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Development of Transport Operations Management

Case Kuljetus Eklöf Oy

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Abstract

Functionality of the organisation can be a challenge in many organisations, since undefined organisational structure and dysfunctional internal communication may lead to inefficient processes. The thesis focused on developing the operations management practices of Kuljetus Eklöf Oy. The aim of the thesis was to develop and enhance the company's management processes and work methods.

The research was conducted as a case study. The theoretical part of the thesis was based on organisational communication, leadership and management. In addition, the suitability of Lean management practices for the company was examined from the point of view of a service provider. The material for the thesis was collected mainly with observations and interviews which were analysed with current state analysis and SWOT-analysis. The existing resources and work done in the company was researched with a job description questionnaire.

As results of the thesis, a clear organisational chart was drawn up and redefined job descriptions were written for each clerical worker. Results showed the company's set aims, the required work to be done, and the manager-subordinate relationships for each clerical worker. A standardised general guideline for reporting was drawn up which define the policies for the employees' internal communication. Also, the thesis defined how Lean management could be implemented into the company's management methods.

The set aims for the thesis were achieved and the thesis helped the company to clarify its management practices and to improve its internal communication through the established methods. The thesis created the prerequisites for bringing Lean management into the company's management culture and creating conditions for continuous improvement.

Keywords/tags (subjects) Management, Change Management, Organisations, Organisational Communication, LEAN Management, Supply Chain Management

Miscellaneous

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Tiivistelmä

Organisaation toimivuus voi osoittautua monelle yritykselle haasteeksi, sillä määrittelemätön organisaatiorakenne ja sisäisen kommunikoinnin toimimattomuus usein johtavat yrityksen prosessien toimimattomuuteen. Opinnäytetyö keskittyi Kuljetus Eklöf Oy:n operatiivisen johdon toiminnan kehittämiseen. Työn tavoitteena oli kehittää ja tehostaa yrityksen johtamisprosesseja ja työmenetelmiä.

Tutkimus toteutettiin tapaustutkimuksena. Työn teoreettinen osuus rakentui organisaatioviestinnän ja organisaation johtamisen pohjalle. Lisäksi työssä tarkasteltiin Lean johtamista palveluita tuottavan yrityksen näkökulmasta. Työn aineisto koottiin kasaan haastatteluiden ja havaintojen avulla, jotka analysoitiin nykytila-analyysin ja SWOT-analyysin avulla. Työssä selvitettiin yrityksessä tehtyjä töitä työnkuvauskyselyn avulla, jonka avulla yrityksessä tehdyt työt ja olemassa olevat resurssit pystyttiin selvittämään.

Työn tuloksena yritykselle saatiin luotua selkeä organisaatiokaavio, ja laadittua määritellyt työnkuvaukset jokaiselle toimihenkilölle. Työnkuvaukset esittävät yrityksen asettamat tavoitteet, työntekijöiden työtehtävät sekä esimies-alaissuhteet työntekijöiden välillä. Työssä luotiin yrityksen raportoinnille standardisoitu yleisohje, joka ohjeistaa työntekijöitä yrityksen sisäisessä kommunikaatiossa. Lisäksi työssä saatiin selville, miten Lean johtaminen voidaan tuoda osaksi yrityksen johtamiskulttuuria.

Työlle asetetut tavoitteet saavutettiin ja työ auttoi yritystä selkeyttämään johtamiskäytäntöjään sekä tehostamaan yrityksen sisäistä kommunikaatiota laadittujen menetelmien avulla. Työ loi edellytykset Lean ajattelun tuomiseksi osaksi yrityksen johtamiskulttuuria ja auttoi luomaan edellytyksiä toiminnan jatkuvalle parantamiselle.

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1 Introduction

Operating in an international supply chain imposes challenges when goods are transported between different countries on a tight schedule by road, rail and sea. Operations require coordination between different parties in the supply chain in which the transport companies play key roles to meet the requirements for the set schedules. In most cases, the transportation companies may need to operate on a 24/7 basis to meet the demand of the effective supply chain.

Automotive manufacturing often operates on just-in-time (JIT) basis in which the transports requires flexibility and certainty to meet the customer demand. The ability to react quickly to customer needs plays a key role for the transport company's operating conditions. Information technologies (IT) used in the logistics chains also play an important role in managing large fleets. The transportation companies in the supply chains must be able to report on every move of the cargo and their fleets, so the vehicle and cargo tracking must be real-time which sets the requirements for the transportation companies' IT systems and management practices. (Päiviö 2016.)

1.1 Kuljetus Eklöf Oy

A transport company Kuljetus Eklöf Oy (Eklöf) is a 1991 established full service semi-trailer hauling company which operates in the EU area. The company provides third-party (3PL) semi-trailer haulage services to its customers. The hauled semi-trailers are owned and provided by the customers that uses semi-trailers for the transportations, so Eklöf only provides the tractor units for the customers.

Semi-trailer hauling operations are focused on the Central European market areas, mainly in Germany. Nowadays, the main part of transport operations consists of transporting Daimler AG's car components in Germany for the needs of a Finnish car manufacturer Valmet Automotive who is producing Mercedes-Benz cars in Uusikaupunki, Finland. The main partner for the transport operations is DSV Road Oy, who owns the semi-trailers that Eklöf hauls. (Päiviö 2016.)

Eklöf has approximately 60 drivers from three different nationalities working for the company. Its main headquarter is in Tampere, Finland, where the main administration, transport coordination and planning is located. The company has a Hungary-based subsidiary company Transport Eklöf Kft, established in 2009. Eklöf has currently two terminals in Germany, one is in Lübeck and one in Mannheim.

Eklöf has a fleet of 44 trucks that services at semi-trailer haulage operations. 19 of the 44 trucks are owned by the Transport Eklöf Kft and operated from the Hungary. Company's fleet consists mainly of Mercedes-Benz and Volvo trucks. In 2017, the concern is opening a German subsidiary company to meet the requirements to operate daily in Germany, and to follow the European Union's cabotage and intermodal transportation laws, which determine how many transportations per week and in which areas foreign companies can operate (Directive (EU) 92/106/EEC; Regulation (EC) 1072/2009).

1.2   Backgrounds of the study

The subject for this thesis arose from the need of the company to develop the company's transport operations managers' internal communication and work methods. The company has found out that the managements' work methods are not uniform and there are issues in the internal communication which are causing problems in the management practices. As a multi-national company, where managers are in three different countries, the company wanted to develop the transport operations management's practices to be more efficient.

The research previously carried out to the company focused on cross-cultural management (Vertamo 2014), and leading and managing employees on the operative level (Horvath 2015). This research will be a response to the Horvath's suggestion for further development concerning about the unifying of the transport operations management's practices.

2   Research methods

2.1   Research methods in general

Research methods can be roughly divided into two categories: quantitative and qualitative methods which are the most common and traditional research methods. They can be refined into action, development and case study researches. Also, multiple research methods may be combined. (Kananen 2010, 155.)

2.1.1   Quantitative research

According to Kananen (2008), a quantitative research evaluates the effects and relationships between phenomena by using quantitative methodologies. The quantitative research is focusing on specific factors or issues. The researcher must be familiar with the factors and their inter-relationships to measure and define the cause-and-effect relationships. (25-28.)

The quantitative research design uses a strict linear design model which anticipates what the results may be if the design is correctly selected. The quantitative research environment is simple, tactile and measurable. The researcher is not emotionally attached to the research, so the research is objective. The most reliable quantitative research results can be achieved by using statistical data analysis tools. (ibid., 25-28.)

2.1.2   Qualitative research

A qualitative research is not as straightforward as the quantitative research is. According to Kananen (2008, 24-25), the qualitative research aims to understand and explain the researched phenomenon. It does not attempt to influence the activities. The qualitative research focuses only on one subject thoroughly as the quantitative research focuses on selected group or subjects. The summary of the differences between quantitative and qualitative researches can be seen in Table 1.

Table 1. Differences between qualitative and quantitative research (adapted from Kananen 2008, 27)

	Qualitative research	Quantitative research
Meaning	Interpretation Comprehension Understanding activities perspectives	Generalisation Forecasting Cause-and-effect relationships
Approach	Ends with hypotheses and theories. The researcher is an instrument.	Starts with hypotheses and theories. Uses formal instruments.
Deduction logic	Induction (from practice to theory)	Deduction (from theory to practice)
Data	Documents, words	Numbers
Role of the researcher	Sympathiser Participant	Objective researcher Neutral, outsider
Hypotheses	Variables are complicated, linked and difficult to measure	Variables can be defined, measured and calculated from the interdependences
Data nature	Subjective	Objective

The qualitative research is conducted when processes that cannot be analysed with statistical quantitative methods are researched. The qualitative research requires direct interaction between the researcher and the research subjects. Observations and interviews are methods used to carry out the research. The selected methods will affect how the end results will be determined.

2.1.3   Action research

Action research continues beyond the qualitative research, since the aim of an action research is to make change. It requires a qualitative research prior the action research part, since if the researcher cannot understand the phenomenon or the issue, and define the variables linked to them, the results cannot be presented and change cannot happen. The action research takes more time than other researches, since it takes more time to concern oneself into the research phenomenon, to plan and implement the correct actions, and to evaluate research results. (Kananen 2010, 157-158.)

Although, the action research is considered to belong to qualitative researches, it may include parts of a quantitative research. Particularly, when one wants to ensure that the research results will cause effects of change, the quantitative research

methodologies such as surveys are used. The action research is a research strategy, which is a mixture of different research methodologies and requires a certain amount of familiarising oneself with quantitative research and qualitative research methodologies. (ibid., 157-158.)

2.1.4   Development research

Normal development work and a development research have a conceptual difference. Organisations are making continuous improvement and development, since it will become a development research through the fact that the research will be included in the development work. The meta-frame of the development research is usually found on the conditions of the development work. (Kananen 2010, 159.)

In development research, the selected subject or process is developed for conscious objectives. Development research is like the action research as both are aiming for a better result. The difference is that the researcher takes part in the researched subject. Development always involves value of claims; what is progress, what is better and in whose point of view. Development research has four base requirements: the identification of current state, the search for alternatives and valuation of alternatives, the determination of goals, and the choice of the research methods to achieve the objectives. To get the conscious and better end results, the results must be measurable. (ibid., 159.)

Current state analysis requires determining relations between the factors influencing the phenomenon or situation of the subject. Effects of the factors to the results should be considered when setting objectives and alternatives. Objects and alternatives can often be unclear, so pre-research is required to be done before setting the aims for the end results. (ibid., 159.)

2.1.5   Case study research

Case study research has many same characteristics as the action research has. The main difference is in the role of the researcher related to the research subject. In the case study, the researcher is an outsider observer and doesn't take part in the activities related to the phenomenon, whereas in the action research the researcher is a

part of the researchable phenomenon and a member of the community. (Kananen 2008, 84-85.)

Other difference is the aim of the research. In action research, the aim is to solve problems and make changes so the researcher act as a change agent in the company. Proposals for actions are tested in practice so an intervention happens in the research. In the case study, the researcher studies in-depth a program, event, activity, process or one or more individuals. Case is bounded by the time and activity, and the researcher collect detailed information using a variety of data collection procedures over a sustained period time. (ibid., 84-85.)

The reliability and validity of the case study research is depending on the authenticity and completeness of the information derived. The case study subject matter should be based on public or theoretical interest to be significant. The case should give a sense of researchers' understanding of the whole case, and the researcher should provide enough sufficient evidence to enable the reader to make his/her own judgements to the research findings. Also, the researcher should point out the alternative perspectives by drawing on the research made by others, and show sensitivity and respect for the research process. (Hirsijärvi, Remes, and Sajavaara 2007, 226-228)

2.2   Research questions

The main research questions were raised up by the Chief Executive Officer (CEO) and founder of Kuljetus Eklöf Oy:

- How does a transport company's organisational structure effects on the company's internal communication?

- How using the existing resources and redefining transport operations management's duties can be used to develop the company's transport operations management practices?

As the company mainly operates on a supply chain that uses Lean production system, the secondary research question was raised up:

- How transport operations management can utilise Lean Management thinking?

The primary aim of the research is to gather data about existing resources and duties so that redefined duties for each middle manager and a clear organisational structure can be made. The secondary aim is to find suitable Lean Management tools that are usable in a company that provides transport and freight services.

2.3   Research design

The chosen research method for this thesis will be a case study research, which was chosen, since the research subject is the company's operations management and the author of the thesis has not worked in the company before, and did not take part of the daily transportation management operations during the thesis work. Instead, the author worked as an outside observer to see the widest possible perspectives for the case. Study's primary focus was put on qualitative research, since the research was focusing on employees' work methods and operations management practices, which are personal related subjects that are not measurable.

According to Brewerton, and Millward (2001, 61), the design of a study pertains to the strategy or schedule used to collect the evidence. Effective case study research design consists of five key components: valid research questions, propositions or purpose of study, unit analysis, logic that links data to propositions, and criteria for interpreting findings. That way, the study process (see Figure 1) is coherent.
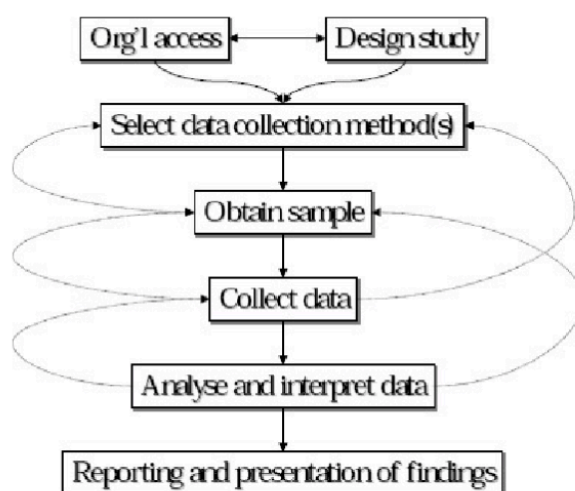
Figure 1. Research study design (Brewerton et al. 2001, 76)

To answer the main research questions, a theoretical background about small and medium sized organisations, and their relationships with organisational management, structures and communication will be researched. The main theory will include the definition of organisation, organisational communication and management, and how a defined organisation structure would change the company's current way of doing business from the viewpoint of transportation management. A target group for the interviews and questionnaire is the company's middle and top management, who can give an overview what the current problems are, and what their expectations for an improvement would be. Content analysis will be used first to evaluate the researched data. According to Kananen (2008, 94), the content analysis transcribes interviews to written format and sum up the content to subcategories to achieve understanding of the phenomenon related to the research questions. Second, the current state analysis is used to analyse the current state of the company.

