the management system should provide guidelines for how to handle the deviation reports that are being turned in by the employees. The responsibility of analyzing and taking action regarding these reports should be the process owners. As Company 3 puts it, "I want the process owner to be the one who installs the fire extinguisher, not the one using it. I believe that in the world of quality today, there are a lot of firefighters". The reports should be analyzed to find emerging patterns, which will help the process owner get a clear picture of where action needs to be taken. It is also important to note that the management system has to try to define what types of errors that constitute a report. If this is not done, the risk is that the employees will view the deviation handling system as a complaint channel, e.g. writing up deviation reports to voice the malcontent towards a colleague.

When it comes to how feedback on how to improve upon already working processes should be delivered, the interviewed organizations provided slightly different answers. The most common was through the intranet, using commentator fields tied to each individual process. Some slight variations of this were used, e.g. Company 6 had a "over all suggestion box" on their intranet. However, Company 6 also mentions that they rarely take actions towards single suggestions. But if several people suggest the same thing, then some sort of action should be considered. They do all share the same philosophy when it comes to who should be responsible for taking action, i.e. the closest manager, or the process owner. They want the person instituting improvement projects to be closely linked to the process itself, however, upper management should take part in analyzing feedback summaries from all departments in order to find emerging patterns across the board. But one can conclude that no matter how the organizations chooses to work with the improvement of processes, the employees play a very big part. So then the question becomes, how can organizations get their employees to be motivated enough to provide them with valuable feedback and suggestions?

The most common view amongst the interviewed organizations was that employees will be motivated to do more than is demanded of them if they feel like their ideas are being listened to, but also making a difference. For this to be true, it is important that the responsibilities are clearly defined in the management system and that it devotes enough resources to the process owner or division manager so that he can put the feedback to good use. Company 11 said it best, "Show your employees that they matter. Give enough resources to the manager on site, don't govern everything from top management who never even visits the workplace. The role of a manager should be supportive, not just a status title. If an employee has turned in 100 suggestions but nothing has happened, then they will stop coming up with these suggestions". Company 6 uses a bonus system tied to each individual department in order to motivate their employees to do more than is needed of them. They claimed to have seen a huge rise in efficiency amongst the employees after the implementation of the bonus system. When it comes to motivation, Company 12 shared some very interesting ideas. Motivation could be divided into internal and external motivators. External motivators could be e.g. higher salary or the ability to participate in company sport activities. But according to them, these types of motivators don't usually provide any long term effects, after a while the employees will see them as the normal state and it will not motivate them further. Internal motivators on the other hand, such as creating a good and healthy work environment, will provide a more long lasting effect. Another way of rewarding the employees, but without giving them a

monetary bonus, might be to implement an “employee of the month” reward that could come with an extra vacation day or longer lunch breaks.

How should a management system then take these aspects into account? When a management system is created, or evaluated, it is important to understand the employees in your organization. To gain this understanding, most organizations agree that this is achieved by having regular dialogs and face to face interactions with the employees. The management system should also create clear routines for how the managers should let the employees know that they have received their feedback, they have analyzed it, and if / how long it will take before they can see any effect of it.

#### 5.2.5 Challenges when developing or implementing a management system

The main challenge when designing and/or implementing a management system is to gain the support of the employees. This challenge, or obstacle, is something that almost all interviewed organizations agreed upon, and they all claimed that in order to gain the support of the employees, they first need to be educated on the purpose behind the system. Company 2 mentioned that “in order to get the employees to work with a system they first and foremost have to understand it. Providing the employees with education is a way for management to show that they view everyone in the company as valuable. In order to be able to implement a management system, managers have to highlight the benefits for not only the company, but for every employee”. So even though a management system’s primary goal is to help organizations reach their goals, it also has to be a truly helpful tool for the employees. What this means is that in order for a management system to provide value to an organization and help it reach its goals, it also has to be designed into something that provides value for the employees. Sometimes this could be counterproductive, where increased value for the employees would result in decreased value for the organization. In other words, sometimes trade-offs between “optimal way of working” compared to “easiest / most logical way of working” will have to be made in order to secure long-lasting organizational success. In order to clarify this statement, a short example will be given:

Let’s assume that a process could have its output theoretically optimized if the employees performed tasks in a specific order, however, the employee feels that this way of conducting their job is both illogical and hard. This could lead to that either, the employees going back to performing the task as they did before the management system made them do it differently leaving the management system void, or they will perform the tasks as instructed by the system, but they will complain and a hostile work environment is created which could echo to other parts of the organization as well. So in other word, a management system could be designed perfectly on paper even though in reality that is not the case.

What this example is meant to show is that upper management who tries to push strategic initiatives down into their organization will have a hard time getting the ideas rooted if the employees can’t get behind the idea. In order to counter, or at least minimize the occurrence of this, a management system should set up guidelines for how to push strategic initiatives down into the organization. If possible, all new initiatives should be developed in a way that suits the current organization, utilizing the knowledge and know-how of its workers and collaborating with them before making any decisions for change. If this is not possible, the best way of pushing strategic initiatives down into the organization is, according to the empirical data, to present the employees with sufficient information, presented in an “inspiring” way, e.g. via videos.

The second challenge mentioned by the interviewed organizations is that it is very hard to create a coherent, integrated system that covers all aspects from e.g. quality management, safety and health and environmental aspects. This is somewhat related to the previous obstacle, i.e. if the

management system consists of several overlapping sub-systems, it will be a much more complex system which in turn will make it much harder to educate the employees on the purpose and logic behind the system. What the majority of interviewed organizations claimed to be the solution for this was to ensure that there is no overlapping or redundant information. Even if the main focus is different for an environmental versus a quality management system, there is a lot of parts that are related. A good management system should be as simple as possible, and because of this, it is important to remove complexity whenever possible.

#### 5.2.6 Managements responsibilities

As stated earlier, most organizations agree that the most challenging part of any management system is getting the support of the employees. Therefore it is not surprising that that, according to the majority of the interviewed organizations, the number one responsibility for managers related to management systems is to communicate and educate the employees. What they should communicate is twofold:

1. Managers should communicate how the employees can benefit from using the system
2. Managers should communicate and align goals and strategies throughout the organization

The communication and alignment of goals and strategies are especially important for those occasions where radical is needed. If the organization is performing badly, something radical often has to be done in order for the organization to survive. However, radical changes will often be met with hostility from the workforce, and because of this it is crucial for the management system to offer support and guidelines for how managers should communicate new strategic initiatives to their employees.

Another important aspect to note is that many organization viewed the “level of enthusiasm” as a very important “responsibility” for managers. This means that a management system cannot become truly rooted and alive in an organization if their manager doesn’t show trust and enthusiasm towards the system. Company 10 said, “If management doesn’t show commitment towards the management system, it will echo downwards in the organization. It is also important to educate the employees about why we have a management system and what it aims to achieve”.

The final point about manager’s responsibility is as both Company 9 and Company 3 mentioned; it is the responsibility of upper management to ensure that the system is being used as intended. So it should be each managers responsibility to evaluate if the system is being used by their employees, and if not, why? If they do find discrepancies, they should be given enough resources to be able to analyze what could be done differently.

#### 5.2.7 Benefits for employees

As stated in section 3.12 about Change Management, the success of an organization is always dependent on the workforce. So when organizations are to undertake a new project, the benefits of said project will greatly depend on how this change is perceived by the different people throughout the organization.

So why should employees want to use a management system?

At first, the majority of organizations answered that the benefit employees would stand to gain by using the system is that it will make their everyday work life easier. But when asked to elaborate further, most organizations wanted to revise their answer. The revised answers were slightly varied, some mentioned the importance of information gathering, whereas others mentioned that it should provide employees with everything they need in order to feel comfortable conducting their daily

work. When it comes to information gathering, Company 10 said that “In an ideal world, it is an easy way for employees to gather information” which means that if an employee needs information, he or she shouldn’t have to bother their colleagues if they are busy, instead it should be available with just a few clicks on your computer. Company 2 claimed “It is a one entry channel where employees can find all information that they could possibly need. This could entail everything from guides, policies and KPIs to laws and regulations”.