Finally, a SWOT analysis will be used as a case analysis tool to evaluate company's strengths, weaknesses, opportunities, and threats, so later steps in planning can be informed to achieve the company's set targets and strategy. The SWOT analysis is a basic analytical framework that assesses what a business can and cannot do. The framework is used to analyse the internal (the strengths and weaknesses) and external (the opportunities and threads) characteristics. (Hanson 2013, 2-4.)

To answer the secondary research question, a theoretical background of Lean Management will be researched to examine the suitability of the Lean Management methods to be used in the company's management. The research on the suitability of the Lean Management will be studied from the perspective of a company which is providing transport services, not operating in the field of production.

2.4   Data collection methods

According to Brewerton et. al (2001, 75-76), the selection of the study's design will suggest the use of one or more data collection methods. It's worth taking time to consider all available data collection methods, their suitability to the selected research question and their specific advantages and disadvantages before setting out to collect the data.

According to Kananen (2010, 159), the qualitative research always requires observation as a data collection method. Although, the author of the study will not be active taking part on the daily operations, he will collect data by observing the employees' behaviour and inter-personal communication related to researchable subject.

Interviews are the main data collection method that the author of the study will use. He will collect data through in-depth interviews face-to-face, using both personal interviews and group meeting interviews. Interviews will be conducted and audio-taped, the tapes will be transcribed into word documents and then the content will be analysed.

To support the aims of the research, a questionnaire will be used to research what tasks are done in the company and what resources are needed to perform them, and how they are currently divided between the employees. This data will be used to help redefining transport operations management's tasks and duties.

2.5 Limitations

The research previously carried out to the company focused on the operative level of the company, such as managing and leading the drivers. This case study will focus only on the company's middle and top management's work and communication methods.

The theory part will be limited to focus mainly on management not leadership also due to the work previously carried out to the company. Due to the defined time frame of the research, measuring the suggested development methods in practice will be limited out, since it would require longer time frame to see the effects in practice.

The Lean management methods will be only researched from the applicable points for a company that provides transport services. Methods are researched only on theoretical level to provide enough information and tools available to continue the development process after this research. Selecting this research tendency also ensures that the secondary research question won't exceed the primary research questions.

3   Organisation

An organisation is defined as a social unit of people who work together in a managed structure to meet a shared purpose or to pursue collective goals. A management structure determines how relationships between different work activities and the individual workers or teams are set. The management structure also subdivides and assign roles, responsibilities, and authority to perform different tasks to the subordinates. (Nelson, Quick 2013, 245.)

An organisation structure is constructed and adjusted to achieve the business strategy and goals the organisation has set. Organisation splits the target goals into tasks which is formed as the basis for jobs. The jobs are grouped into departments, and by linking the departments into each other, they form the organisation structure. (ibid., 245)

The organisation structure is represented visually through an organisational chart. It shows the main departments and job titles in organisation, and to whom people are reporting to, and who are responsible of which department. The organisation chart shows the formal structure which is based on four key features: what are the major tasks in the organisation, how subdivisions are divided, how many levels there are in the organisational hierarchy, and what is the chain of command. (Boddy 2012, 176.)

3.1   Jobs

A job defines what tasks are fundamental to a position. The job is clarified with a job description which forms the basis for an agreement between an employer and an employee what to expect from job performance results. It describes what are the employee's main and sub tasks and what qualities are required from the employee. Also, it defines the relations of authority, to whom the employee should report and who the subordinates the employee is responsible of are. (Arthur 2006, 83-84).

Even though most organisations use the job descriptions, some smaller ones do not, since it is just not a priority for them and they feel that everyone knows what they are supposed to be done. Still, regardless of whether the job type is generic or specific, every position in an organisation should have a written job description. Generic

job descriptions are written in more generally and broadly. They are often used in similar positions in different departments. When the position has unique responsibilities that alternates from other similarly entitled jobs, a specific job description is used. It defines the responsibilities and tasks of one position. (ibid., 83-84.)

According to Arthur (2006, 84-85), the job descriptions are multipurpose tools that can be used in virtually every aspect of the employment process. Accordingly, the employers should use time and effort to write job descriptions as comprehensively as possible. The language used should be concise, easily interpreted, straightforward, and uncomplicated. The writing process can be done with the help of Arthur's fifteen guidelines (see Figure 2).

1. Arrange tasks and responsibilities in a logical, sequential state
   • Only fundamental tasks
   • Indicate the frequency of occurrence of each task
   • Sort by the requiring the greatest amount of time

2. Write tasks shortly and separately
   • Clearly
   • Concisely
   • Understandable

3. Try to avoid generalizations or ambiguous words
   • Use present tense and action words
   • Be objective and accurate in describing the job
   • Eliminate unnecessary articles

4. Include specific examples of tasks wherever possible

5. Check
   • No references to specific people
   • Actually tells what the employee are doing
   • All requirements are job-related and are in accordance with equal employment opportunity laws and regulations

Figure 2. Guidelines for a job description writing process (adapted from ibid., 84-85)

Eventually, the needs of an organisation and specific environment will dictate what the exact contents of a job description should include. The job descriptions should be reviewed on an annual or a semi-annual basis to ensure that the job's content or requirements have not changed. The organisation should keep the job descriptions in a database in which it provides understanding of how the jobs contribute to achieving the business targets of the organisation. In addition, it provides a solid legal base if there is a need to make any employment-related decisions relative to that job. (ibid., 86-87.)

3.2   Grouping jobs

An organisation's structure is designed according to the size, industry and aims of the organisation. When the organisation size grows, more management is needed. Manager positions are created to supervise the work of the subordinates. Jobs are grouped according to some plan, and a suitable manager and employees are assigned to the jobs. This process, where departments in an organisation are formed, is called departmentalization. (Griffin 2011, 162-163.)

3.2.1   Functional structures

According to Griffin (2011, 162), the most common approach for departmentalisation is the use of a functional structure (see Figure 3). It is used especially in the smaller organisations. The jobs involving similar actions are grouped together to form a department. For example, production, finance, marketing or human resources (HR) departments.
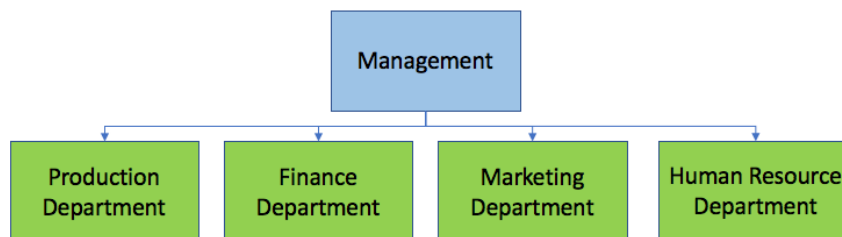
Figure 3. Example of a functional structure

The advantages that the functional structure offers are that each department can be employed with experts in that functional area. The management needs to focus only on one single function, so they only need to be familiar with a relatively narrow set of skills. That makes the coordination of activities easier and the supervision more facilitated. (ibid., 162.)

When organisations grow, the functional structure becomes less and less usable as the decision making tends to become more bureaucratic and slower. Accordingly, the accountability and performance becomes increasingly difficult to monitor. Also, if the employees may lose their focus of the total organisational system, and they may begin to concentrate too narrowly on their own unit. (ibid., 162.)

3.2.2 Divisional structures

Divisional departmentalisation design separates different departments based on the selected types. Typically, the divisional departments are formed based on a product or customer type, or geographical area. The divisional departments can be also based on a process, time and number departmentalisation. In addition, different combined structures may be used. (ibid., 162.)

In a product oriented divisional structure, the departments are separated from each other based on the type of a product or service produced by the organisation. Each individual department is only responsible for producing and selling the assigned product type (see Figure 4). The advantages that the functional structure offers are that all activities associated with the product or product group can be easily integrated and coordinated. When only focusing on one type at a time, the effectiveness and the speed of the decision making is enhanced. In addition, the departmental accountability is improved when the performance of an individual product can be assessed more effortlessly and objectively. (ibid., 162.)

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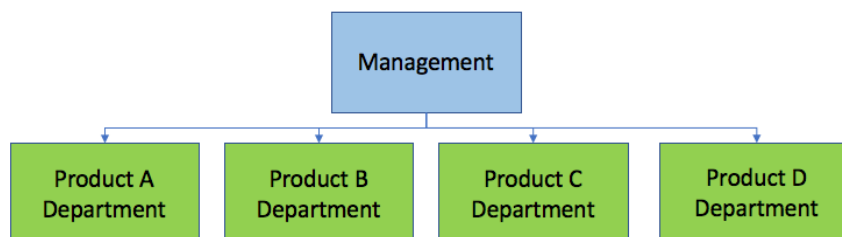
Figure 4. Example of a product oriented divisional structure

The product based departmentalisation causes administrative costs to rise when more management is needed and no single manager handles all the specific areas in every department. In addition, by only focusing on one product at a time may cause that when managers are only concentrating on their own product, the big picture in the company will become unclear and the overall performance results will suffer. (ibid., 162.)

In a customer oriented divisional structure, the departments are separated from each other based on the customer types or groups the organisation is has (see Figure 5). The customer oriented structure is suitable in cases where each customer group

need different approach and strategies to handle them better. That way, the organisation can assign their best resources to handle the needs of their customer groups. Accordingly, the administration costs will arise when more managers are needed to integrate the activities of the various departments. (ibid., 162-163.)
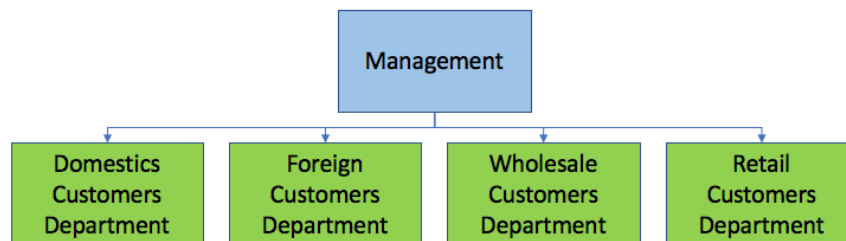
Figure 5. Example of a customer oriented divisional structure

In a geographic oriented divisional structure, the departments are separated from each other based on the organisation's operative areas. The operations are carried out either within a restricted area, for example a city, or over a large area, for example a continent. The organisation should first decide the entire area of operation, and secondly establish geographical branches in every geographical area to manage local affairs of the organisation in that area (see Figure 6). (ibid., 163.)
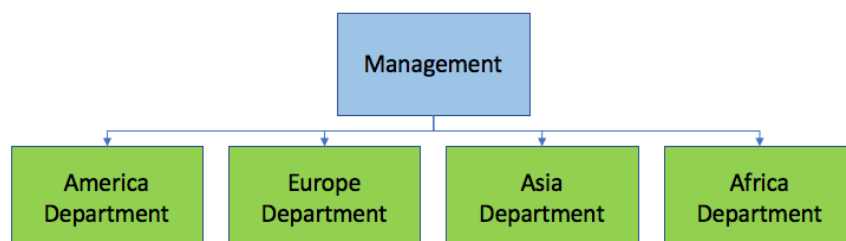
Figure 6. Example of a geographical location oriented divisional structure

Geographical location oriented divisional structure is widely used in transportation companies which operate in different countries. The main advantage for using it is that it enables the organisation to respond effortlessly to unique customers and environmental characteristics in different operative areas. The units located in scattered areas means that more management may be needed to keep track with all the activities. (ibid., 163.)

3.2.3   Matrix structures

Divisional and functional structures are usable when the jobs in the organisations are mainly not project based. When the jobs are based on projects, the typical way to form a structure is to use a matrix structure (see Figure 7).
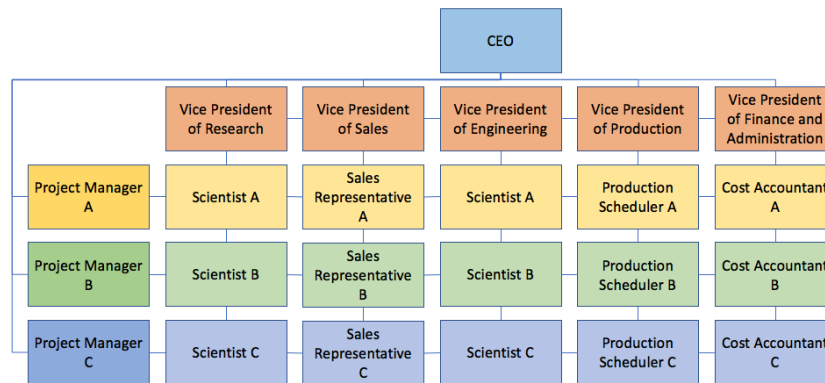
Figure 7. Example of a matrix structure

The matrix structure combines the functional and divisional structure into a matrix, where functions are set to one axis and projects on the other axis. Employees that move between projects are responsible for the divisional manager and the current project manager. The complexity of the management may cause confusion and poor performance due to employees' unclear accountability and responsibility. (Boddy 2012, 181-182.)

3.2.4   Team structures

As the matrix structure shows, the way of grouping jobs when using a project based organisation is to use teams. Teams are formed to perform a specific job and they often shape the organisation's base structure. Teams are usually divided into a vertical or a horizontal team. Vertical teams consist of a manager, a team-leader, and subordinates within a single department. Vertical teams are usually formed by the department's senior manager to support achieving the department's goals. (Boddy 2012, 298.)

Horizontal teams consist of cross-functional employees from roughly the same level and lead often by a project manager. Horizontal teams are used when organisation requires several types of professional knowledge to solve non-routine problems or for example develop a new product. (ibid., 298.)

The third way to form a team is to create a self-managed team. According to Boddy (2012), the self-managing team operates without an internal manager and is responsible for its complete area of work. Although, the team members are responsible for their work, the structure gives them autonomy to perform and set the pace of work, make operative decisions, manage quality, and solve problems. This means that the selection of the team members plays a key role, to form a well-performing, self-managed team. (299.)

4 Communication

We live in a connected world where different information systems and networks have dramatically and permanently changed how people communicate with each other. The change has make people's personal relationships more visible and quantifiable. Technology can help to accelerate communication however it will not make information more useful unless people have first built their personal relationships. That way, when the receiver has some pre-existing relationship with the sender, the sent information will achieve its wanted aim easier. (Boddy 2012, 277.)

According to Boddy (2012, 278), most managers within the business consider themselves to be effective communicators, since surveys have rated communications as being very poor. The information flow is being only top-down not forming a two-way communication, and managers are only hearing what they want to hear. Management of communication is essential though effective communication is dependent on people's knowledge and skills how to communicate with each other. The communication is not only direct but it also happens within contexts (see Figure 8), which effects what methods will be used, and can the mutual understanding to be found. (ibid., 278.)
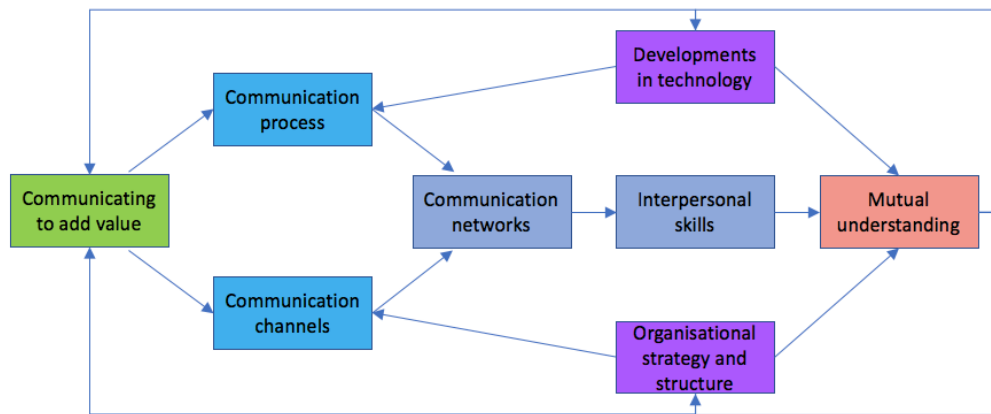
Figure 8. An overview of communicating in organisations (adapted from Boddy 2012, 278)

The communication aims to the mutual understanding via exchange of information through written or spoken words, symbols and actions. Communication management ensures that people can work together efficiently by conveying and interpreting messages. Effective communication can add value through cost, delivery, innovation and quality. Products and services can be improved when all the related parties are communicating with each other to achieve the continuous improvement. Effective communication also makes supply chains delivery perform better when different parties communicate accurate, reliable and timely. And with effective communication, people can get information about the current performance and the ways of removing waste, since the need to reduce cost of goods and services is constantly rising in competitive business markets. (ibid., 279.)

4.1   Communication process

The communication is a subtle and complex process where at least two people, a sender and a receiver, are involved in decision making and activities. Communication process consists of seven elements (see Table 2).

Table 2. Elements of communication (Rai, & Rai. 2008, 4)

Element	Role
Source (Sender)	The person who initiates the action of communication
Audience (Receiver)	The person(s) for whom the communication is intended
Goal (Purpose)	The desired result of the communication
Context (Environment)	The background where the communication takes place
Message (Content)	The delivered information
Medium (Channel)	The method used for delivering the message
Feedback	The sender's observation of the response for delivered message

The sender is the initiator of the process. Conscious or intended communication has a clear purpose and selected target audience. People communicate because they want to influence the receiver in a certain way. Prior sending the message, the sender should decide which information will be selected and how it is encoded in a way that the intended receiver will understand it in a wanted way. Also, a suitable communication channel should be selected, which is depending on urgency of the message, availability and effectiveness of a channel, and the relationship between the two communicators. After sending the message, the sender should make efforts to get a feedback from the receiver. The foregoing is called the transmission phase of the communication process (see Figure 9). (Rai et al. 2009, 4-5.)
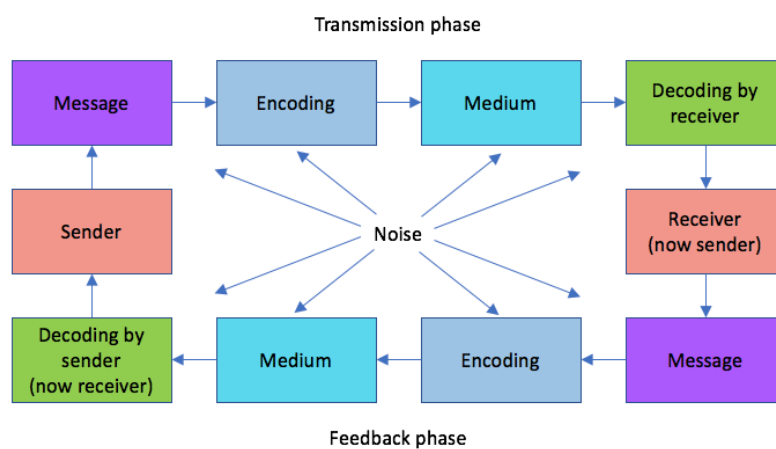
Figure 9. Communication processes (adapted from Boddy 2012, 280)

The communication process is a two-way process. The second part is called the feed-back phase (see Figure 9). The receiver interacts to the arriving message by listening, reading or observing. The message is decoded depending on the receiver's capabilities to interpret and understand the message upon the previous knowledge of the subject matter. The receiver responds to the message by a conscious or an unconscious reaction, and replies to the sender of the message with a feedback if some action may require to be taken. (Rai et al. 2009, 4-5.)

Only by understanding the two-way process, the communication can be effective. Noise that causes confuses, diminishes and interferes with the communication require that the sender makes messages as clear as possible for the receiver. In addition, an encouragement for providing the feedback is required to make the communication successful. Without a response through feedback the process will fail. A knowledge of the failure should drive communicators at putting time and effort into preventing it to happen. (Boddy 2012, 281.)

4.2 Communication channels

The communication process model (see Figure 9) presents the steps for effective communication. A communication channel is the medium of communication between the sender and the receiver. According to Boddy (2012, 282), in 1988 Lengel and Daff presented the hierarchy of information richness (see Figure 10) to compare the capacity of channels to promote the common understanding between the sender and the receiver. The information richness describes the channel's ability to handle several cues at the same time, to support rapid two-way feedback, and to establish one's personal focus for the communication. (2012, 282.)
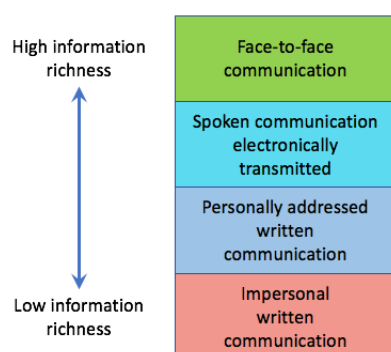
Figure 10. The Lengel-Daft media richness hierarchy (adapted from Boddy 2012, 283)

4.2.1 Face-to-face communication

The richest medium of the information richness hierarchy is the face-to-face communication. When using quick and spontaneous oral communication enriched by nonverbal signals, managers are can gain deep understanding of the nuances of the meaning. The face-to-face communication happens through one-to-one conversation, meetings of several people or audience of a conference. (Boddy 2012, 283.)

According to Tucker, and Singer (2013), one of the best ways to practice face-to-face communication in organisations, is trough Management-by-Walking-Around (MBWA). By practising MBWA managers are visible and highly accessible to their teams. Managers can connect with their subordinates and stay connected with what they are working on. Being visible shows that the management builds trust and shows care amongst their team members. The subordinates can share ideas and issues concerning them, and management can get information that may otherwise be filtered.

When all the information is verbally spoken, there aren't any written record confirming what was agreed. Also, face-to-face communication becomes less and less practical as managers and subordinates become geographically distanced. Like for example in transport companies, where management may be in different country than the drivers are working. Videoconferences can be used as tools to connect people located in different countries with face-to-face. (Boddy 2012, 283.)

4.2.2 Electronically transmitted spoken communication

The second richest medium of the information richness hierarchy is the electronically transmitted spoken communication. The communication happens through a mobile device or a telephone. Communicators are not able to read one's non-verbal expressions, since they can pick up the tone of one's voice, sense of the urgency of the matter or the general manner of understanding. (ibid., 283.)

Teleconferences allows multiple users to communicate themselves at the same time with a cost-effective way. Companies also use voicemail systems and answering ma-

chines as supplement to telephone systems. It allows, in a cost-effective way, to direct the caller to a correct department by using automated systems where the caller interacts with the system by pressing keypads of their phones. (ibid. 283-284.)

4.2.3 Personally addressed written communication

Personally addressed written communication, nowadays communicating through an email or social networks, has advantages over face-to-face communication in that regard it is being addressed personally, and it usually requires a response from the receiver. The sender should phrase the message in a way that is the most suitable for the receiver, and the receiver will have a common understanding about the message the sender is wanting to produce. (ibid., 284.)

Electronical messaging is the most common way to communicate within and between organisations and between individuals. Instant delivery enables that the communication can be completed within minutes, instead of sending out letters that could take days to complete the communication cycle. The proof of record also ensures that using electronical written communication is more effective than sending letters. (ibid., 284.)

The lack of visual and verbal cues makes using the electronical communication more likely to cause that the receiver will misunderstand the message of the sender. That said, it is more important for the sender to carefully revise the message before sending it out so it won't cause any conflicts. (ibid., 284.)

4.2.4 Impersonal written communication

The least richest way to communicate is impersonal written communication. It is the most suitable way for managers to send simple messages to numerous people. Newsletters, routine reports and instructions or procedures are messages that don't encourage the receiver for a response. The use of the channel ensures that a standard form for the communication is used in different parts of an organisation and proof of record of the message is available. (ibid., 284.)

The ease of use of the medium leads easily to information overload, since electronical messages can be sent to multiple persons. If the message is unclear or the

amount of the information is more than the receiver can handle, the receiver will become inadequate to process the available information. (ibid., 284.)

4.3 Organisational communication networks

4.3.1 Vertical communication

The organisational structure forms the chain of command, which defines, how information is delivered internally in the organisation. This information flow is vertical. Managers use the formal downwards communication to coordinate the activities of separate units. They send information about instructions or procedures to their subordinates. Intelligibility of the information is the key point in the downward communication, especially if it requires any comments or responses from the receivers. If the information is unclear, the receiver will interpret it in a way that is most suitable for them, and that may cause unwanted results. Managers can use the help of their colleagues to clarify that the message is clear prior sending it out. (Boddy 2012, 287.)

In the upwards communication, the information flow is opposite, from the lower-level to the upper-level management. The upwards communication mainly consists of two types of communication: reporting and suggesting.

Reporting is used to give a logical presentation of the known facts and information. The information is needed for taking decisions, reviewing and evaluating progress, and planning future course of action. Every organisation should have a system of a routine periodical reporting on the status and the progress of different activities. Reports should be submitted at regular intervals or soon after the completion of a task. (Rai et al. 2008, 170.)

In smaller organisations, managers are usually located close to the operative employees, so the communication upwards is easier. In larger organisations, the stricter hierarchy and the chain of command means that it may be harder to get the information from the operative level to the knowledge of the top management. Organisations can implement suggestive feedback systems in which the employees can suggest and pass on their views and ideas to managers. With the help of the systems,

the organisations can collect valuable information about the general indication of employee attitudes and the issues that will need attention. (Boddy 2012, 287-288.)

4.3.2 Horizontal communication

Unlike in the vertical communication, where people are communicating with people working in different levels than them, the horizontal communication connects people at broadly similar levels in the organisation, and the communication usually crosses departmental or functional boundaries. Also, it can include communication with other organisations, like suppliers, customers or partners, in collaborative projects. (Boddy 2012, 288-289.)

In horizontal communication, the communication is less about routines and structured problems. It is used when people communicate frequently and different parts of the organisation cooperate on projects or systems. When the current state of affairs is known through the information sharing, each separate unit is properly advised to contribute to the project as required. (ibid., 288-289.)

With the help of a computer-based information technology (IT), the routine information is passed between the departments with speed and accuracy. Organisation's processes are much productive and predictable, when modern IT systems are used to pass the relevant information to all the departments that will be involved in meeting it. By using technological aids can also achieve that the quality of services will be improved. (ibid., 288-289.)

4.3.3 Organisational barriers

Communication barriers are caused by one or several things that prevents the sent information from having the desired effect on the recipient or from reaching the intended recipient. Individual communication barriers are related to human's socio-psychological, semantic, linguistic or cross-cultural differences, and how they can handle the information. External or physical communication barriers refer to a machine or a third party, such as mail service related services, which can get messages delayed, distorted or even lost during transmission. Management may have some control of the process, yet some processes cannot be controlled since they are out in the environment. (Rai et al. 2008, 34.)

In the corporate world, organisational structures cause that communication gaps and barriers become more complex. Having multi-level organisations means that information gets held up by the system itself and causes delays and distortion since the formal information must pass through the chain of command from the senior management to the lower levels and vice versa. Individual working styles and habits cause persons to take time to process and pass on the information. In addition, decision avoidance or postponement can also cause information delays. (ibid., 39.)

Multi-level communication chains in the organisations cause information filtering and editing when messages move through the formal communication channel. When each person filters and simplifies the messages for the understanding and needs of the following person who is to receive it, a great possibility of loss of information occurs as messages move from the senior management to the lower levels. The more levels there are in a hierarchy of an organisation, the more possibilities there are for information distortion. Misinterpretation, lack of understanding, and neglect of messages by some of the organisation members can cause information loss or distortion when information moves downwards. Active information flow does not guarantee that the subordinates will receive, understood and accept send messages.

According to Rai et al. (2008), studies have shown that employees at the lowest levels receive only 20 % of the information that they should get. The information filtering and editing happens also in upward communication for the needs of the managers at the top-levels so that they are not overloaded with unnecessary information. In addition, the upper-level managers may deliberately suppress the information received from their subordinates out of self-interest and jealousy so they can use the information to take the credit personally. Also, the lack of human relations skills may prevent the discontent in a department from reaching the top-level management. (39-40.)

According to Terano (2008), the agent-base social simulation (ABSS) has proven the point that using the "Keep It Simple Stupid!" (KISS) principle in communication, the message delivery is more receptive, when the interaction is performed according to the knowledge attribute. Messages are typically delivered via email, circulars, bulletins and even letters in an organisation. Too much dependence on the written communication causes barriers to the communication, since the messages are not always

read carefully. It arises from the fact that the reading and understanding long messages are difficult for many employees in every part of the organisation. It means that even the higher educated persons in management positions do not always give a proper attention to all written communication, and oral communication may be needed to deliver the messages. (Rai et al. 2008, 39-40.)

Internal rivalries in the organisations causes lateral communication barriers when the knowledge and information is deliberately withheld from co-workers at the same level. If the true state of affairs is not available to the upper level of management until it is too late, the resulting information gap may be harmful. Although, the routine reporting systems and information sending is meant to ensure that all the key information is delivered to the concerned persons, some information may still not reach all the required persons. Therefore, sometimes cutting the chain of command is necessary for the sake of speed and efficiency. (ibid., 40.)

The poor communication culture is a result of the lack of commitment to the open communication climate and culture in an organisation. The commitment to free and open movement of information and new learning should be originated from the top-level management and the rewarded effects should be demonstrated. Otherwise, people will not share information openly and there will be irrelevant human habits which will prevent the information flow. (ibid., 40.)