In addition to information gathering, it should provide the employees with everything they need so that they feel comfortable conducting their daily work, i.e. descriptive and informative guides and manuals for how to perform difficult tasks. Company 10 said, “New employee’s needs information on how to conduct their daily work, experience employees needs information on how to do difficult tasks”. This would also entail that information in the management system would have to be differentiated depending on its purpose and intended users. Other participants mentioned the importance of creating value and opportunities for the employee. For example did Company 3 answer “By using the system the employees should gain a sense of security and support related to their work tasks” and with that he meant that if organizations have a simple and good management system that makes the work for the employed easier and is he or she more willing to use it daily.

Finally, the management system should, as previously stated, provide the employees with appropriate channels to voice their concerns and provide suggestions regarding improvement possibilities. This will not only make the employees feel more involved in the well-being of the organization, but it will also make them more motivated if they feel that management is listening to their suggestions and ideas.

#### 5.2.8 An easy management system

An easy and simple management system is tricky to define. The common aspects provided by the interviewed organizations are:

- Easy to find information
- Relevant information
- Different layers of detail for the documents, manuals and policies

First of all, the information presented to the employees in the management system has to be easy to find. Company 10 and 12 mentioned, “Information should be quick to find, a search function helps with this, and documents should be as short as possible” respective “Information should be easy to find, either via categorization or by search functions or both, and the documents should be as simple as possible”. Search functions are something that was met with ambiguous answers. Some claimed that it was necessary, others claimed that it was very hard to implement since everyone is “expecting Google”, but few organizations have the resources for that. What the majority of organizations did agree on is that search function or no search function, the information has to be categorized. How the categorization of the information should be done could differ depending on the organization, but one idea is to base the categorization on carefully chosen keywords. The interviewed organizations claimed that in order to keep the keywords as optimized and logical as possible, it would be beneficial if there was a way for the users to provide feedback on them, suggesting that the document should be made visible under other keywords as well. The use of process maps for navigating in the management system is something that was met with ambiguous responses from the organizations. What can be concluded is that it could be an idea to use process maps as a way of enhancing the navigation process of a management system, but since most employees are unfamiliar with the concept of “processes”, this could instead have the opposite effect, making it feel bureaucratic and complex. So if process maps are to be used, it could be necessary to give the

employees a short training about what processes are and how they relate to the job they are doing.

The next thing that is visible in an easy or simple management system is that the information presented is of relevance to the user. Company 8 said that “That the information available is easy to find and more importantly, relevant to the specific user”. Most organizations agreed that if news or manuals that are presented in the management system is of no use to a specific user, then this will only add to the feeling of a “complex system”. So organizations should, if possible, try to create individual points of access for their employees, and these access points should present the users with information, news and documents tied to their specific tasks.

Another interesting idea brought forth by Company 9 and Company 1 who states that the steering documents in a management system primarily used for two purposes. The first being new employees who needs very detailed information for how to perform their tasks. If the information is detailed and clear, they won’t have to constantly ask their colleagues for help. The second occasion when the management system is used is when employees are to perform a specific task which they have not conducted in a while. In this case, it may be enough to provide them with a short and simple checklist that will spark their memory. Company 9 and Company 1 goes on to say that because of this, it may be necessary to create “different layers” of the documents, by doing so it will create a structured system which should feel relevant to all employees.

Additionally, checklists, short documents, pictures and videos is better than long documents of text when it comes to keeping up the simplicity of the system. Generally, a simple system is a system that is easy to navigate in, the information should be relevant and the system should also be inspiring with for example pictures, videos, color and less text.

#### 5.2.9 Availability

Most organizations felt that the best platform to present the management system on would be an intranet. They said that most companies build their intranet with the purpose of being the main communication channel between the employees and upper management, and because of this, they want to add upon the information available so that no other platforms for news or information gathering are needed. They main reason for this is that, as Company 8 puts is, “to reduce the complexity of the system landscape”, meaning that by consolidating all information into one system the redundant systems could be discarded. This view is expanded on by Company 3 who states “on what type of platform that the system should be available on will depend on the organization, however it is beneficial to make it all available in one platform in order to not create confusion as to where information could be found”. Company 12 backs this view, “simplicity can be achieved by consolidating all information to one platform, maybe an app on your telephone? It is about finding the right tool to present the information with, which feels logical for the employees”.

The idea that a management system should/could be available on a smartphone or tablet is something that was met with different reactions among the interviewees. Some claimed it to be a great idea, while others thought it to be unnecessary. One interesting point made by Company 10 was that for jobs requiring you to spend time outside of the office, the benefits of making it available for smartphone usage will increase greatly.

The final point shared by the interviewed organizations is that no matter what platform the management system is available on, it is very beneficial to make it accessible online. The reason for this is because it enables employees to access the system from home and during their commute to and from work. Even though not all employees will make use of this possibility, they could still be

able to work from home, resulting in less productivity loss if they have to stay at home for some reason, e.g. taking care of their children if they are home sick.

#### 5.2.10 Communication channels

Since most organization utilizes an intranet as a tool for presenting the information in the management system, it was not surprising that the most commonly used method for managers to communicate with the employees was through the intranet. However, many organizations felt that the news presented on the intranet seldom got the desired attention. Company 6 mentioned that they had presented a news story about free samples to their employees; all they had to do was sign up under the post. This effort only got a 20% response rate, which would indicate that the employees are not reading these news at all. Their takeaway from this was that all news presented on the intranet has to be of interest to that specific user, otherwise he/she will after a period of time be so tired of these news that they won't read them.

Other commonly used channels were e-mails and regular meetings. How these channels are being used is another topic. Several of the interviewed organizations mentioned that they want the communication more "fun" or "inspiring". Company 6 says that "we would like our information to our employees to be more fun. We could be doing much more in order for our employees to feel like the information they are getting is more inspiring. And this is important since the information they are getting is something that could potentially be very useful for them in their daily work". Company 5 had a good idea on the topic of making the information more inspiring. First they use their intranet to publish news related to the organization. They also have middle managers who are responsible for communicating and explain the ideas face to face with the employees. Finally, for each change being made, they make short videos which explain what the change is, why it was needed and how it will affect the organization and the employees work situation.

The final takeaway from this topic is that some organizations agrees that what information channels that should be used is highly dependent on the types of employees employed by the organization. Company 12 said it best when they highlighted the point of the bigger the organization, the more channels are needed. This is because not everyone processes information in the same way, for some it is easier to read, some likes to listen. But most importantly, organizations needs to realize that not everyone wants to participate. They said that the ones not willing to participate could be persuaded by making the information more inspiring, e.g. via videos and the avoidance of long text based e-mails.

#### 5.2.11 Thoughts about the future and additional thoughts

When asking the interviewees what they think will change in the futures management system, some interesting ideas was brought forth. Company 4 mentioned that they felt that suppliers will be more integrated, or at least educated on companies' management systems. According to them, this would help their supplier relationship management by making their suppliers understand their point of view regarding quality better. And since many organizations are more or less dependent on their suppliers when it comes to the quality of their products, this makes a lot of sense. How this should be done in reality is a much harder question since suppliers have their own management system to follow. One idea might be that already in the purchasing phase of collaboration, try to find suppliers with management systems and standards similar to your own organizations.

Another interesting point, made by Company 1, is that the development and implementation of a management system will take time. You could create a management system that looks good on paper and gets certified relatively fast and easy, but if you truly want to get the system integrated into your organizations way of working, it will take time. And in addition to time, it will need regular

evaluation and auditing. And these evaluations are amongst the hardest parts of managing a management system according to Company 9. They claim that the challenge of auditing lies not in the procedure itself, but to find people who are willing to look at the management system and be critical. They have to be courageous enough to raise a flag if they see any discrepancies between how the system looks versus how it is being used. If people can get away with not using the system, then it is not a good system. They proposed that the task of internal auditing should fall on someone very high up in the organization.

The final point is that there will always be informal groupings in any large organization. In these groups there will always be people who openly opposes ideas and change projects. Company 6 suggests that a management system has to create routines for how to deal with these trouble makers. The way they propose to do this by is to try to get the organization itself to come up with ideas on how to improve the organization. It is hard for people to argue against ideas that were put forth by themselves. This idea is closely related to how organizations should motivate their employees to provide feedback to the organization. Company 12 talks about four types of people within the organization as seen in the figure below:

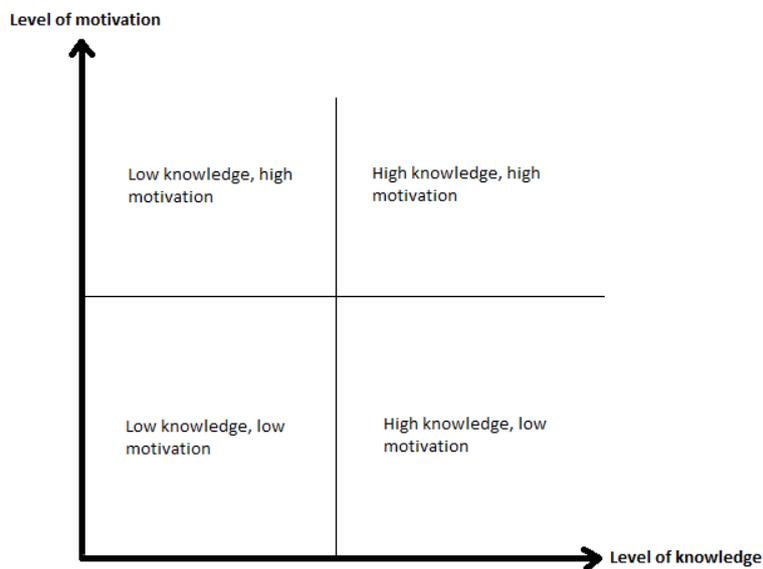


Figure 6 Four types of employees

What this figure tries to illustrate is that all employees could more or less be categorized into these four categories. Important to note is that in the upper right, the people with high knowledge and a high level of motivation, these people will do excellent work no matter what the managers do, so these people could more or less be left alone. The people with low knowledge, but a high level of motivation are the people who want to help the organization move forward, they want to do more than is asked of them, but they lack the knowledge to provide anything useful. These people could become a great asset to the organization, if the organization provides them with the right training and education. The management system has to establish procedures for how to find these people, and how to educate them.

In contrast to this, we have the lower right corner, i.e. people who possess great knowledge or skill, but lack the motivation for doing anything but the minimal effort. As with the other group, if their motivation could be changed, then they too will become a great value for the organization.

So how can a management system make use of this aspect? A management system should provide the managers with the tools and routines needed to conduct regular employee evaluations in order to be able to sit down with the employees, and gain an understanding on which type of person this specific employee is. If he/she shows a great deal of commitment, then it is just a matter of giving him training and education. If he lacks motivation but clearly shows that he possesses great knowledge or skill, then it becomes important to try to figure out why his/her motivation is lacking. However, Company 12 also points out that all people shows ups and downs in in their level of motivation. Therefore an organization has to both understand and accept that their employees will never be able to constantly do their best and contribute after their fullest capabilities. What sets a good management system apart from a bad one, is that a good one understands this, but establishes a corporate culture that promotes individual growth, reducing the time their employees experiences these dips in motivation.

The last group of people, the ones that shows no interest to contribute and even if they did they don't know anything, are a large threat to any organization. They are the ones who most often turn into these troublemakers. An organization has to sit down with these employees and explain to them that this is not working out. They don't want to be there, and the company would be better off without them. This conversation is often hard to have for many managers, which is why the management system should provide clear guidelines on how to handle these matters, so that a manager feels like he/she can lean on the system for these difficult tasks.

### 5.3 Summary of the comparative analysis

#### 5.3.1 Definition of a management system

A management systems main purpose is to help steer and govern the organization in order to achieve it corporate goals and vision. For this purpose, the management system has to be developed so that it promotes continuous improvement of its core processes. In order for the management system to achieve this, it has to gain the support of its employees. This means that it has to be developed and designed with the workforce in mind so that both managers and employees can see and experience the benefits of using the system. Finally, the management system has to help create a climate that helps the organization adapt to its surroundings.

#### 5.3.2 Value creating

There are seven main areas that will be benefited by having a management system; increased quality towards the customer, increased organizational productivity, goal alignment within the organization, enabling fact based decision making, streamlined communication channels, increased employee engagement and continuous improvement.

The value creators within a management system that enables these benefits are closely linked to creating a structured way of working. By creating structured routines for how to conduct various processes, several benefits are to be gained.

#### 5.3.3 Risk minimization

According to the empirical findings, a management system will help to reduce risks throughout the organization by creating structure and routines for assessing various risks related to the organization, trying to find the root cause of a potential issue. It should clearly define who should be responsible for conducting the risk assessments, ideally someone working close to the process itself. In addition to this, the system has to establish channels for how employees can provide feedback if they discovers a mistake. Finally, the management system has to create a uniform way of working, establishing routines for how each process should be conducted, and through this minimize the deviation of the process output.

#### 5.3.4 Continuous improvement

Create quality related goals for each process with the purpose of increasing customer value. All improvement projects should be aimed at reaching/exceeding these goals. The process owner should be the one responsible for these improvement projects and the management system has to clearly define what mandate he/she has related to change projects.

Deviation handling systems has to be used not as a way for employees to complain but to provide the organization with information about things that have gone / could go wrong. Therefore, a management system has to clearly define what type of occurrences that constitutes a deviation report. The system should never be used to assign blame to an individual person, rather it should try to get to the root cause of the mistake. The process owner should be responsible for analyzing the reports related to his process.

The employees should give feedback to the closest manager or process owner. This could be done via a simple feedback tool on the intranet. The process of providing feedback should be quick and easy for the employee, and it is important that the employees get encouragement from management when they have provided feedback. It is important to understand that different employees will be motivated by different incentives. A bonus system rewarding good performance on a personal or divisional level could be a good idea. It is also important to note that if employees turn in several suggestions or deviation reports without them being utilized or implemented by management, they will stop.

#### 5.3.5 Challenges when developing or implementing a management system

The number one challenge when it comes to management systems is to get it integrated and alive in the organization, i.e. getting the employees to actually use the system. This could be achieved by having managers communicate and educate their employees on the purpose and logic behind the management system.

The second thing is to create a coherent, integrated management system that covers all aspects of the organization, e.g. quality, environmental, safety and health.

#### 5.3.6 Managements responsibilities

The responsibilities of upper management related to the management system is to show trust and commitment in the system, communicating the purpose and logic behind the system to the employees and to ensure that the system is being used as intended.

#### 5.3.7 Benefits for employees

A good management system provides support for the employees when they are conducting their daily tasks. The employees will primarily lean on the management system for support on two occasions: when they are recently employed and when they have to perform difficult tasks that they do not perform regularly. A good management system will also make the employees feel more included by setting up clear channels for how they can provide feedback or voice concerns.

#### 5.3.8 An easy management system

First of all, a simple management system ensures that the information available feels relevant towards the specific user. This could be done by creating employee or division specific log-ins which presents the information related to their specific department at the start page. They should be able to access other information as well, but it does not have to be presented right in front of their eyes.

All documents in the management system should be categorized. This categorization is not always easy to do, but each author of a document has to really think under what keywords it should be

made visible. By taking a few extra moments to think about this, it could achieve a much simpler, and logical system. The employees should also be able to provide feedback on these keywords.