4.3.4 Grapevine

The Grapevine is a term of an informal business communication which happens spontaneously. People pass information and gossip throughout the organisation and across the company's hierarchical levels when they meet during the working day or off the workplace. The information that is passed through the grapevine communication from a person to a person is typically related to who has said what to someone, or what is going to happen in the company. It is usually well ahead of the information available through formal communication systems. The communication is rather qualitative than quantitative. (Boddy 2012, 285-286.)

The main advantages of the grapevine communication for the organisations are that the grapevine channels can carry information more rapidly. Employees become inquisitive and pass the information to their co-workers hastily the moment they get to know any confidential information. Grapevine communication can be used as a management tool to get the rapid reactions and feedback on policies from their subordinates compared to the usage of the formal communication channels. The grapevine can help effected, but not yet formally consulted employees to prepare themselves for upcoming changes in the organisation when they have early information available. In addition, the grapevine communication can also help in developing a workgroup's cohesiveness as it creates unity and serves as an emotional supportive value among the employees who communicate to each other. (ibid., 286.)

In cases where the formal communication does not work it can be also used as a supplement method to communicate. However, slipping out partial confidential information through the grapevine can cause huge disadvantages for the companies when the information is more based on rumours than correct facts. Not using formal communication methods, the grapevine is not a trustworthy information as it does not clearly present the complete state of affairs in the company. This may cause that employees' productivity is harmed if they use more time on talking instead of working. The grapevine can affect negatively on the atmosphere of the workplace as it may carry false negative information about the top-level management people of the organisation and cause hostility against the executives. (Rai et al. 2008, 13.)

4.3.5 Team communication

According to Coutu (2009), researches consistently show that teams underperform, despite all the extra resources they have. The problems with the coordination and motivation typically chip away at the benefits of collaboration. Even if an organisation has a strong and cohesive team, the competition with other teams causes that the team dynamic can also get in the way of real progress. Every team need a deviant person who is willing to question the decisions and to suggest the things that nobody else is willing to say. For a productive and well performing team, the suitable number of persons should be kept under ten persons. Bigger teams need more management and it is the most common reason why the teams are underperforming.

According to Rai et al. (2008, 40), all educated persons are responsible for improving the communication among the members of a working team or any organisation. The effective communication improves the team efficiency. That requires understanding, how people in a team communicate. Different types of tasks require different type of approach to efficient team communication (see Figure 11).
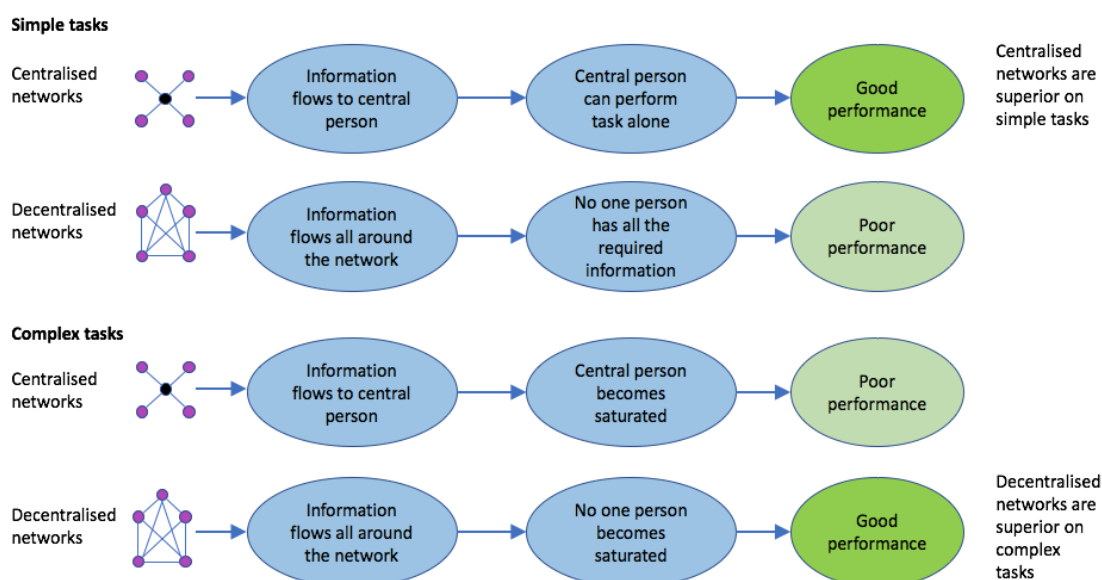
Figure 11. Communication structure and type of task (adapted from Boddy 2012, 286)

The team communication can be divided into two different networks, centralised and decentralised (see Figure 11). In a centralised network, all the information flows through to and from the person at the centre, whereas in a decentralised network, the information is passed between those who are the members of the network. If the task is simple, the centralised network is more suitable, when one person controls and organizes the information flow. However, when the task is more complex and uncertain, the member who manages the information flow in the centralised net-work becomes a bottleneck. The higher information flow needs more rapid actions to be taken, so the decentralised structure is more suitable for complex tasks.

Team briefings are methods used to pass information consistently and rapidly throughout an organisation. According Boddy (2012, 287), a result of a survey made in 915 companies has shown that the team briefings are rated as the most common way to communicate with employees. By using the team briefings, the management can provide standard methods for briefing, formatting and giving messages to their

subordinates, which will continue down the organisation by using same methods. It will enable tools for managers to personally deliver a consistent message to their subordinates quickly, to hear the views of the subordinates, and reduce the possibility of a distortion by the grapevine. (ibid., 287.)

5 Organisational management

Organisational Management is defined as the process of controlling, leading, organising and planning the transformation of resources into valuable outputs to achieve organisation's business objectives (Boddy 2012, 15). Nowadays, the business environment is constantly changing and highly competitive, so the organisational management needs to be able to react into changes in the environment, and to make decisions and resolve issues to be both effective and beneficial. According to DiDonato, and Gill (2015), one of the major challenges an organisation can face is to change people's behaviour and to put the organisation's long-term interests first. Showing vulnerability can be the key to getting people to take the change seriously, even though, it is hard for a top-level executive to publicly admit to struggling with a corporate initiative.

According to Yukl (2013, 22-23), to be a successful as a manager in a modern organisation, a manager needs to have leading skills, although a person can be a manager without leading and vice versa. Although, the assumptions say that "managers are people who do things right and leaders are people who do the right thing.", the empirical research has proven that people cannot be separated precisely into these stereotypes. However, there are still key differences between managing and leading.

Managers are more concerned about how things get done and how to get people to perform better. They are impersonal, risk-averse and usually focused on short-term results. Managers value more efficiency, predictability, order, and stability. Leaders are more concerned what subjects mean to people and how to get people to agree about the most important work to be done. Leaders seek to produce organisational change, and leadership becomes essential when major organisational changes must be implemented. Leadership is needed when an organisation wants to achieve long-

term results, to gain subordinates' commitment to the change, or to influence other people whose co-operation is necessary. (ibid., 22-23.)

The importance of leadership or managing is depending on the size and the environment of the organisation. Managing becomes more important when the organisation becomes more complex and larger, and leadership becomes more important when the external environment becomes more dynamic and uncertain. Although both roles are necessary, if an appropriate balance is not maintained, problems may occur. According to Yukl (2013, 22-23), too much emphasis on the leadership role can create impractical change and disrupt order, while too much emphasis on the managing role can create bureaucracy without a clean purpose and discourage risk-taking. So, the organisational management needs to have a balance between these two matters to be an effective organisation.

5.1   Leadership

Yukl (2013, 23) defines leadership as: "Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives". According to Kruise (2013), leadership is a way of social influence not authority or power. It requires setting a goal and participating others to be effective. Overall, it is all about maximising the employees' effort.

Leadership is usually seen as a thing that cannot be taught, as the natural leaders are born not taught. However, leading can be practiced and taught so people can become better leaders. According to Goleman (2004), the five components of emotional intelligence at work, which can be practiced for being a more effective leader, are self-awareness, self-regulation, motivation, empathy and social skills. Self-awareness means the ability to recognise and understand people's moods, emotions, and drives and their effects on others. Self-regulation means the ability to control and redirect one's disruptive impulses and to think before act. Motivation means a propensity to pursue goals with energy and persistence, and to have a passion to work for reasons that go beyond status or money. Empathy means the ability to understand people's emotions and to treat them according to their emotional reactions. Finally,

social skills mean the abilities to build and lead teams, manage relationships and build networks.

5.2 Management

A theoretical aspect sees management as a rational performance-based endeavour. An organisation gives its employees clear expectations and concrete goals and targets which the management measures to see the performance. According to Lipman (2017), surveys has shown that in the aggregate managers are underperforming when it comes to managing performance, although management should be all about focusing on the results the organisation needs.

Management can be roughly divided into two categories, strategic management and operations management. The strategic management focuses on long-term management as the operations management focuses on short-term management. In addition, the business environment is nowadays more networked, so the management may also require management in networks.

5.2.1 Strategic management

Rao (2010, 21) defines a strategy as" a unified, comprehensive, and integrated plan that relates to the strategic advantages of the firm to the challenges of the environment. It is designed to ensure that the basic objectives of the enterprise are achieved through proper execution by the organisation."

A strategy is set of actions and the chosen direction to do business in the changing operational environment. The decisions made based on the strategy carry out the organisation's fundamental purpose and are essential for its implementation. The developed strategy sums up the management's intent of the organisation's future. On the other hand, Gans, and Ryal (2017, 17-41) emphasises the management's understanding of the persistent heterogeneity in an organisation performance as the central objective for a strategy. Their research of the value capture theory, based on the co-operative game theory, has shown that mathematical methods can be used to indicate how a strategy will create and capture value for an organisation.

The strategic management process (see Figure 12) consist of six parts. The base for the strategy is formed from the organisation's mission, purpose and objectives, which are set to achieve organisation's long-term vision. Environmental analysis defines how the dynamics of the organisation's operational environment and stakeholders' expectations will affect to future activities.

Figure 12. Major Steps in Strategic Management Process (adapted from Rao 2010, 31)

The process revises the organisational direction and looks for other alternative strategic sources before implementing the selected strategy into practice. The feedback from the strategic evaluation ensures that the process is controlled and the strategy is maintained. Comparing the results to the previous situation enables the strategic development.

Strategic management needs certain prerequisites from both management and organisational point of views to be successful. The manager leading the development and implementation of the strategy should have skills to see the process from a wide perspective and to obtain correct information. One should have responsiveness and competence to tolerate the uncertainty. The management style should be participative and communicative. The organisation's ongoing the strategic change process should have an open atmosphere. Confidence in the competent management, well-functioning co-operation and the desire to develop and change the current activities are key elements for a successful change process. In addition, every employee should adopt the organisation's core business idea and values, to promote the organisation's interest. (Rao 2010, 28-31.)

5.2.2 Operations management

The operations function is a core function of every business, responsible for producing goods and providing services. The operations function uses processes to transform inputs, such as raw materials or other resources, into value-added outputs, which are either products or services. Operations management is a delivery-focused process management practice, which ensures that the organisation turns inputs into

outputs in an efficient manner. It involves system design and operative decisions re-
lated to product and service design, capacity planning, process selection, location se-
lection, work management, inventory and supply management, production planning,
quality assurance, scheduling and project management. (Stevenson 2012, 4-32.)

The goal for operations management is to achieve an economic matching of supply
and demand. Effective operations management provides the supply or service capac-
ity for expected demand, and manages the exhibiting variation. It requires under-
standing of supply chain management (SCM) and logistics. To meet the customer de-
mand, an operations manager needs to understand the global trends in SCM and the
series of processes within the organisation to get them flow seamlessly. The coordi-
nation of the logistics processes in practice should happen in a cost-effective way and
the use of resources should be carefully considered, to provide quality service to the
customers, and to cope with the possibility of a short supply. (ibid., 4-26.)

The key issues that organisations face in their business operations are quality prob-
lems, economic conditions, lack of innovation, risk management, and competing in a
global economy. The recent recession and the slow financial recovery in various eco-
nomic sectors has made managers cautious about new investments and rehiring laid
off workers when organisation's financials are not growing as much as before. Inno-
vations usually helps to reduce costs, to increase productivity, to expand markets, or
to improve customer service. The lack of innovation may mean that an organisation
cannot cope with the highly competitive business environment. In consequence of
the globalisation, the lower labour costs in third-world countries has tighten the
competition increasingly and pressured organisations to reduce their labour costs. In
addition, the recent events regarding the crises and unsecure economic situation in
the world force the organisations to deal more and more with risk management.
(ibid., 27-28.)

Environmental concerns and ethical conduct has also raised as issues in the organisa-
tions' supply chains (ibid., 28-30). For example, the Swedish furniture manufacturer
IKEA has created a supplier Code of Conduct practice called the IKEA Way (IWAY) to
cope with these concerns. IWAY comprises the IKEA's minimum requirements relat-
ing to the environmental, social and working conditions. The IKEA's supplier acknowl-

edges and accepts the IWAY requirements by signing the IWAY Compliance Commit-ment document. By accepting the IWAY's requirements, the supplier is expected to follow national and international laws, to not use child labour, to not use woods and glues from non-sustainable forests, to reduce their wastes and emissions, to contrib-ute to recycling, to follow health and safety requirements, to take care for the envi-ronment and to take care of their employees. (IWAY Standard 2008.)

5.2.3 Management in networks

As previously mentioned, the globalisation has forced businesses to cope with the tightening competition and to seek ways to be more cost-effective. One way that has become more and more common business practice is networking. It refers to a situa-tion in which an organisation agrees to work together with others to deliver products or services but remain independent. Outsourcing activities to other companies who can produce them more cost-effectively means that the remaining organisation will concentrate on managing the core units and setting directions for its strategy. (Boddy 2012, 182.)

While outsourcing is an easy practice to reduce costs for a product or a service, the downside is that the outsourcer remains responsible for the customer. The organisa-tion outsourcing is still accountable and responsible to the customer, and cannot evade that by blaming their suppliers, although the suppliers may be doing all the work. So, the management should ensure that the quality of the suppliers' product or service is at the same level as they would expect as their own would be. (ibid., 182.)

6 Lean management

The key to success for a company is to be efficient in every area of its business. In the business world, the term "Lean" is used today as the leading business paradigm. The Japanese way of organisation management is used to promote lean processes and to intensively participate all the workers on the way to success. (Bhasin 2015, 1-2.)

The Toyota Production System (TPS) is the origin which developed the approaches, instruments, and practices of Lean. Lean as an ideology has evolved over the previous forty years, which has led into that nowadays Lean can be defined variously. So, it is important that the consequences of Lean are recognised regarding to its ideology. (ibid., 1-2.)