The documents themselves should always have a purpose. Never document just for the sake of documentation. Try to avoid long text based documents, and if possible, include videos or pictures. However, if pictures are to be included, they have to be very clear and should not be open for interpretation.

Keeping in mind that steering documents are most often used for two different purposes, it is important to design these documents so that they could be of quick and easy use at both these occasions.

#### 5.3.9 Availability

Where the information in the management system should be made available depends on the types of jobs included in the organization. It is important to present the information on a platform that feels logical to the users. This could be either via an intranet online, or maybe even optimized for smartphone or tablet usage. Important to note is that the management system should be available in one main platform, e.g. the intranet. The more platforms used, the more it adds to the complexity of the management system.

#### 5.3.10 Communication channels

What types of communication channels that should be used by managers in order to communicate with the employees should be optimized according to the different types of employees within the organization. Commonly used methods involve presenting news on the intranet, during meetings or simple face to face dialogs. News presented on the intranet has to be of interest for the person reading them; otherwise this will lead to the news not being read at all. Not every employee wants to be a part of the information exchange, but these people could be persuaded by making the information more fun, e.g. through informative videos and the avoidance of long text based documents.

#### 5.3.11 Thoughts about the future and additional thoughts

Companies should try to get their supplier more integrated or aware of their own management systems, this may be done by creating purchasing processes that tries to find supplier whose management systems are similar to their own.

An important aspect for keeping the management system relevant in an organization is to conduct internal auditing. These audits have to be conducted by people who are not afraid to raise a flag if they find any conformity. These audits should be aimed at not only reviewing the documents, but also to investigate if the system is being used as intended by conducting interviews with the employees.

A good management system sets up routines for how to handle or quell troublemakers. The sheer number of troublemakers could be reduced by making the organization come up with the ideas for change, e.g. through the promotion of feedback from the employees.

To get the employees to provide feedback, the organization needs to understand the different types of personalities amongst their employees and try to motivate them accordingly.

## 5.4 Comparison of empirical findings with existing theory and models

### 5.4.1 Definition of a management system

As stated in section 3.1, a management system according to the International Organization for Standardization is “a *set of procedures an organization needs to follow in order to meet its objectives*”. So according to ISO, a management system covers all processes that an organization needs to conduct in order to reach its goals and survive in their market. Another explanation of what a management system is, is offered by (Asif, Fisscher, & Joost de Bruijn, 2010) who claims that a management system should “*help organizations to take a systematic approach to executing various business functions in order to achieve a specific goal*”. Furthermore, looking at the definitions presented in table 5, it was concluded that most existing definitions view a management systems mostly from a management perspective. It should be a strategic tool for managing an organization various business processes in order to achieve the corporate mission and vision. This view, that a management system should be closely linked to the organizations overall strategy and goals is shared by the empirical findings in this report. However, the empirical data also suggest that not only should the management system help the organization reach its current goals, it should also create an atmosphere that helps the organization adapt and change course if its surroundings demands it. This idea is closely related to the theories of “change management” by (Nasiri, Ansari, & Fathi, 2013) who states that in order to make changes successfully, individuals and groups need the following:

- Awareness of the need for the change
- The desire to participate and support the change
- Know-how to change
- The ability to implement the required skills and behaviors
- Reinforcement to sustain the change

This would indicate that the workforce perspective should be part of the definition as well. The empirical findings in this report clearly show that the most challenging task of designing and/or implementing a management system is to gain the support of the workforce. So in order to highlight their importance, it would be beneficial to include the workforce perspective already in the definition of a management system. This idea, that the definition of a successful management system has to incorporate the workforce perspective, is somewhat shared by both the major quality award models, i.e. MBNQA, EFQM & DP, and ISO, who all covers the importance of the workforce in their setup and scope. For example, one of the “enabler criteria” is “People” in the EFQM model. So according to EFQM, if the “people” aspect of an organization is lacking, then they cannot hope to achieve business excellence.

### 5.4.2 Value creating

The empirical findings in this study suggests that the main benefits to be gained by implementing a management system are:

- Increased quality towards the customers
- Increased organizational productivity
- Goal alignment within the organization
- Enabling fact based decision making
- Streamlined communication channels
- Continuous improvement
- Employee engagement

From these perceived benefits, one could argue that streamlined communication channels are closely related to increased organizational productivity. This because if managers can communicate with their employees in a faster, more efficient way, the overall speed of the organization will follow. The same could be said for continuous improvements and fact based decision-making. One may not exclude the other, but according to theory, the chance of improvement projects reaching success will be greatly increased if the decisions to initiate these projects are based on facts rather than gut-feelings.

Looking at the benefits mentioned by the BEMs and ISO, i.e. increased employee engagement, tools for continuous improvement, increased productivity, streamlined communication channels, increased quality and increased employee motivations, one can conclude that they are very similar, almost identical, to the findings in this study. The small differences lies in how these values are supposed to be created. The empirical findings suggest that most benefits are gained by creating routines and structure throughout the organization. But this structure should be developed in such a way that it feels logical for the employees. If the workforce understands what needs to be done, and how to do it, the organization will in turn be rewarded with increased employee motivation and increased productivity. This view is shared by both EFQM and MBNQA who both claims that business excellence is reached by aligning resources, plans and goals within the organization.

One thing to note is that the empirical findings denotes continuous improvement as an individual benefit to be gained by implementing a management system, whereas the existing models claim that the actual benefit is that the organization will gain the tools needed for conducting continuous improvement projects. This is an interesting idea that is shared by the authors. Just by implementing a management system, there will not be any immediate improvements made. However, the management system should provide guidelines and routines for how the organization should work with continuous improvement, and thus, the real benefit gained by implementing a management system is that the organization will gain the tools necessary for working with improvement projects.

#### 5.4.3 Risk minimization

The empirical data suggests that a management system can help reduce risks throughout an organization primarily by creating a standardized and uniform way of conducting risk assessments. This is similar to the structure stated in the ISO 9001 standard, i.e. the organization has to create documents explaining the procedure used to find and take action against risks.

ISO also talks about identifying and taking preventive actions against the root cause of a potential risk. This is important because if risk assessments are aimed at finding someone to blame, people will be less inclined to raise their voice if they did something wrong. Instead the system should try to find the reason as to why/how the mistake could have happen. If the employees feel that they can, without being punished, provide feedback when they see something that could go wrong, it will be much easier and faster to improve upon the organizational processes. MBNQA states that leaders within an organization should establish a corporate culture of rewarding employees for valuable contributions to the organization. In other words, even if an employee has made a mistake, they should not be punished for bringing it to their manager's attention. This is related to the empirical findings that suggest that a management system should clearly define who should be responsible for conducting the risk assessments, ideally someone working close to the process itself. Managers could be the ones analyzing the risk assessments, but the actual task of performing them should fall onto someone who works with that specific process on a regular basis.

Finally, according to the empirical data, the management system has to create a uniform way of working, establishing routines for how each process should be conducted, and through this minimize

the deviation of the process output. This is shared by the principles of the DP, which claims that education and standardization leads to that troubles in the organizations daily work will be minimized and major operations in each department should be stabilized.

#### 5.4.4 Continuous improvement

ISO 9001 talks about continuous improvement as a way of correcting processes not working 100 %. This should be done by collecting data related to each process and then try to improve upon it in order to reach the desired outcome. This could be related to this study's finding that each process should have clear quality related goals for which to improvement projects should be aimed at. MBNQA, EFQM and DP all talks about the necessity of constantly improving upon processes. However, they don't merely see these improvements as fixing non-conformities, instead they claim that continuous improvement should also try to improve upon processes that are already working. This later view is the same as suggested by the empirical findings in this study.

As to how these continuous improvement projects should be conducted, the existing models mention some different approaches. First of all, they mention the importance of fact-based decision-making, and EFQM talks about changes in results are gained by modifying the "enabler criteria". They all claim that self-assessment is key when it comes to continuous improvement, and that these self-assessments should be the responsibility of both managers and employees. This study's findings suggest that feedback and improvement ideas should come from the organization itself and then handed to the closest manager or process owner. This could be related to the responsibilities of an organizations leaders outlined by EFQM or MBNQA. These models state that leaders of an organization should provide an organization with the energy and motivation needed for continuous improvement. Leaders should also act as "the voice of change" within an organization, so they would need to know what to do with the feedback provided to them. This is similar to the findings in this study, which suggests that when employees turn in feedback, the managers have to show enthusiasm and encouragement towards the employee.

Bonus systems could, according to the empirical findings, be a good idea in order to encourage the employees to provide feedback to the organization. This idea is somewhat shared by Nohria, Graysberg and Lee (2008), who talks about four different types of motivators, where the first level is to offer a competitive salary. However, they also mention that good performers, or employees, should be sharply differentiated from the average or poor. This could be interpreted as a bonus system rewarding good ideas or performance could be a valid way of getting the employees to do more than is necessary for their specific role.

#### 5.4.5 Challenges when developing or implementing a management system

The empirical results in this study suggest that the number one challenge when designing or implementing a management system is to gain the support of the employees. This is backed by ISO 9001, which emphasizes the importance of understanding different stakeholder's demands and expectations, including the employees. By clearly understanding this, the chance of gaining organizational success is greatly increased. In addition to ISO, all of the BEM's, i.e. MBNQA, EFQM and DP, talk about the important role that the workforce plays when it comes to achieving operational excellence.

In addition to this, according to Davies (2008), studies have found other aspects that are key for the success of implementing management systems or BEM's:

- Setting up clear objectives and outlining the expected benefits.
- Gaining the commitment from senior management.

- Demonstrating the senior management commitment
- Education and training.
- Activities to maintain momentum in the implementation process.

Looking closer at these aspects, one can see that most of them can also be found in the empirical findings of this project. To establish clear objectives and outlining the expected benefits should be part of all management systems since it will promote continuous improvement projects. Gaining and demonstrating senior management commitment is important since it will most often echo down into the organization, making the chance of getting the management system truly integrated into the organizations way of working much greater. The most important part, education and training, is very closely linked to gaining the support of the employees. This is completely in line with the findings in this study, which shows that by educating the employees on the logic and purpose of the system, they will be much more likely to view it as a helpful tool rather than a bureaucratic obstacle.

#### 5.4.6 Managements responsibilities

The empirical findings in this study suggests that managements responsibilities related to a management system should be to communicate the purpose and logic behind the system to the employees, to show commitment towards the system and to ensure that it is being used as intended.

These findings are all somewhat included in all BEM's. MQBNA and EFQM both state that managers should be the leading voice of change in an organization. They should communicate the strategic changes to their employees and make sure that they understand them. The DP also mentions this, however it also says that managers should be responsible for the development of the employees. In addition to this, they mention a few other responsibilities such as setting up goals for the organization, motivating the employees, acting as role models and evaluating/reviewing the system.

The notion that it should be the responsibility of management to conduct internal self-assessments is something that is shared by Company 9 who states that the self-assessment is one of the hardest things that an organization can do. It requires that the person who conducts the audit to be very confident and brave, and this responsibility should fall upon upper management.

#### 5.4.7 Benefits for employees

ISO 9001, MBNQA, EFQM and DP all mention the importance of the workforce or employees. However, they all view a management system primarily as a tool for managing different business processes and tend to forget to highlight what the employees stand to gain from implementing the system. The models all talk about creating clear routines for how to perform certain processes, which could be beneficial for the employees by making them, feel more confident while performing their tasks. However, the spotlight is on the process itself rather than the employee. The model also mentions the importance of educating the employees and increasing their skill level. This will, according to them increase organizational productivity, however, they fail to mention that it will also increase the chance of success when implementing the management system.

Although this could be considered two sides of the same coin, the authors feel that the benefits stated by the interviewed organizations should be made more visible when talking about a management system. This is because the success or failure of a management system is so dependent on the employees; it is vital to highlight what they stand to gain by using the system.

#### 5.4.8 An easy management system

None of the models, ISO 9001, MBNQA, EFQM or DP brings up the subject on what could be done in order to make a management system feel easy to use. Therefore, the conclusions in this report will mainly focus on the suggestions brought forth by the interviewed organizations, i.e. personal or

divisional log-ins, categorized documents, easy to read documents and the incorporation of explanatory videos or pictures.

#### 5.4.9 Availability

None of the models, ISO 9001, MBNQA, EFQM or DP mentions anything regarding the topic of where a management system should be made available. Therefore the conclusions in this report will mainly focus on the suggestions brought forth by the interviewed organizations, i.e. the platform used will be dependent on the organization itself and the management system should, if possible, only be available on one specific platform/media.

#### 5.4.10 Communication channels

One of the top responsibilities for managers is to communicate news and information to their employees. The question is then, how should this communication be conducted? ISO 9001 mentions that you should have “effective methods of internal communication”. MBNQA, EFQM and DP all highlight the importance of good communication. However, none of the models specifies what constitutes “good communication” or what types of channels that should be used. The theories of change management also highlight the importance of clear communication channels. Nohria, Groysberg & Lee (2008) claims that good communication between managers and employees can be a good way of dealing with organizational resistance to change. Company 12, who are working as communication consultants claims that what type of information channels to be used is highly dependent on the organization itself, and the bigger the organization, the more channels are needed.

#### 5.4.11 Thoughts about the future and additional thoughts

The idea of getting your suppliers more aware or integrated into your management system is mostly lacking in existing theories. ISO talks about creating “mutually beneficial supplier relationships”, where they talk about the vital part those suppliers have towards an organization. However, no guidelines for how these relationships should be related to the management systems is mentioned. MBNQA and DP do not mention suppliers at all while EFQM talks about the importance of close collaboration with partners and suppliers. But like ISO, EFQM does not talk about how this would look in a management system.

The empirical findings also suggest that internal audits and evaluation of the management system is something that needs to be more visible in the management systems of tomorrow. This is somewhat visible in all of the investigated models, in the sense of continuous improvements or in the case of ISO 9001; internal audits are an actual requirement. ISO 9001 specifies that it is the responsibility of management to review that the system is performing, but it does not specify how to conduct the audit. Therefore it is not unreasonable to draw the conclusion that how these audits should look will depend on how set up of the organization.

The final point regarding how to deal with troublemakers within an organization is not mentioned to any extent in any of the BEM models or ISO. However, they all mentions the importance of the workforce, and that the workforce should be nurtured and provided with personal growth opportunities such as trainings or education opportunities as well as promotional incentives. Change management however, talks a great deal about how to quell troublemakers. Existing theory mentions that many managers’ underestimates the level of resistance amongst the employees in regards to change. This resistance to change can be countered by providing the employees with the following:

- Awareness of the need for the change
- The desire to participate and support the change

- Know-how to change
- The ability to implement the required skills and behaviors
- Reinforcement to sustain the change

The reason this would work is because it will counter the four most common reasons as to why people will resist change, as presented by Kotter & Schlesinger (2008):

- A desire to not lose something of value
- A misunderstanding of the change and its implications
- A belief that the change does not make sense for the organization
- A low tolerance for change

This idea is very similar to the point made by Company 12, i.e. that there are four types of people in an organization, and the management system has to create routines for how managers are to deal with each type. It is often enough to provide the employees with education and training, communicating the reason for the change and how it will affect them.

## 5.5 Key aspects of a management system

When comparing the empirical findings to existing models one thing becomes apparent, i.e. the management systems primary goal is to generate value for the organization. However, in order to do so, it also has to be beneficial for the employees. Because of this, the key aspects that need to influence a successful management system can be divided into two categories; an organizational perspective and a workforce perspective. The following section aims summarize the results of the analysis in regards to the key aspects of a management system as provided by Trivector LogiQ.