6.1   Definition of Lean

As previously mentioned, Lean is a management philosophy. To be a Lean organisation, it must understand the value of the customer and focus on continuously increasing its key processes. The definitive goal for a Lean organisation is to have a perfect value creating process that has zero waste and provide perfect value to the customer. The goal can be achieved by using Lean thinking for management practices. (ibid., 1-2.)

The typical management strategies will only focus on the optimising the separate assets, technologies, and vertical departments. Lean management changes the management's focus to optimising the flow of products and services through the entire horizontal value stream. That way, the Lean management sees all the processes as a unity where the organisation will take all the assets, departments, technologies, and customers into account. (ibid., 1-2.)

When the organisation eliminates waste along the entire value streams instead of certain points of the stream, the processes will become more efficient and profitable. Compared with the traditional business systems, the usage of Lean processes can help organisations to make products and services at far less costs and with much fever defects. It means that the processes will need less capital, less human effort, less space, and less time to make products and services. In addition, the management of information will become more accurate and simpler. Accordingly, the Lean supply chain also means that organisations can respond to the changing customer needs with lower costs, higher quality and variety, and more rapid throughput times. It means that organisations can create more value to their customers. (ibid., 1-2.)

6.2   Lean management tools

The precondition for the usage of lean management tools is that the selected tools are suitable for the practices an organisation have. The aim for using lean management tools is to proceed supporting the organisation's value chain within the right circumstances. According to Bhasin (2015, 234-237), many companies say that they are implementing Lean when they are just implementing only one or two of the elements. To fully implement Lean, it needs to be viewed as a set of principles evolving from a conjunctive philosophy. The TPS has established the key principles and rules of Lean (see Figure 13), whom to follow a lean organisation can be achieved.
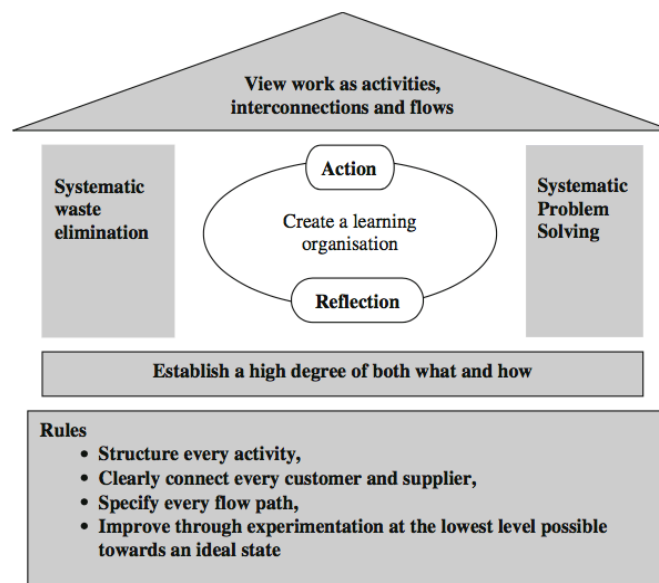
Figure 13. Lean principles with rules (Bhasin 2015, 238)

The organisation implementing Lean should always keep its focus upon the concept of value and continuous improvement. The elimination of the eight wastes should be systematic and always to be considered. The eight wastes are defects, inappropriate processing, inventory, overproduction, transportation, unnecessary motions, underutilised people, and waiting. (Bhasin 2015, 14.)

Most of the Lean management tools are suitable for organisations making products. Accordingly, the Lean management tools suitable for a transport service provider are presented in the next subchapters.

6.2.1 Muda

Muda is defined as waste. From the customer's perspective, anything in the supplier's processes that does not add value is considered as waste. The Lean principles (see Figure 13) presents that the systematic elimination of waste from all the processes is considered as the primary focus of Lean management. (Bhasin 2015, 93.)

According to Goldsby, and Martichenko (2005, 4-5), the excess inventory is the top waste in logistics. Transportation, space and facilities, time, packaging, administration, and knowledge are considered as the six other potential sources of waste in logistics. When organisations are able see the hidden wastes through Total Cost (TC) concept, every cost related to processes are considered and hidden costs are eliminated. The effective logistics planning and execution ensures the healthy return for the organisation and the greatest possible value is created to the customer. Also, it will increase the supply chain's velocity and flow. (4-5.)

6.2.2 Kaizen

According to Bhasin (2015, 93), the continuous improvement, Kaizen, is defined as a strategy where employees work together proactively to achieve regular and incremental improvements in the organisation's processes. Combining the collective talents of the organisation, the waste from organisation's processes are continuously eliminated with using Kaizen strategy.

The key object to understand about continuous improvement is that it is not seen as a single event. The development should not happen in isolated, occasional periods. Instead, the continuous improvement should happen continuously through an organisation with small and incremental upgrades. These small and incremental improvements will over time create highly efficient and effective processes and operations. (Goldsby et al. 2005, 190-193.)

Implementing Kaizen strategy to process development is done with a four-way process development cycle (see Figure 14). First, the current condition of the process is researched and desired condition for the process is set. Then, gap analysis is used to define what are the differences with current and desired conditions. And finally, suitable actions are implemented to improve and to bridge the gap.
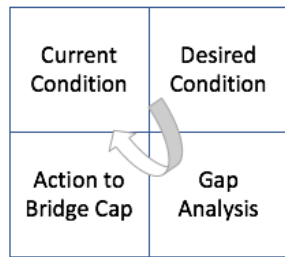
Figure 14. The continuous improvement quadrants (adapted from Goldsby et al. 2005, 191)

The continuous improvement is essential when organisations are considering about improving the organisational performance. According to Goldsby et al. (2005, 190-192), multiple surveys has shown that when serving their customers, the continuous improvement is one of the key deficiencies among logistics service providers. The lack of a formal process for improvement in an organisation will lead that continuous improvement is non-existent.

The organisation must fulfil certain requirements to improve its processes. First requirement is to form a formal model of common language to articulate the value and work plan of any specific initiative of improvement. Second, trained people with the proper tools and time is required for the continuous improvement and problem solving. To sustain a Kaizen program, training is needed to develop people skills along with change management, leadership, project management, and teamwork skills. (ibid., 194-195.)

Project management skills are needed when working through any Kaizen program. To keep a project on task and hold all the stakeholders accountable, it is crucial to obtain abilities to create and manage timelines and Gantt charts. Leadership skills are crucial when any change occurs and it is needed to be controlled in a sustained way. In addition, the involvement of employees should not to be forgotten. The in-depth understanding of teamwork is required to ensure that the initiative spans departmental and functional borders. (ibid., 194-195.)

Therefore, the education in leadership and change management issues should be focused on concerning all the employees. Only when all the stakeholders believe, rec-

ognize, and understand that continuous improvement has an important role in bringing success to the organisation, a significant improvement will happen. (ibid., 194-195.)

6.2.3 PDCA

Basin (2015) defines the PDCA cycle (see Figure 15) as an iterative methodology or a scientific approach for implementing improvements. The cycle consists of four parts: Plan, Do, Check, and Act. Organisation's management should first develop a hypothesis, establish a plan and expected results. The plan is then implemented to practice. The results of the plan are evaluated and verified if expected results are achieved. Finally, the experiment is refined and cycle starts from the beginning. (94.)

Plan → Do

Act ← Check
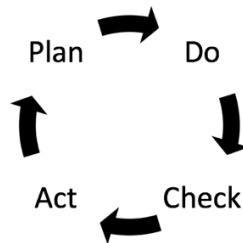
Figure 15. PDCA cycle

According to Hutchins (2008, 96-102), the PDCA concept should be applied to all the activities and processes. Also, the overall management process of organisation needs to be implemented with the PDCA concept, since all work includes the four elements of the PDCA cycle. The PDCA cycle controls the improvement of processes and takes the first steps in the continuous improvement and the PDCA is the essence of achieving Total Quality Control (TQC). Going through the full PDCA cycle improves the previous cycle until the process begins to approach perfection.

6.2.4 Hoshin Kanri

Hutchins (2008) defines Hoshin Kanri as a Japanese policy management strategy, which consist of four components (see Table 3) that include four key business management terms: vision, policy development, policy deployment, policy management. Hoshin Kanri is linked with the Japanese version of Total Quality Management (TQM) which provides tools how the set strategic goals are achieved. (2.)

Table 3. Meaning of Hoshin Kanri (ibid., 2008, 3)

Japanese word	Meaning
Ho	Direction
Shin	Focus
Kan	Alignment
Ri	Reason

According to Hutchins (2008), the Japanese TQM is based on the principles that every employee in an organisation is recognised as being the expert in their own job, and with recognition they are involved and motivated to be contributors driving success to the community to which they belong. The overall objective of the Japanese TQM is to harness these individuals' collective thinking power and job knowledge to achieve an organisation that is capable of being the best in its business, both in fact and in the eyes of its stakeholders. It requires a project-by-project basis of involvement of both voluntary and mandatory team-based activities which are systematically carried out at every level of an organisation. The usage of Hoshin Kanri ensures that the business performance will continually improve on both internal and external functional basis. Certain basic elements are required for implementing Hoshin Kanri (see Table 4). (2.)

Table 4. Outline of the Hoshin Kanri elements (adapted from Hutchins 2008, 2-3)

1.	Organisation's goals, aims and future scope are derived from the vision.
2.	The development of strategy, policy, benchmarking and targets is required.
3.	The target deployment should include all levels through a cascade process and the creation of a policy at each management level.
4.	A feedback loop of results to complete the PDCA cycle is required.
5.	Hoshin Kanri is not value-adding, if it does not include the Japanese TQM which represents the Do part of the PDCA cycle.

A clear understanding of the organisation's vision and goals sets the ground for Hoshin Kanri. The productive power of the organisation will be optimal only when all the members are in perfect alignment, understand their own role in achieving the set goals, and are trained and encouraged to work together to achieve them. (ibid., 4.)

6.2.5 KPI

Key performance indicators (KPI) are tools used to evaluate and benchmark organisation's past performance in a certain time periods. The KPIs make possible for organisations to compare performance between current and previously measured periods and help organisations to set operative targets. The KPIs are used to give a clear review of an organisation's operative performance by providing metrics and factors of the current state. They indicate the operative areas where actions are needed to be taken care of. Consequently, the KPIs are essential tools for supply chain optimisation. (Hutchins 2008, 39-41.)

Organisation's vision and overall business strategic plan defines what are the drivers, the performance indicator areas, that the KPIs will measure. According to Krauth, Moonen, Popova, and Schut (2005, 239-247), the KPIs are assigned to appropriate management level, strategic, tactical or operational. Logistics service providers can measure their performance from the internal and external perspective. The internal measurement focuses on management and employee performance and the external measurement focuses on performance requirements coming from the customers and society. That way, the KPIs provide a process framework for tracking the continuous improvement for a long-term.

6.2.6 Overall Equipment Effectiveness

Overall Equipment Effectiveness (OEE) is defined as a framework for measuring productivity loss for a given manufacturing process. OEE measures three categories of loss: availability, performance and quality. OEE provides a benchmarking tool to track the progress in eliminating waste from processes. (Bhasin 2015, 94.)

According to Gottstein, Mahboob, Stoiber, and Tsakarestos (2012, 19-32), the OEE can be applied to measure effectiveness of a transportation. The OEE is simple, effective, and flexible formula to measure the efficiency during the planned operation time. OEE is not affected by the planned downtime.

Availability measures which percent of transport units are available for service at each day. The availability becomes a problem when a transport unit is undergoing in

the maintenance, inspections or check-up, and not being available for the daily oper-
ation. Availability can be calculated with using equation 1. (ibid., 25.)

$$Availability(\%) = \frac{Total\ time\ available\ for\ operation}{Schedule\ time} \times 100 \tag{1}$$

Performance measures the kilometres travelled per unit time. Standard routes define
the standard number of kilometres should be travelled per unit time. The perfor-
mance express if the unit has travelled less than planned and it can be calculated
with using equation 2. (ibid., 25-26.)

$$Performance(\%) = \frac{Actual\ kilometers}{Standard\ kilometers} \times 100 \tag{2}$$

Quality yield measures the successfulness of the transportation. Quality can be de-
fined in many ways, based on different user's, owner's, or stakeholder's expecta-
tions. The quality yield can be calculated with using equation 3. (ibid., 26-27.)

$$Quality\ yield(\%) = \frac{Number\ of\ transport\ units\ worked}{Total\ transport\ units\ in\ service} \times 100 \tag{3}$$

Finally, the OEE can be calculated with using equation 4 (ibid., 24.)

$$OEE = Availability \times Performance \times Quality\ Yield \tag{4}$$

The flexibility of the OEE measurement ensures that by using different inputs and
outputs of the parameters the OEE can be used in different scenarios to analyse the
effectiveness of the operation. The parts with low scores can be researched to de-
velop action plans to improve the OEE. (ibid., 29.)

6.2.7 Gemba

Gemba, a Japanese word for the real place, is defined as a philosophy that reminds
organisation's management to get out of their offices and going to the place where
the real action occurs. Gemba suggests for the management to spend time on the
operative level. By first-hand observation and by talking with operative employees,
the management will get the understanding of the real world operative level issues.
(Bhasin 2015, 92.)

The Gemba has become popular management method because its powerfully effec-
tive. According to Flinchbaugh (2011), Gemba consist of three elements. First, the

management should have deep curiosity to obtain knowledge about what is really going on. Second, the direct observation of how work is performed helps management to understand the current situation more clearly. Third, the Gemba walks demonstrates the respect from management to the employees when employees are engaged directly. It is important to test and validate the observations so the management can understand if they have a proper handle on the current reality. (ibid., 2011.)

6.2.8   Root cause analysis

Root cause analysis is a causal problem-solving methodology that focuses on resolving fundamental problems instead of applying quick fixes that will only provide temporary solutions to the problems. Finding the root cause of a problem and applying the corrective action ensures that the problem will be truly eliminated. (Bhasin 2015, 94.)

The basic tools to perform root cause analysis are brainstorming, cause-and-effect diagrams, and five-why analysis. They can be conducted with a little training and no formal data collection. To perform a more complex analysis, the usage of quantitative tools and extensive data collection to feed the analysis is required. (Goldsby et al. 2005, 219.)

Brainstorming is a way to get the team members involved in problem recognition and resolution, to initiate conversation and to gather new ideas. It offers free and open display of ideas, yet the session will need a structure to prevent unproductiveness and unwanted confusing results. Brainstorming sessions can easily get stuck on first impressions, so it is important that inputs of all participants' ideas are considered. Also, visual capturing via whiteboard or mind mapping helps documenting and analysing the ideas, and providing a synthesis to the brainstorming. (ibid., 219.)