## 5.6 Organizational perspective

### 5.6.1 Value creating

The analysis indicates that there are two main areas that will benefit from having a management system; increased organizational productivity and increased quality. Both the empirical data and existing theories mentions other areas as well, i.e. enabling fact based decision making and increased employee engagement, however the authors feel that those are closely linked and correlated to these two main categories.

By creating routines for what to document and how to document, while simultaneously creating a system that makes information gathering easier and quicker, it will help the process of fact-based decision-making. This will help both management and the employees in their daily work, and if documents are created that could help employees in their daily work and a corporate culture that encourages the employees to provide feedback is established, the result will be increased employee engagement.

These two benefits will the echo in to the organization, fact based decision making will make the process of continuous improvement much easier, which in turn will lead to increased quality of products and/or services. Increased employee engagement together with streamlined communication channels and clearly defined responsibilities will lead to increased organizational productivity.

### 5.6.2 Strategy enabling

A management system should help organizations reach the corporate vision and in turn generate value to the customers. This is achieved by creating strategies and plans that, if possible, are aligned with the organizational culture. A management system will fail to help an organization reach its goals

if it does not get the support from the organization. Therefore, all strategies has to be developed in such a way that the employees, in one-way or another, can get behind the idea.

There are two main ways for a management system to help organizations follow their strategies. First, if the developed strategies are based on feedback and ideas from the employees, it will be much easier for management to implement the change. These strategies will be possible if the management system creates routines can clear and easy to use channels for how employees should provide feedback and suggestions to upper management.

The second way is for those strategies that have to be implemented, even though the idea does not come directly from the employees. This could for example be that the market is rapidly changing, and the organization needs to adapt quickly or they will fall behind. For this occasion, the management system will help in the follow ways. First, by understanding why people will resist change, the management system can help set up structures and procedures for how managers should inform and educated the employees in regards to the change. As mentioned previously, the following parts are needed in order to make people embrace change as something good:

- Awareness of the need for the change
- The desire to participate and support the change
- Know-how to change
- The ability to implement the required skills and behaviors
- Reinforcement to sustain the change

So if the management system can provide the organization and management with clear communication channels and make the process of information gathering easier, i.e. enable fact based decision making, will be much easier for managers to educate and inform their employees on the need for the change and then provide them with the necessary education and trainings.

#### 5.6.3 Coordinative

A management system also has to increase the coordination of processes. The coordinative aspects of a management system are closely linked to communication. A management system has to establish clear communication channels for how managers communicate with the employees and how employees can communicate with their managers. Increased coordination is also gained by clearly defining the different processes of an organization as well as the roles and responsibilities related to each process. It is also important to make sure that all employees understand how their work relates to the whole chain. For this purpose, it might be necessary to educate the workforce on what processes are and why it matters. Another aspect related to this is how a management system could help organizations with the coordination of its suppliers. It could be beneficial to establish procedures for how a suppliers own management system could be a factor when initiating long lasting collaboration projects with third parties, i.e. in the purchasing process.

#### 5.6.4 Developing

For a management system to be developing, it should provide support for how the organization works with continuous improvement. Continuous improvement entails both risk minimization (corrective actions), and the improvement of already working processes.

A management system should establish quality related goals for each process and the undertaken improvement projects have to be aimed at achieving/exceeding these goals. The system should also clearly define who is responsible for initiating the projects, most often this person should be either the closest manager or the process owner. The system should also clearly define and standardize the way that the processes are conducted in order to minimize the deviation of the process outputs.

Deviation handling systems should be used in order to reduce risks related to specific processes, and as a tool for gaining information that could be analyzed to find emerging patterns across the board. The management system has to clearly define what constitutes a deviation report so that the employees won't use it as a way of complaining. The process owner or closest manager should be responsible for analyzing the reports. These analyzes should never assign blame to an individual employee, but rather investigate the root cause of the mistake in order to find systematic errors.

## 5.7 Workforce perspective

### 5.7.1 Simple

For a management system to feel simple for the employees, the information has to be easy to find, and it has to be of relevance for the employee trying to find it. This means that for every document uploaded to the system, the author of said document has to really think about under what keywords it should be visible. In order to keep these keyword up to date, the employees should also have a way of suggesting additional keywords that could be used. If the organization has the resources for it, then a search function will greatly increase the information gathering process.

For the information to be relevant to the user, it is suggested that the organization creates individual or divisional logins for their users. Each login should have a different start page which should only present information closely related to their specific function. The documents included in the management system should be as short and concise as possible while still providing enough information to be of use.

Clickable process maps could be included in order to ease the navigation process in the management system. This would also allow the employees to gain an understanding of where in the value chain they fit in, and how their job is related to other departments. However, for the process maps to gain acceptance among the employees, the organization might have to offer a short education explaining the purpose and idea behind a process based organization.

### 5.7.2 Supportive

There are primarily three occasions when an employee will use the system.

1. He/she wants to gain information about any changes in the organization. This should be done by communicating the news through their main communication channel, e.g. the intranet and having managers explain the news during meetings. Important to note is that news presented on an intranet has to be of interest or use for the employee reading them. Individual newsfeed tied to logins should be implemented if possible.
2. A newly hired employee needs information on how to perform their daily work. For this purpose it is important the documents are as detailed as possible. By reading the document, the employee should be able to understand how to perform the task without having to ask his/her colleagues.
3. An employee is about to perform a task, which he/she has not done in a while. For this purpose a short checklist might be enough to spark that employee's memory.

When developing or improving a management system, it is important to tailor it so that it provides support on these three occasions. By understanding when an employee will use the system, it is easier to develop it into something that could be of assistance for them. By developing a system based on these three occasions, it will reduce the risk of including irrelevant documentation in the management system, which will reduce the risk of the system getting too complex.

For managers it should support them in the decision making process by making relevant data available. It should also provide guidance for managers on how to communicate with their

employees and how to deal with / find troublemakers within the organization by creating clear routines for how and when to have face to face interaction with the employees.

#### 5.7.3 Developing

The management system also has to be developing for the workforce. By allowing the employees to grow on both a personal and professional level, their commitment towards the organization will increase. The system should also provide guidance for how to train/educate both the employees and managers, allowing them to grow on a both personal and professional level. This could be done by gaining understanding of the training wishes or needs for each employee during e.g. employee evaluations. By providing the employees with the opportunity for personal growth, it will increase their loyalty towards the organization, increase the chance for getting more constructive feedback and, as suggested by the four different types of employees (figure 8), really harness the full potential of the workforce. Important to remember is that if an employee gain increased knowledge within an area, it is important to establish a well-rooted information sharing culture so that this knowledge stays within the organization even if the employee decides to leave. This could be done by initiating “mentoring projects”, where experienced and knowledgeable will be responsible for passing on their skills and knowledge to other employees. Here, once again, it is important to find the right way of motivating these mentors so that they want to share their knowledge.

#### 5.7.4 Available

The management system should be made available on a platform that is logical for the organizations specific purpose. Before choosing a platform the organization needs to think about if the system will be used outside the office (e.g. traveling salesmen), or only used at site. Smartphone and tablet use could be beneficial for those organizations that have employees who spend a lot of time outside the office walls. Important to note is that the more platforms the information is available on, the more complex the system will feel.

#### 5.7.5 Interactive

The interactive part of a management system comes from allowing the employees to provide feedback to the organization. The management system should set up clear, simple and fast routines for how the employees should provide feedback or write deviation reports. What these channels should be and how the routines should look at will be highly dependent on the employees and the organization itself. The simplest and most commonly used method is by having suggestion boxes available on the intranet. When the feedback is turned in, the task of analyzing and utilizing this information should fall onto the closest manager or process owner and they should categorize it based on what process it is related to. It should be the managers’ responsibility to encourage the employees to provide feedback. This could be done by simply providing the employees with recognition, either by telling them that they have received the feedback and what the next step will be, or by implementing a bonus system or employee of the month program.

Employees should also be able to leave comments on the documents and news presented on the intranet. For example, if the employee is searching for a specific document, but it takes too long to find it because the keywords for which it is visible under is illogical, the employee should be able to propose additional keywords that the document should be visible under.

#### 5.7.6 Inspiring

For a management system to be inspiring it is important that the employees understand the purpose and logic behind it. This could be achieved by creating routines and structure for how to educate the employees of the idea behind the management system and the processes it aims to manage.

An inspiring management system avoids the use of long text-based documents as far as possible. It writes the information in bullet points, includes pictures (when possible) and informative videos explaining how to perform specific tasks and videos explaining changes made to the organization.

### 5.8 Empirical findings and their connection to the theoretical framework

By looking at table 8, which summarizes the ideas and practices of the BEM's and comparing it to the empirical findings in this report, it can be determined what value this report will bring to the field of organizational management.

In accordance to the BEM's, the managers of an organization need to create clear channels for how to communicate with their employees. They should aim to understand their employees in order to find out how to best motivate them to perform in accordance to their fullest capabilities.

When it comes to strategy related matters, both similarities and discrepancies can be found. For instance, MBNQA mentions that quality improvement plans should be incorporated into the overall strategy of the organization. This is similar to the empirical findings that suggest that quality related goals should be set for each individual process of the organization. However, the BEM's all mention that strategic initiatives and plans should be developed to fit the organizations mission and vision. This is to some degree strengthened by the findings in this report, but the empirical findings also highly suggests that strategic plans should first and foremost be developed in line with the corporate culture since all strategic plans will fail if they don't gain the support of the organization.

What the BEM's brings up in regards to the workforce is that it is crucial to provide them with the training and education needed for them to perform and develop on both a personal and professional level. EFQM says that an organization should develop a corporate culture based on transparency, integrity, mutual trust and participation, because by doing so, the organization will experience an improvement in the result criteria. This is very similar to the findings in this study, i.e. that the most important aspect of any organization is the employees. No matter how good or knowledgeable the management team is, without the employees, the enterprise will absolutely fail.

So what can be concluded is that the empirical findings in this report is very similar to the ideas and practices set up by the BEM's. However, since a management system should strive to provide value to an organization, and hopefully, help it reach business excellence, this is not unexpected. The key aspects suggested and investigated in this report are those that will make a management system more likely to be powerful tools in organizations strive towards business excellence!

## Chapter 6

### Conclusion

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***This chapter summarizes the conclusions made by the authors. The answers to each research question is given and explained. Section 6.2 consists of a short summary regarding how a management system should incorporate each key aspect into its design, for a more extensive explanation of these aspects, please refer to section 5.5, 5.6 & 5.7***

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#### 6.1 How can a successful management system be defined?

A successful management system helps an organization to reach its corporate vision. This is done by creating structures and routines for managers to manage the different business processes in their organization. It should also help encourage employees within the organization to perform according to their fullest capabilities by creating structures that enables them to feel relevant to the organization and by offering support so that the employees feels secure when performing their daily work. Finally, the management system should help create a corporate environment that enables the organization to adapt to change. The authors suggest the following definition:

“A management system should aim to provide value to the end customer by creating a systematic way of managing all of an organizations processes. It should help the organization understand its employees in order to create a corporate culture that embraces change projects and enables it to utilize their employees to their fullest capabilities”.

#### 6.2 What aspects needs to influence a management system so that it will be rooted in the entire organization?

The number one aspect of getting a management system to be alive and truly integrated in an organization is the employees. No matter where the system is presented or how well formulated the documents are, the system will fail without the support from the employees of that organization. And in order to gain the support of the employees, the management system first needs to gain the support of the managers within the organization. After all, it is the responsibility of the manager to communicate the system to the employees, and a lack of commitment from top management will echo down into the organization. For this purpose, the management system needs to be valuable for both the organization and for the workforce. What this means is that a management system could be looked at from two perspectives, an organizational perspective and a workforce perspective.

A successful and living management system has to be designed based on the three primary occasions for when an employee will use the system, i.e. gaining information regarding changes made in the organization, new employees who are looking for information on how to conduct their daily work, experienced employees who needs information regarding how to conduct a task which they have not done in a while.

The following aspects has to be visible in a management system so that both managers and employees will find it beneficial, and therefore use it in their daily work:

#### Organizational perspective

##### 6.2.1 Value creating

A management system will generate value for organizations by:

- Clearly defining processes and responsibilities
- Creating routines for continuous improvement

- Creating routines for what to document and how to document it
- Increasing employee engagement

#### 6.2.2 Strategy enabling

A management system will help organizations fulfill their strategies by:

- Creating routines for how to align organizational plans with the corporate culture
- If possible, develop change projects based on feedback from the employees
- Enabling fact based decision making
- Creating streamlined communication channels

#### 6.2.3 Coordinative

A management system will help with the coordination of processes within an organization by:

- Creating clear communication channels
- Clearly defining roles and responsibilities related to each process
- Increasing the employees understanding of how their work influences their colleagues by using clear and explanatory process maps
- Integrating the suppliers into the organizations way of working

#### 6.2.4 Developing

A management system should help with the development of the organization by:

- Creating routines for how to work with continuous improvement
  - Establish goals for each process within the organization
  - Establish channels for how employees can provide feedback to the organization
  - Establish ways to promote employee engagement
- Establish a deviation handling system
  - Clarify what constitutes a deviation reports
- Creating routines for how to conduct risk assessments
  - Root cause analysis
- Creating a structured way of conducting the processes in order to reduce the deviation of the process outputs

### Workforce perspective

#### 6.2.5 Simple

A simple management system is characterized by:

- Easy to find information
- Relevant information for the specific user
- As short and concise documents as possible

#### 6.2.6 Supportive

A management system is supportive if:

- It provides the employees with relevant news related to the organization
- It provides enough information for new employees to conduct their job without having to ask colleagues
- It provides enough information on how to do tasks that are not conducted frequently
- It provides managers with routines for how to communicate with the employees
- It provides managers with routines for how to handle troublemakers

### 6.2.7 Developing

A management system should help the workforce of an organization to grow by:

- Creating routines for when to provide the employees with trainings and education
- Establishing routines for knowledge sharing between employees

### 6.2.8 Available

A management system should be available on:

- A platform that is logical for the organization
  - The more platforms used, the bigger the risk is that the system will feel complex for the users.

### 6.2.9 Interactive

A management system is interactive if:

- It is possible to provide feedback on the information available in the management system
- Clear, simple and fast routines exists for how to provide the organization with suggestions or write deviation reports

### 6.2.10 Inspiring

A management system feels inspiring if:

- Everyone understands the purpose and logic behind it
- It avoids the use of long text-based documents
- It incorporates pictures or informative videos

## 6.3 How the aspects relates to the success of a management system

By analyzing the organization and the employees in order to design a system that is developing, simple, available, interactive, inspiring and supporting, it will gain the support of the managers throughout the organization. This should be done while keeping in mind at what different occasions the system will be used. The managers can then more easily communicate the benefits of the management system to the employees, increasing the probability that the system will be used as intended. By having the support of the employees, the management system will be more likely to create value for the organization and achieve the goals set by upper management. This framework is best illustrated by figure 7 below.