A fishbone like cause-and-effect diagram provide qualitative tool to issue the root causes of a focal problem. The diagram generates discussion between the team members and provides preliminary analytical tool for narrowing the scope of a problem for deeper analysis. Consequently, the tool diagram is rarely sufficient in and of itself to justify action to eliminate the problem. (ibid., 219-220.)

According to Goldsby et al. (2005, 220), the five-why analysis is a favourite tool of the Lean practitioners. It is a convenient way to solve cause-and-effect relationships. The five-why methodology focuses on a key problem's core by asking the question "Why?" in succession up to five times. By using the method, the root cause should be clear and the essence of the problem can be understood. It also gives a deeper investigation to the problem than the cause-and-effect diagram would give. (220-222.)

6.2.9 Standardised work

According to Goldsby et al. (2005, 233), standards are essential for understanding the current condition of a process, measuring improvement, and supporting continuous improvement. To standardise one's work, a clearly made documentation of the expected inputs, procedures, and outputs is required. The documentation will ensure that employee coming outside of the process is able to step in to the process and make one's work without the need of a long-term training. The clear instructions ensure that the employee will understand the process and is able to operate as a fully functioning team member, and to make appropriate contributions to the process.

Standardised work serves as a fundamental platform for continuous improvement. The process standardisation allows organisations to understand variance in their processes and to make appropriate corrections, which cannot be made without knowing the variance (ibid., 233). According to Bhasin (2015, 95), the standardised work will eliminate waste by constantly applying the best practices.

7 Case study

7.1 Operations environment analysis

Manufacturing cars in Finland demands a complicated intermodal supply chain where car components are transported from Europe to Finland by road, rail and sea. The Mercedes Production System (MPS) operates with the JIT principle, in which case the factory's warehouse levels are kept as low as possible (Clarke 2005, 139-144). This causes demand for an effective supply chain where the transportation management plays a key role to provide the scheduled freight transports. Accordingly, the

transportation companies in the supply chain need to have real time information about the locations of their fleets for the transportation planning, scheduling and tracking.

Eklöf's trucks are equipped with telematics-supported IT systems like Mercedes-Benz FleetBoard and Volvo Dynafleet that allow transport and fleet managers to operate company's trucks in a most economically efficient manner. With the help of the systems, the company monitors legislation regulated driving times and rest periods from the trucks digital tachometer, monitor and report driver's location data, driving habits and fuel consumption. For transportation management and planning, Eklöf uses NextLog's LogiControl 10 Transportation Management System (TMS) which provides tools for scheduling and tracking transports.

After the recent recessions in Europe, the transported volume of freight has slowly increased. Yet, the ongoing migration crisis has caused that many countries have tighten their border control which may cause delays to transportations and increases in transportation costs. Even though the transportation times are usually calculated with a certain time margin, the tighten border control may lead to traffic backups and long waiting times at border crossing, and limit the free flow of freight and could make a significant impact on the transport industry. (Trepins 2016.)

According to the survey made by the Finnish Transport and Logistics association (SKAL Kuljetusbarometri 1/2017 2017), most of the transport companies are constantly balancing on the margins of the profitability and the volumes of the freight transported outside Finland is constantly decreasing. It is mostly a result of the open and highly competitive European transport market where transport prices are dumped by the companies that uses underpaid and exploited truckers. Some high-wage European Union (EU) countries has demanded the EU to tighten the regulations and legislations to prevent the social dumping. Some countries have already ruled the minimum wages that should be paid for the truck drivers who are working mainly in a certain country. This causes that the drivers and the transport companies may be in legal limbo and cause operative and economical harm when the national laws differ from the EU legislation. (Stupp 2017.)

7.2   Current state analysis

To develop the transport operations management practices, the current state of the company and its practices needed to be researched first. The data of the current state was collected with face-to-face and group interviews and observations by recording and writing down the discussed subjects. The gathered data were then transcribed and analysed. The sample size of the interviews was six out of seven Eklöf's clerical workers, which provided enough reliable data about the company's current state.

Transport coordinators take care of the Eklöf's transportation management from Finland. They work with foremen located in Germany and a regional manager located in Hungary. The company has noticed that the work efficiency of the transportation coordinators has been remarkably weak, due to the actual time used for work in relation to the working hours. The fact has been also noted by the transportation coordinators. The poor work efficiency is a result of because the work is unevenly distributed over the working day. Most of the work is required to be done in the evening, some work is done in the morning, and at noon there is practically no work to be done.

The work of the transportation management is not clearly organised into morning and evening shifts, whereupon the transportation coordinators should have clearly defined working times. Also, there are no clear arrangements made for being on duty on weekends. Eklöf's main headquarter has previously located in Mänttä-Vilppula. Since the beginning of 2017, the company moved into Tampere to a new premise. While the company located in Mänttä-Vilppula, the transportation coordinators lived in the immediacy of the workplace, so it was easy for them to work all the time when needed. In other words, the company has previously used the traditional Asian working model, where an employee is constantly at work and cannot separate the working time from the free time, which has caused the poor operative performance.

As a result, the company has identified a need to improve the operative performance and change the clerical workers' working culture and methods, since the company has prepared and calculated that the workload will continue to increase in the future. The company values the commitment of employees to high-quality of work, and

invests them economically to achieve the wanted quality levels. Most of the Eklöf's clerical workers also agreed that the work methods should be changed and standardised. After the company moved from the Mänttä-Vilppula to Tampere, there has been willingness to move to regular working hours from the employee side, since it would affect positively to the well-being of the employees. This requires that the company makes new binding agreements with the employees.

Some of the clerical workers have made an oral contract of employment, in which case their job descriptions and duties are have not been clearly defined, nor has been any other clerical workers' jobs clearly defined. As Arthur described (2006, 83-84), the job descriptions are not used in all the organisations, since it has not been the priority for them and the organisation's employees should know what they are supposed to be doing. The company has been in operation over 25 years so the Arthur's theory is proven to be valid in this case. The work in the company has been done in a certain way so there has not been any proper reason to make job descriptions. The practice has led to unawareness of what tasks each employee should do and it had lowered further the efficiency of the work.

In addition, an employee that had worked in the company for over 10 years and served as a central person of the management had just resigned, hence those duties must be divided among the other employees. Some of the tasks have already been divided, yet they are not written down. Thus, what tasks must be divided remain unclear and require additional work to be done. In consequence, the company should not continue the practice of not using proper job descriptions. The company should use time to redefine jobs and make the proper job descriptions to reduce the unnecessary work done in the company.

When the employees do not know what they are expected to achieve with their work, it affects the well-being of the employees and the atmosphere at the workplace, and may cause work-related stress. In a situation, where the company at the same time expects that the employee should be performing certain tasks on their own initiative, yet the employee does not have a clearly described job, will cause conflicts, where it is unclear who should perform certain tasks or why a certain task is not completed.

The reasons mentioned above have accumulated that too much tasks are piled up for individual employees. As a result, there have been problems in concentrating to remembering and performing a certain task at a time. In cases, where new tasks are given, the focus to performing former tasks may lose although they could be completed before moving to performing the following tasks. The CEO of the company has not been able to monitor the task performance, which has often caused unnecessary delays on performing the tasks. Unnecessary work is done to remind the employees to perform the tasks even though the employees know that the certain tasks belong to them and should be performed in certain time frames.

Changing the attitudes and resistance to change is perceived as one of the most significant issues facing the company. If the tasks in the company have been performed in a certain way for over more than 10 years, why should the practices change? Influencing the attitudes must be done correctly and use concrete examples why the change will achieve the improved operative performance. The done interviews showed for example that the implementation process of the more productive version of the company's TMS software has delayed for months since neither no one has taken responsibility to lead the project and test the software in practice, nor it has not been ordered to be led and tested by someone. The desire in the company is that more initiative should be used to perform the tasks, yet the practice has shown that one does not take on one's own initiative to perform them. It shows sings about poor business management, lack of leadership and management skills, and the lack of responsibility towards the work.

The problems of the internal communication within the company was the first subject that came into the attention of the research author. The theory presented by Boddy (2012, 287-288.), suggested that an organisation should have a clear chain of command, which forms the rules and basis on how information is sent and received inside the organisation. Although, the internal communication and reporting inside the company is constantly subject of being inconsistent. Often in situations which take place at the operative level, the required information does not flow upwards fast enough in the command chain to the knowledge of the top-level management. Accordingly, actions to the problems may be done too late, which can cause unnecessary economical losses.

In the beginning of the research, the company did not used any management's weekly meetings, as they have been previously deemed unnecessary and the currently used work methods were considered effective. The interviews showed that three out of the seven employees believed that the weekly management's meetings should be taken immediately into practice to improve the internal communication. They also believed that more attention should be paid into giving feedback, since they felt that the given feedback has not been developing and it has lacked the positive feedback. When the company has not implemented the weekly meetings as a management practice, the positive performance is not highlighted. As the theory proves, the aim of the weekly meetings is to provide a tool for the management to point out the company's current operative activities and how they will be developed in the future. The weekly meetings also offer a way to provide positive aspects of the operative performance and to give positive feedback.

Although the future of the freight transport business is uncertain and the fact is that many transport companies are struggling to be profitable, currently Eklöf has gained strong customer relationships and the company is deeply integrated into its customers' supply chain. The current situation has its pros and cons. The deep integration ensures better prospects for the future, yet the treat is the possible changes in its customers' supply chain in the long-term. The current state of the European transport labour market has also caused difficulties in recruiting while enough skilled drivers have not been available, and some of the recruited drivers had suddenly resigned for reasons that go beyond work. To cope with the competition in the labour market, the company invests in the training of the employees, and currently provides the most modern fleet and tools available for its employees.

7.3   SWOT-analysis

Based on the current state analysis, a SWOT-analysis for the company can be done. The SWOT-analysis consist of attributes of the organisation which defines the strengths and weaknesses of the company, and attributes of the environment which defines the opportunities and threats coming outside the company. According to Hanson (2013, 2-4), the internal analysis lists the company's resources and identifies the capabilities of the company which forms what are the company's strengths and

weaknesses. The external analysis looks the industry and general environment in which the company operates and competes, which forms what are the company's opportunities and threats. The SWOT-analysis made for Eklöf is collected into a SWOT-chart (see Figure 16), which presents the results of the analysis.

	HELPFUL to achieving the objective	HARMFUL to achieving the objective
INTERNAL ORIGIN (attributes of the organisation)	**Strengths** - Education and training - Modern fleet - Modern tools - Operational quality - Timeliness of the practices in the field of transport	**Weaknesses** - Attitude towards work - Communication - Competence to use proper tools - Indifference - Operational efficiency - Profitability - Recruitment of new employees - Reporting skills - Stability of the labour force - Well-being in the workplace
EXTERNAL ORIGIN (attributes of the environment)	**Opportunities** - Deep integration into customers supply chain - Expansion of operations - Expansion of fleet - Increased amount of freight to be transported - Increased demand from customers - Strong partnerships	**Threats** - Availability of labour - Competitiveness in the labour market - Current amount of customers - Demands and pressures imposed by stakeholders - Long-term customer demand - Seasonal demand fluctuations - Tightening of legislation and regulations (EU, Germany)

Figure 16. SWOT-analysis for Eklöf

The company's strength has been for over 25 years the quality of the freight transports which has been the main reason why the company has succeeded in the highly-competitive European transportation environment. Timeliness of the practices in the field of transport has also been one important factor so that Eklöf has been able to react to changes occurred in the field of transport. Besides the quality, the company has invested in education and training of its employees. When entering the work, the drivers will go through an intensive training period with the more experienced drivers who will guide new employees to do the work according to the company's requirements. In addition, the company invests in different types of training that will help drivers to maintain and develop their professional competence. The company mainly uses the most modern transport fleet, so it can perform the transports as safe as possible. Eklöf has the modern transport management tools available which enable the efficient transportation management.

Although the company provides high-quality transportation services to its customers, the weaknesses of the company have been the operative ineffectiveness and profita-

bility. Both the operative ineffectiveness and the disruption of the flow of information are caused by the unnecessary work made, and the reporting and communication failures. In addition, the company employs individuals whose professional competence is not at the company's required level. Their indifferences and attitudes towards work are causing unnecessary costs to the company. Weaknesses in recruitment have led to the situation where the company had had a high turnover of employees due to the recruitment of the incompetent employees. It has also affected to the well-being at workplace when there had been major changes in company's employees.

The strong customer relationships with existing customers provided by the external environment enables the deep integration into the customers' supply chains. Long-term freight transportation contracts will enable the financial and operational conditions to continue the operations. Growing customer demand and the amount of freight transported will enable the possibilities to expand operations and increase the size of the fleet. In addition, the expansion of operations make possible to provide more work to truck drivers.

The essential threats caused by the external environment are related to the availability of the workforce and the company's competitiveness in the field of transport. The availability of the enough sufficient competent drivers has substantially weakened since nowadays more drivers are retiring faster than companies can replace them (SKAL Kuljetusbarometri 1/2017 2017, 21). A strong dependence on the existing customers may appear as a threat, since too much dependence may cause operational losses, if the customer demand will decrease substantially in the long-term, and the company's fleet is not making any profits. The unpredictability of the customers' demand may cause threats if the demand is fluctuating too much in which case the company's fleet does not match the customers' demand and there is no subcontracting available to cope with the demand fluctuation. In addition, the changing legislations and regulations both at the EU and the national levels are affecting to the activities in the operative environment. The tightening legislation forces companies to

comply with stricter emission regulations and limits the operational conditions for foreign companies to operate in the EU member states.

7.4 Job descriptions

7.4.1 Basis and aims

At the beginning of the research, the company did not had methods in use in which it would write down the clerical workers' job descriptions and areas of responsibility. With the help of the study, the company wanted to research the work done by the clerical workers, and to draw up a written job descriptions for each clerical worker.

The aim of the job description redefining process was to clarify the duties made in the company by writing down the job descriptions for each clerical worker and by clarifying the sharing of responsibilities. Also, the aim of the job description redefining process was to research the so called tacit knowledge about the certain duties done in the company that the top-level management may necessary not have information about.

7.4.2 Redefining job descriptions

Before redefining the job descriptions, a research about all the available resources and work done in the company had to be made. The research began by drawing up a job description questionnaire (JDQ) (see Appendix 1), which was used to collect data about the current positions, duties, responsibilities and work done in the company. The preparation of the JDQ followed the instructions made by the Rochester Institute of Technology (Job Description Questionnaire (JDQ) Instructions N.d.).