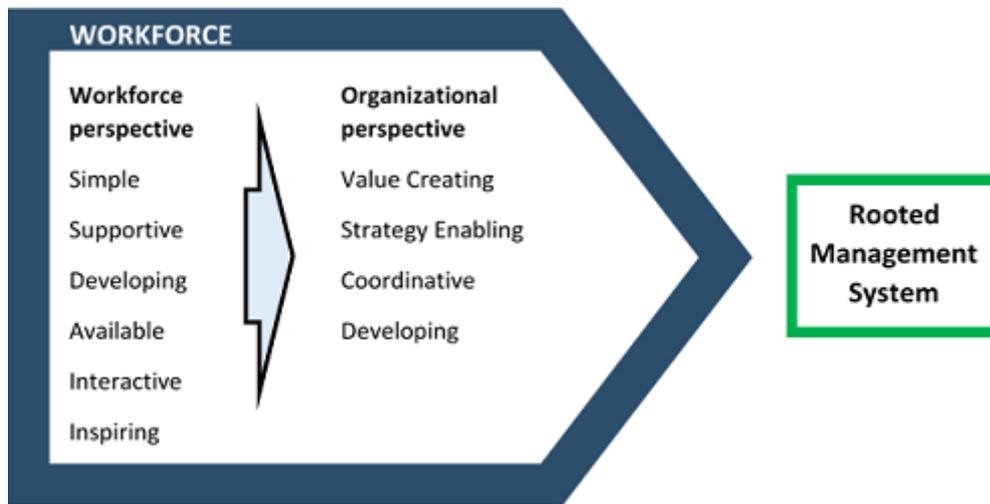


Figure 7 Framework for a rooted management system

## Chapter 7

### Discussion and Future Studies

***This chapter discusses the conclusion of this study as well as outlines the necessity for further studies within the field of management systems.***

First of all, this study set out to investigate why organizations have a hard time getting their management systems rooted in their operations and how management systems will look in the future. The findings of this study suggest that most existing definitions of what a management system should be are actually valid to a certain degree (compared to the findings in this study). What this study claims is that the management systems of the future will not look that much different on paper (regarding what the actual system should cover/entail), but instead they will be developed with another angle of attack. Instead of being created purely as a management tool, it will be developed in collaboration with the workforce.

In the conclusion of this study, three key aspects were left out: risk minimization, intuitive and complete. These were left out since the authors felt that they are included in other key aspects:

- Risk minimization is a part of continuous improvement, which is a key part of the “developing” aspect.
- A management system cannot be simple if it is not intuitive
- A management system that is value creating, strategy enabling and supportive has to be complete, i.e. include everything needed to manage the organizations processes.

As we can see in the table below, the conclusion is very similar to the author’s assumption of each aspect presented in section 4.3.

Table 23 Assumption vs. conclusion

Key aspect	Assumption	Conclusion
Value creating	Processes developed with regards to customer expectations	Clearly defined processes, routines for continuous improvement, documentation routines, employee engagement

<b>Strategy Enabling</b>	Align strategy with stakeholder demands, structured resource utilization	Align plans with the corporate culture by utilizing feedback and ideas from the employees, enabling of fact based decision making, creating streamlined communication channels
<b>Coordinative</b>	Defined linkages between processes, clear communication channels	Clear communication channels, defining roles and responsibilities for each process, increasing the employee's understanding of processes, supplier integration
<b>Developing</b>	Routines for continuous improvement and self-assessment to meet stakeholder demands	Routines for continuous improvement, deviation handling, routines for risk assessment, structured way of working
<b>Simple</b>	Easy to read and understand, (intuitive: easy to find and relevant)	Easy to find information, relevant information, short and concise documents
<b>Supportive</b>	Help employees with their daily work	The system should primarily help employees at three occasions, should also be supportive for managers
<b>Developing</b>		Routines for when to provide employees with education and training, establishing routines for knowledge sharing
<b>Available</b>	Understand the organization before choosing a platform	The platform used to present the management system should feel logical for the users, to many platforms increases complexity
<b>Interactive</b>	Knowledge sharing, users should be able to comment on documents presented in the management system	Users should be able to comment on information presented in the management system, establish channels for feedback and deviation reports
<b>Inspiring</b>	Communicate and explain the benefits of the management system, include pictures when possible	Communicate and explain the benefits of the management system, avoid long text based documents, include pictures and explanatory/informative videos when possible

The reason for these similarities could stem from the fact that the first interviewee was very knowledgeable, able to provide insights and ideas, which would hold true and shared amongst the other interviewed organizations as well. Another possibility could be that since the interview questions were developed with the theoretical framework and the information gained during the first interview, the developed questions could be biased. However, the authors feels this to be doubtful since the results are well in line with existing theory, and therefore it is reasonable to assume that the similarities stem from the fact that the first interviewee was able to provide great insights into what needs to be changed with future management systems. Still, more and broader initial interviews would be of interest for the authors to gain more knowledge within the subject. By doing more initial interviews with experts within the area a better and more specific interview guide could have been created. It would also have been easier for the authors to analyze the data if some

questions were asked that could have provided quantifiable answers. One way to do this would be to let the participant answer some questions and then rank their importance for their company in a scale one to seven. How the interviews were done in this report created some additional work for the authors to analyze which questions the participants thought were of more importance than other.

The results in this study are very similar to existing theory. As to why this is could be because the existing models are actually good. The findings of this study however would indicate that the main reason as to why some organizations fail to make their management system alive is because they do not pay enough attention to their workforce. They develop a management system and tries to push strategic initiatives down into the organization without educating the employees on the purpose and necessity of the change. This study shows the importance of understanding the different types of employees when designing the management system. Because of the time constraint, the authors have not been able to further investigate how different types of employees will result in different management system setups. This question would be greatly beneficial to further investigate in order to set up more specific guidelines for organizations looking to create/change their management system.

The authors did not dig into the interviewed organizations current management systems more than asking them which system they used at the moment or which system they wanted to use in the future. By asking and analyzing the organizations systems and certifications they had at the moment before the interview took place would further have strengthened the reliability of this report.

The idea of the three different occasions of when employees will use the management system is very interesting. Trying to create a system with single documents designed to fit all needs of the employees is an impossible task. But by creating separate documents for each of the occasions would be truly valuable for the organization, reducing the risk of creating systems that are optimized for no one, and therefore not used by anyone. However, this would have to be presented in such a way that it does not feel confusing for the user. One idea would be to have “different layers of information”. For example, when searching for information on how to perform a specific task, the first layer of information would be a short checklist. If the user wants more detailed information, he/she could simply go deeper into the system.

Since the findings in this report are based on the 14 interviewed organizations (almost all of them non-producing organizations), they will be more valid for management systems of similar organizations. It would however, be very interesting to see similar studies done, but with the purpose of investigating if a successful management system would look differently depending on other factors such as size, industry sector, private vs. public organizations, service vs. product organizations.

The findings also suggest that suppliers will play a bigger part of future management systems. It would be necessary to investigate if the integration of suppliers into an organizations management system would be beneficial, and if so, how the integration of two completely different systems could be achieved.

## Chapter 8

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# Appendix 1

## Interview guide

### Initial questions

1. Tell us a little bit about who you are and what responsibilities you have?
2. How have you come in contact with management systems during your career?
3. What is a management system according to you?

### Organizational Perspective

#### **Strategy Enabling, Value creating, Coordinative, Risk Reducing, Developing**

4. Why should upper/mid management want to use a management system?
5. How do you think a management system can help create value for organizations?
6. How can a management system help organizations with the coordination of people?
7. How can a management system help organizations with the coordination of processes?
8. In what way could a management system help organizations reduce risks throughout the value chain?
9. How can a management system help the organizations to improve their processes / results?
10. What do you think the management's role and responsibilities should be related to the management system?
11. What are the biggest challenges for management when designing, implementing and managing a new management system?

### Workforce Perspective

#### **Simple, Supportive, Available, Intuitive, Interactive, Inspiring, Complete**

12. Why should employees want to use a management system?
13. What aspects do a management system need to have in order for the employees to see it as a useful tool?
14. How should the management system be designed in order for the employees to find it easy to use?
15. How can a management system be designed so that all employees can find the information they are looking for?
16. Where/how should a management system be available in order for the employees to use it?
17. How should the management system be designed in order to promote the employees to give feedback regarding either the system, or any of the processes?
18. What are the biggest challenges when it comes to getting the employees involved in the management system?

### Future

19. If you could predict how management systems will look in ten years, what is the biggest differences between then and now?
20. How would you describe the "ideal" management system?
21. Is there anything else you would like to share?