The JDQ was divided into seven sections. In section 1, each clerical worker explained their work experience and background in the company and in their current position. In section 2, they explained in their own words what they think that was expected from them, and what was the summary and aim of their current position. In section 3, they listed what were the essential duties in their work, the importance factors, the time intervals duties are made, and the percentage that one duty takes from the working time. In section 4, they listed any additional tasks that they were possible

performing. In section 5, they listed the required knowledge, skills and work experience to perform the listed duties. In section 6, the different types and amount of supervision and feedback requirements in the company were studied. Finally, in section 7, the clerical workers listed the required tools, equipment and knowledge about certain documents needed to perform the duties. The JDQ was set up so that it forced the clerical workers to answer as comprehensively as possible so that the aims set for the JDQ would be fulfilled.

The results of the JDQs formed the base knowledge that made possible to redefine the job descriptions. The job description redefinition process followed the guideline made by Arthur (2006, 84-85) (see Figure 2). The replies from the JDQs were summarized and analyzed first together with the top-level management. The discussions were about what were the duties that was not on the knowledge of the top-level management, what were the duties that more than one employee was doing yet one would be able to do it oneself, and what were the duties that were made unnecessarily. Then the management gathered around for meetings where each one's answers to the JDQ were went through and discussed about the redefined job descriptions. The meetings ensured that each clerical worker could share their own opinions in the job description redefining process.

The researched data was collected from the Eklöf's seven clerical workers. The JDQ's section 1 showed that most of the worker's in the company had worked over 5 years in the company (see Figure 17).

Figure 17. Survey results: Employee has worked in the company

Since the company is a medium size company, the amount of managerial positions effects on the possibilities of the rotation of jobs in the company. This also showed in the answers regarding, how long the clerical workers had worked in their current position (see Figure 18). Due to the recent resignations, some positions needed new

employees which showed in the results as two employees had only worked in the current position under one year.
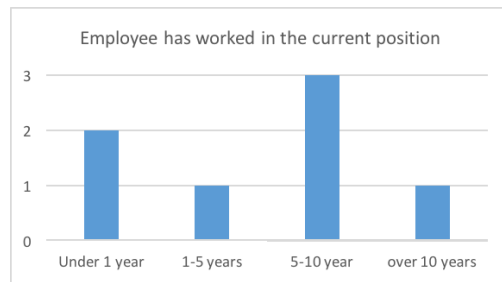
Figure 18. Survey results: Employee has worked in the current position

The JDQ's section 6 showed, what kind of supervision clerical workers receive and give. In the first part, they needed choose what kind of supervision they receive (see Figure 19).
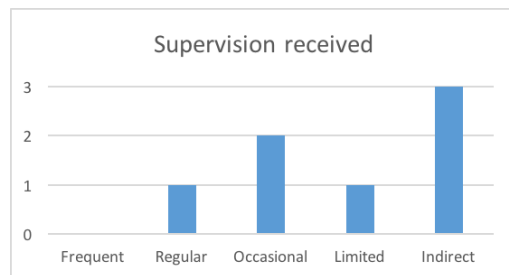
Figure 19. Survey results: Supervision received

The results showed that none of the clerical workers receive frequent supervision. Most of the workers have no direct supervision at all, and they exercise own judgement in work decision. The work done in the company is mainly done independently, either under limited supervision where clerical workers' work independently within established policies and broad objectives, or their work follow established work methods. Only one employee responded that the supervision is regular, and the supervisor is normally available for help-advice. The current state of the supervision can be connived at reporting failures, since the information exchange is not following the frequent two-phased communication process (see Figure 9).

The second part of the section focused on the supervision that the clerical workers give. The JDQ results showed that 6 out of 7 clerical workers work in a position where they are responsible of supervising subordinates (see Figure 20).
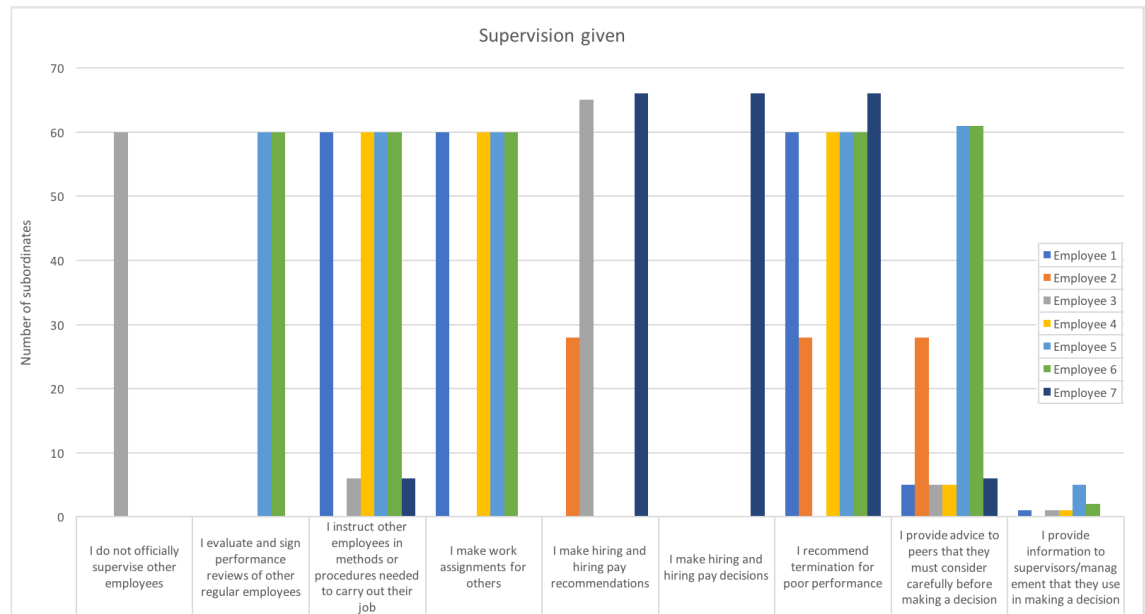
Figure 20. Survey results: Supervision given

The results also showed that the clerical workers who are directly in contact with the drivers, are mainly advising their subordinates, doing performance reviews and suggesting contract terminations for poor performance. Yet, the final HR and financial decisions are concentrated to the top-level management. The foregoing results are the factors that determine manager-subordinate relationships in the company.

The essential duties and responsibilities clarified by the research ensured that the redefined job descriptions could be written. The written job descriptions were created by using the job description classification form made by the Finnish Employer's Federation of Road Transport, which provides a ready-made tool to write employee's job description (Autoliikennealojen toimihenkilöitä koskeva työehtosopimus 26.1.2017–31.3.2021 2017, 52). By using the prior mentioned guidelines, the company's set objectives, essential and additional tasks in priority order, which included their specifications, time and percentage used of the working time, competence classification, and management relationships were written to the form for each clerical worker (see Appendix 2). The redefined job descriptions were then given to the clerical workers and documented into the company's archives. The documentation ensured that the company can later review the job descriptions and use them in future as a salary payment basis and the orientation of new employees.

7.4.3 Effects of the redefined job descriptions

Prior to the job description redefinition process, the company was not able to define a clear organisational structure, since the company did not have defined job descriptions which would present the manager-subordinate relationships, the chain of command, and the assigned duties and responsibilities for each clerical worker. In consequence of the preceding state, the company had an ongoing situation where duties that one employee could perform, where decentralised to multiple employees. Since the chain of command was not obeyed, unnecessary work was done in the company when overlapping duties were assigned.

Based on the results of the research, the company's job descriptions were redefined and clarified, which allowed to form a clear organisational structure, in which the individual employees will have the knowledge about their roles and responsibilities belonging to them. The clarified manager-subordinate relationships ensured that an organisational chart (see Figure 21) for the company could be made. The matrix structure was selected for the organisational structure, since the company wanted to form the organisational structure from the point of view of the operations management's relations.
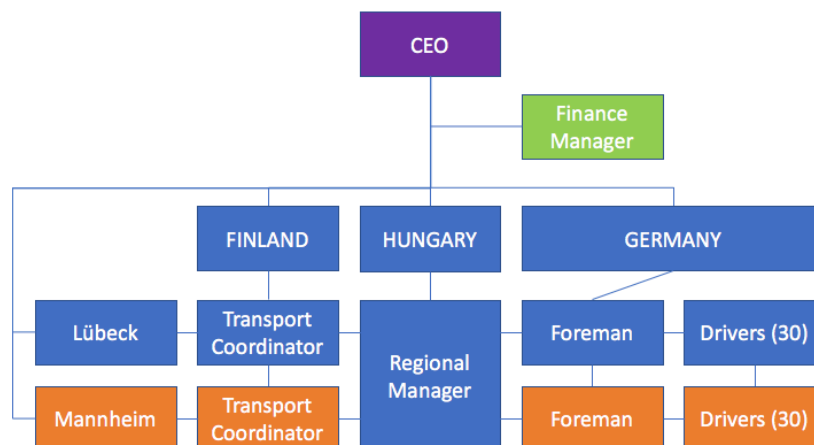
Figure 21. Eklöf's organisational structure

The decision was made since the Eklöf's transport operations are clearly divided into separate activities that are occurring through the two terminals located in Germany, and the transport operations are managed from three different countries. Therefore,

the terminal acts as a project in the matrix. Both terminals' operations include a tri-lingual Regional Manager, a transport coordinator who is responsible for the transports occurring in the terminals' area, an on-site foreman and the needed number of drivers to perform the transports. The company's CEO and the finance manager operate above the operative and operations management levels and are responsible for the entire operations of the Eklöf concern.

7.5 Reporting

7.5.1 Basis and aims

Due to the current state of the company, in which the clerical workers did not have defined job descriptions, it also meant that the company's reporting had issues. The issues were existing since there were no necessarily given guidelines for reporting or the given reporting guidelines were not followed. In addition, the company's reporting issues were caused by the fact that the company operates in a multicultural and multilingual environment in three different countries. Therefore, the management is mainly carried out by written email messages or spoken via mobile phone, so the communication rarely occurs face-to-face which causes information failures. The company's resources are wasted when tasks require more time to complete instead of performing them in a standardized way.

The aim was to create a general reporting guideline for the company that would enabled the standardization of reporting policies. The guideline would set the time frames in which the reporting should be done. Thus, the aim was to reduce the unnecessary work done in the company and improve the operative effectiveness when the employees would be aware of the commonly agreed reporting policies.

7.5.2 General reporting guideline describtion process

Before describing the general reporting guideline, the current reporting processes in the company had to be found out. The process started by creating an Excel sheet for the guideline, where reporting processes were listed (see Appendix 3). The sheet shows from which organisational level reporting should be done and to which level they need to be report in what time intervals.

The first version of guideline was based on the discussions held between the research author and the clerical workers. It listed the current reporting relationships in the company in the beginning of the research. Then the research author and CEO had a meeting where processes were discussed about. The guideline was then improved by adding the missing reporting processes that would meet the company's reporting requirements.

Then discussion about the reporting guideline were held during the clerical workers' quarterly meeting in which some minor redefinitions were made based on the discussions. This ensured that the processes would be in the knowledge of every clerical worker and the finished reporting guideline could be implemented to the company's management practices.

7.5.3   Effects of the general reporting guideline

The drawn up general guideline for reporting sets the standards, how internal communication and management should be performed on the general level in the company. The guideline simplified the reporting chains and created standard policies for reporting. The guideline was drawn so that not only it focuses on company's internal reporting processes. It also defines the policies and principles, how reporting should be done with the company's customers.

The internal communication development focused on making standardized practices that would reduce the unnecessary internal communication. The guideline helped the company to implement measures to improve the internal communication. The management's meeting procedures were put in place immediately after the research started, and the development during the research showed that it was an effective measure that helped improving the managers' internal communication. Other enhancing measures requires longer time interval to see if the measures would improve the internal communication.

Transport arrangements and follow-up should be primary dealt with through the company's TMS. This will reduce unnecessary calling and concentration can be put on the essentials calls, and the initiatives for calling should be primarily come from the management's side. Fault diagnosis message management changed so that they

go through a centralized system via the trilingual area manager. The improved system should reduce the pressures from the transportation coordinators when they do not need to take care of matters that do not concern the transportation management.

By implementing the MBWA management method for the company's foremen, the internal communication and reporting should be improved when the drivers can talk about their problems directly to their supervisors. In addition, by implementing a suggestion box for the operative level, the company can collect anonymous feedback that it may not be able to get with the spoken communication. These measures should improve the formal business communication, when the chain of command is obeyed more accurately.

7.6   Lean management implementation

The theoretical foundation of the research was created from the point of view, how Lean management could be utilised in a company that provide services and not manufacturing products. Implementation of Lean management philosophy into the company's management culture and operations requires change management and modifying the attitudes of the company's employees towards Lean. Since the needed changes in attitudes is considerably large to the current state, without the full commitment to Lean ideology and from the top-level down occurring change management leading, the company cannot fully implement the Lean to its processes.

Changing the company's management and leadership culture to Lean management allows the company to continuously improve its operations with small steps. The greatest impact that Lean management could make is the effectiveness at work. By standardising the company's work methods, the company could reduce the unnecessary work done and eliminate waste from its processes.

The other key area that Lean management philosophy would improve is the KPI follow-up. The company currently has a KPI follow-up that only focuses on driver performance and the follow-up is not done completely. The improvement in metrics and follow-up could help the company to improve the operative effectiveness.

8   Conclusions

8.1   Research results

This case study researched Eklöf's internal communication and management practices. The research aim was to develop and enhance the operations management practices. The first research question was about how does a transport company's organisational structure effects on the company's internal communication. The operations analyses showed that when the company did not have a clear organisational structure, the company's management was disorganised. It showed that there was lack of internal communication and leadership, which caused that performing task were often delayed and the company suffered economical losses when the formal information channels were not used and the information streams were ineffective. Drawing up the organisational chart that showed the manager-subordinate relationships made the company's operations more consistent and improved the usage of formal communication chains. However, the change is a long-term process that has only just begun. Thus, the actual impact of the research results can be seen in a longer time frame.

The second research question was about how using the existing resources and redefining transport operations management's duties can be used to develop the company's transport operations management practices. The existing resources and the clerical workers' duties were mapped by using a JDQ. Based on the JDQ, it was possible to record all the work done in the company and define clear job descriptions for each clerical worker. Thus, the workload could be shared more evenly among the clerical workers. The resource mapping also helped to eliminate the unnecessary work done in the company and create standardised work method that would clarify the management practices. The important measure taken was the drawn up general guideline for the reporting done in the company. It sets out the standardised instructions for reporting and thus it enables more effective operations by following the guideline.

Third research question was about how transport management can utilise Lean management thinking. Implementing the Lean management philosophy to be a part of

the company's management practices and operative activities would give the prerequisites to the continuous improvement and development of the management practices. The implementation would need changes in attitudes towards Lean. The given theory provides tools that company can use to improve their operative effectiveness. By improving the company's KPI follow-up and standardising the company's management practices, the company can remove waste in its processes and limit the unnecessary work done. This case study already made foundations for the company how to standardise work methods and to implement lean management into practice.

8.2   Reliability and validity

Since the research was mainly done with qualitative research methods, the research is based on the authors observation and interviews. The main issue in this kind of research is authenticity and completeness of the information derived, which will depend largely on the amount of trust the employees have towards the researcher. Also, the analysis of the obtained data relies on the ability of the researcher to understand the meaning what is said to him. In the beginning of the research, some of the employees had siege mentality towards the author of the research. Though over the time, the trust build between the employees and the author, so the gotten information were more reliable. The analyses were done in a wide perspective to see the complete perspective of the case.

The JDQ was based on standard so it is repeatable and as a tool for research it gave reliable information even though there were minor threats to its validity. The JDQ sample size was under 10 persons, yet the return percent of the JDQ was 100 %. This meant that the JDQ would only give valid results depending on the completeness and the quality of the returned answers. For some employees the questionnaire was, in their opinion, too hard to answer, so this meant that necessarily not all the wanted information of the done work in the company was gotten. Yet, the overall results of the research were what the company's CEO wanted, so in this case the JDQ gave enough sufficient evidence to make this a valid case.

8.3 Reflections on the research

The subject of the thesis was challenging since it dealt with change management in an international company, which required knowledge about organisational management and business communication. I took the job, since I had been involved in leading and being a part of development and change management in various sports organisations. That and my previous work experience had definitive advantages of doing the thesis, since I could implement the previously proven effective development and change management actions into Eklöf's operations management practices.

During the research, I gained a lot of new information regarding organisational management and communication in a multinational and multicultural operations environment. Although, the tight schedule of the research and writing in English posed their own challenges, the thesis helped to improve my business English writing skills. The research required determination and increased my skills and motivation to take more responsibility in organisational management and to develop business processes towards lean and cost-effectiveness.

9   Further research suggestions

This research focused on the development of transport operations management practices, particularly on the organisational management and the internal communication. During the research, a certain need to continue the development of both the operational and the management practices after this research was arisen.

The prerequisite of the Lean management implementation is the requirement to develop the operational KPIs which would serve better the needs that Eklöf and its supply chain has. The KPIs that the company currently measures is the data available through the fleet management systems. The systems only provide data and reports from the fleet usage and drivers' driving habits, which assist the development of the drivers' professional competence.

Therefore, the KPIs should be developed to measure the whole Eklöf's activities in the supply chain, so the data gathered could be a unity, and benefit the needs of the

entire supply chain. Also, the effects of the new TMS version to the operative effectiveness should be considered when developing the new KPIs. In addition, the KPIs should consider the requirements of the fleet management follow-up. The selected KPIs should be selected so that they can be presented visually to influence the employees to work towards to the set target performance levels.

During the research, discussions were held if the company should develop a new and replace its current salary bonus system. The development of the KPIs would enable a new bonus system development as they would set the base requirements for the operational target levels that are the preconditions for paying the bonuses. Redefining the bonus system would also need calculations about the economic preconditions. The company's liquidity and the statement of earnings defines what kind of bonus system the company can use.

One of the research results was a drawn up general guideline for reporting which sets the standards, how internal communication and management should be handled in the general level. Further development of the guideline to be more detailed would help the company to continuously standardize of its management practices. In addition to the guideline, the company should research and select a suitable project management tool to improve the management of tasks and reporting performance. In the current state, the company has issues in both task performing and schedule management, so the project management tool would help the company to manage its employees scheduled tasks and reduce the management by email. The effective use of the project management tools would also mean that the performance of done task would not be effected of by the delays in the same manner as they do in the current situation.

 In addition, based on the discussion held during the research, a need to develop company's workforce management tools was revealed. In the highly intensive field in which the shift planning is a top priority, the workforce management tools should be effective and easy to use. In the current state, the foremen use Microsoft Excel to draw up the rosters, which requires a large amount of working time resources to perform the rosters by hand. A research of more advanced tools would enable more efficient shift planning, which would help reducing the pressures from the foremen. In addition, an automated system would also help reducing time used in HR practices,

when the calculations of salary hours would come automatically to the HR instead of sending separate data files. This would mean that the foremen's and HR's resources could be allocated to other tasks and the productivity of the work could be improved.

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Appendices

Appendix 1.   Job Description Questionnaire

JOB DESCRIPTION QUESTIONNAIRE

This job description questionnaire (JDQ) will assist us in updating job descriptions. In doing this, we value your input in this process. We need you to be specific as you list individual job tasks and the knowledge, skills, and abilities required for this job. Please fill out the questionnaire as completely as possible. If you have any questions, please send them to the author of the questionnaire. Thank you for your help in doing this.

Section I - BACKGROUND:

Employee name:

Current job position:

How long have you worked for the company?

How long have you worked in your current position?

Section II - POSITION SUMMARY:

Briefly describe what you consider to be the major purpose or objective of the position.

Simply stated, what are your primary responsibilities and what are you attempting to accomplish in this position?

Section III - ESSENTIAL DUTIES:

This is the most important question in this process, where you describe in detail what you do. Each task should be carefully explained.

Describe the essential duties of this position:

Essential duties:

- Responsibilities that involve at least 5 % of your time.
- Begin each duty statement with an action verb that tells **what is done or why and how it is done**.
- List the tasks that you consider **the most important first**, followed by the less important work with the least important work being described last.
- If your work varies from season-to-season or at specific times, group your duties and note the time-period or season.
- Describe your work in detail so that someone unfamiliar with your work can understand what you do. Avoid using department or personal terms.
- Estimate the percent of time that you spend on each task (in a typical 12-month period).
- If appropriate to explain your duties, attach forms or other documentation. Be sure to explain the significance of each document.

Decisions Required:

- For each duty you have listed, state the decision(s) you must make to carry out the duties required. e.g.:
  - Determine how work should be assigned to subordinates
  - Determine information needed by subordinates to accomplish work assignments

Importance:

- Rank each responsibility between 1 and 5; **1 being the most important** and 5 being least important.

Frequency:

- Indicate how often you perform each duty: **D=daily, W=weekly, M=monthly, Q=quarterly, A=annually, S=seasonally**.

Percent (%) of Time:

- Indicate percent of time you spend on each task during the period indicated (for example, if daily, percent of time per day, if monthly, and percent of time per month). The total of these percentages should equal 100%.

#	List of Essential Duties	Decisions Required	Importance 1 - 5	Frequency D/W/M/Q/A/S	% of Time

Section IV - ADDITIONAL DUTIES:

Describe duties not listed before that you regularly perform that you believe are not performed by others.

Describe the duties not listed in the Essential Duties section you perform that may be performed by others if you are not able.

Section V - KNOWLEDGE AND SKILLS:

What knowledge, skills, and abilities are needed to perform this job?

The knowledge and skills that you list must be directly related to the Essential Duties you listed in Section 3.

What special training is needed to perform this job?

List any certifications and/or licenses needed, etc.

What additional knowledge, skills, and abilities are preferred to perform this job?

What are the work experience requirements needed for this job?

Section VI - SUPERVISION & ORGANISATIONAL DECISION-MAKING:

Supervision received:
Check the **ONE** listed below that best describes the kind of supervision this position receives.

__ Frequent, work is closely supervised

__ Regular, supervisor is normally available for help-advice

__ Occasional, minimal guidance, follows established work methods

__ Limited, works within established policies and broad objectives, quite independent

__ Indirect, no direct supervision, exercises own judgement in work decisions

Supervision given:

The chart below asks for your specific supervisory responsibilities. If a duty statement applies to you, please check the box under the "Yes" column and then indicate the number of employees for which you are responsible to the right of the statement.

Yes	Duty	No. Employees
	I do not officially supervise other employees (sign performance reviews).	
	I evaluate and sign performance reviews of other regular employees.	
	I instruct other employees in methods or procedures needed to carry out their job (how to carry-out their assigned duties).	
	I make work assignments for others.	
	I make hiring and hiring pay recommendations.	
	I make hiring and hiring pay decisions.	
	I recommend termination for poor performance.	
	I provide advice to peers that they must consider carefully before making a decision.	
	I provide information to supervisors/management that they use in making a decision.	

Describe how you receive your assignments, how your work is reviewed or evaluated?

Describe how much discretion you have in completing your assignments?

Describe three types of important decisions and judgments you make regularly and independently in the performance of your duties.

For what work do you make the final decision?

Include decisions that may be ultimately made by a higher-level manager but for which your recommendation is usually accepted without revision. Provide examples.

Does this position communicate with internal and or external customers? If so, who?

Section VII - EQUIPMENT:

What types of machines and equipment is this position required to operate?

List the tools, software, or other devices used by this position.

Is this position required to use or wear personal safety equipment? If so, please specify.

Does this position have policy or maintenance manuals, blueprints, laws, ordinances, labour contracts, insurance policies, diagnostic reports, and computer printouts, etc., that are used to complete job tasks? If so, please specify.

Section VIII - ADDITIONAL COMMENTS:

Please review the JDQ thoroughly and include any additional comments you would like to make to clarify any sections. After that, please return the completed JDQ to the author of the questionnaire.

Appendix 2.   A redefined job description

KULJETUS EKLÖF OY   **JOB DESCRIPTION**

Position:	**FOREMAN 1**			
Position's objectives:	Maximizing the usage of the transport fleet. Motivating the drivers and improving the drivers' quality of the work with daily guidance and leadership.			

Essential Duties	**Specification / competence factors:**	**Percent of time %**	**Period**	**Competence classif.**
Create work schedules for employees	According to the laws and rules, and availability of the workers	20	W	3C
Be responsible of the fleet management	Responsible of managing trucks' equipment, maintenances and services.	20	D	3C
Maintain the terminal in Lübeck	Maintain the administrative tasks in the Lübeck terminal	20	D	3B
Supervise the work done	Supervise the observance of the defined operations models. Step in the observed flaws immediately. Report about the progress of the work	20	D	3C
Act as an adviser for the drivers	Mainly for Finnish and Estonian drivers, secondary for Hungarian drivers. Advise, guide and support the drivers to work independendly and self-directed.	20	D	3C
Additional Duties				
Assist with administrative tasks	Assist with administrative tasks related to Eklöf GmbH			
Drive truck when needed	Ability to drive truck due to a driver shortage.			
				Competence level

Post:	Germany	Department / unit:	Lübeck	**3C**
Temporary position:	Foreman 2	Immediate manager:	Regional Manager	
Immediate subordinates:	Eklöf 's drivers			
Name of the clerical worker:		Date:		
Signature of the clerical worker:		Signature of the manager:		

Appendix 3.   General reporting guideline

GENERAL REPORTING GUIDELINE					
CUSTOMER	**DAILY**	**WEEKLY**	**MONTHLY**	**QUARTERLY**	**ANNUALLY**
reports on	Operational subjects - transport orders	Operational subjects - weekly transport order plans	Strategic subjects - strategic decisions	Strategic subjects - strategic decisions	Strategic subjects - strategic decisions
gets reports about	Operational subjects - status of the transport orders - status of the fleet		Operational subjects - KPI follow-up and development	Strategic subjects - KPI follow-up and development	Strategic subjects - KPI follow-up and development
FINLAND	**DAILY**	**WEEKLY**	**MONTHLY**	**QUARTERLY**	**ANNUALLY**

reports on	Operational subjects
	 - transport orders to drivers
	 - status of the transport orders to customer
	 - status of the customer's fleet
		Operational subjects
		 - management's weekly meetings
		   - past, future and developed subjects
		   - process anonymous feedback (from suggestion box)
		 - weekly transport order plans
		Strategic subjects
		 - management's weekly meetings
		   - strategic decisions
			Strategic subjects
			 - hiring and HR
			 - strategic decisions
			Operational subjects
			 - KPI follow-up and development
				Strategic subjects
				 - managements' quarterly meetings (3 month intervals)
				   - strategic ja operational aims & decisions
				 - KPI follow-up and development
				 - job satisfaction survey (6 month intervals, fin&eng)
					Strategic subjects
					 - performance appraisal
					 - KPI follow-up and development

gets reports about	Operational subjects - status of the transport orders IMMEDIATE action needed - truck doesn't move - trailer or freight has problems	Operational subjects - follow-up and evaluation of drivers' KPIs (2 wk intervals) - trucks' service and maintenance schedules	Strategic subjects - strategic decisions - hiring and HR Operational subjects - development of drivers' KPIs	Strategic subjects - strategic decisions - results of the management's quarterly meetings - results of the job satisfaction survey	Strategic subjects - strategic decisions
HUNGARY	**DAILY**	**WEEKLY**	**MONTHLY**	**QUARTERLY**	**ANNUALLY**
reports on	Operational subjects IMMEDIATE action needed - truck does NOT move - trailer or freight has problems NO IMMEDIATE action needed - truck needs service or repair - the current job can be still finished	Operational subjects - follow-up and evaluation of drivers' KPIs (2 wk intervals) - process anonymous feedback (suggestion box)	Strategic subjects - hiring and HR Operational subjects - development of drivers' KPIs	Strategic subjects - job satisfaction survey (6 month intervals, hun)	
gets reports about	Operational subjects - service advices	Operational subjects - anonymous feedback (from suggestion box)	Strategic subjects - hiring and HR	Strategic subjects - results of the management's quarterly meetings - results of the job satisfaction survey	
GERMANY	**DAILY**	**WEEKLY**	**MONTHLY**	**QUARTERLY**	**ANNUALLY**
reports on	Operational subjects - work shifts	Operational subjects - trucks' service and maintenance schedules - process anonymous feedback (suggestion box)	Operational subjects - fleet management (condition & equipments)		
gets reports about	Operational subjects NO IMMEDIATE action needed - truck needs service or repair - the current job can be still finished	Operational subjects - anonymous feedback (suggestion box)	Operational subjects - fleet management (condition & equipments)	Strategic subjects - results of the management's quarterly meetings - results of the job satisfaction survey	
OPERATIVE LEVEL	**DAILY**	**WEEKLY**	**MONTHLY**	**QUARTERLY**	**ANNUALLY**
reports on	Operational subjects - freight & transport statuses - service advices	Operational subjects - follow-up and evaluation of drivers' KPIs (2 wk intervals) - anonymous feedback (suggestion box)	Operational subjects - fleet management (condition & equipments)		
gets reports about	Operational subjects - work shifts - transport orders	Operational subjects - actions done on the grounds of the anonymous feedback	Strategic subjects - hiring and HR - development of drivers' KPIs Operational subjects - fleet management (condition & equipments)	Strategic subjects - results of the job satisfaction survey	Strategic subjects - performance appraisal