Sales process development between sales and customer relationships to increase efficiency

Lean and Kaizen

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Myynnin ja asiakkuuksien välisen myyntiprosessin kehittäminen toiminnan tehostamiseksi

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Abstract

The 2020s have shown companies that it is necessary to be able to react as quickly as possible to changes and intensified competitive situations in the market. Therefore all the company's processes must be as efficient as possible in order to secure competitive advantage and market presence. Pandemics and other global material availability problems generate this situation even more challenging. The better a company's processes are in place and continuously developed, the better it will gain a competitive advantage over other companies in the market.

This study develops the sales process of an company operating in the industrial automation sector in Finland. Lean Management and Kaizen principles with supporting actions are used to help in this development. The goal is to construct the process as efficient as possible by simplifying a few sub-processes in the company's operations and improving operations and day-to-day operations in insignificant steps, according to Kaizen, by cutting and speeding up unnecessary operations and continuously developing and improving the whole process.

The aim of development was defined as streamlining and harmonizing the sales process and its components throughout the company group in order to maximize customer satisfaction, improve added value and streamline operations in the company's internal operations and day-to-day work. The theoretical part of the thesis is initially based on the main principles of Lean Management and Kaizen.

The qualitative research part was carried out within the company by documenting the sales process as new among the entire staff based on the old instructions. Customer satisfaction surveys were also monitored. These provided valuable information what processes needed more development and what added value each employee can bring for developing the sales process and the customer experience. The purpose and aim of this thesis is to highlight the benefits of continuous development and improvement in the daily processes of the company.

Streamlining the sales process saves the company unnecessary costs, creates a positive customer experience and at the same time creates a positive and efficient work atmosphere in which everyone's work is of great importance.

Keywords/tags (subjects)

Sales Process, Lean Management, Kaizen

Miscellaneous (Confidential information)

Appendices are only for internal use in the company under a non-disclosure agreement.

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Tiivistelmä

2020-luku on osoittanut yrityksille, että muutoksiin sekä markkinoilla tapahtuviin kiristyneisiin kilpailutilanteisiin on pystyttävä reagoimaan mahdollismman nopeasti sekä joustavasti. Siksi yrityksien kaikkien prosessien ja osa-prosessien on oltava mahdollisimman tehokkaita, jotta kilpailuetu ja olemassaolo markkinoilla pystytään turvaamaan mahdollisimman hyvin. Pandemiat sekä muut maailmanlaajuiset materiaalien saatavuusongelmat tekevät tästä tilanteesta entistä haastavamman. Mitä paremmin yrityksen prosessit ovat hallussa ja niitä kehitetään jatkuvasti, sitä paremmin saadaan kilpailuetua muihin markkinoilla oleviin yrityksiin nähden.

Tässä tutkimuksessa kehitetään suomalaisen teollisuuden automaatioalalla toimivan yrityksen myyntiprosessia. Apuna käytetään Lean Management- ja Kaizen-periaatteita sekä niihin muokattuja tukitoimintoja. Tavoitteena on saada prosessi mahdollisimman tehokkaaksi yksinkertaistamalla muutamia osaprosesseja yrityksen toiminnassa ja jatkossa parantamalla toimintaa ja päivittäistä tekemistä Kaizenin mukaan pienin askelin ja turhien toimintojen karsimisella ja nopeuttamisella sekä koko prosessin jatkuvalla kehittämisellä ja parantamisella.

Kehityskohteeksi määritettiin yrityksen toimesta myyntiprosessin ja sen osa-alueiden tehostaminen ja yhdenmukaistaminen koko organisaation alla, jotta asiakastyytyväisyys saadaan maksimoitua, lisäarvon tuottaminen parannettua ja toimintaa tehostettua yrityksen sisäisessä toiminnassa ja päivittäisessä työssä. Opinnäytetyön teoriaosuus pohjautuu alkuvaiheessa Lean Managementin ja Kaizenin pääperiaatteisiin.

Kvalitatiivinen tutkimusosuus toteutettiin aluksi yrityksen sisällä dokumentoimalla myyntiprosessi aiempien ohjeistusten perusteella uudeksi koko henkilökunnan kesken. Myös asiakastyytyväisyyskyselyitä hyödynnettiin tarkastelussa. Näistä saatiin arvokasta tietoa siitä, missä prosesseissa on eniten kehitettävää ja mitä lisäarvoa kukin pystyy tuomaan myyntiprosessin kehittämiseen ja asiakaskokemuksen parantamiseen. Tämän opinnäytetyön tarkoitus on tuoda ilmi jatkuvan kehittämisen ja parantamisen hyötyjä sekä metodeja yrityksen jokapäiväisiin prosesseihin.

Myyntiprosessin tehostaminen säästää yritykseltä turhia kustannuksia, parantaa asiakaskokemusta ja luo samalla myönteisen ja tehokkaan työilmapiirin, jossa jokaisen työntekijän pienilläkin parannusehdotuksilla ja työpanoksella on suuri merkitys.

Keywords/tags (subjects)

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Miscellaneous (Confidential information)

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1 Introduction

1.1 Background of the company

Within line with its strategy, the company produces and delivers technology as a service and strives to be an active and customer-oriented partner for its customers. The company serves its customers by selling and distributing its services on a broad front in Finnish industry. The company is seeking growth from its existing and new customers by expanding its range of supplies and services so that it is proactive and recognizes its own customers, recognizes their current and future situation and needs, and at the same time brings out new, sustainable solutions and services from a technology perspective.

The company has its own customer and sales operating model, which is built together with its own organization. The company's customers are divided into identified target groups and customer categories according to the current value of the customers and their future growth potential. With customer care models, the company describes its own way of operating with various customers, as well as the company's goals and operating models, which aim to increase customer capital.

The company has its own goals (Appendix 3) to help creating the change visible. With the help of these goals, the company effectively communicates the common direction internally and externally. Implementing these goals and customer promises requires a concretely new way of implementing structures and a procedure of thinking to take the work forward within the short and long term in many areas, such as the sales process.

In addition, the goal of the customer and sales operating model is to enable the company to orientate and act in accordance with the company's ten-year strategy (Appendix 1) and to have a consistent position throughout the organization's operations and work phases.

The author of the thesis has 26 years of background and experience within various positions in international automation and power transmission companies. Through this, the author seeks to bring his own capital into the development of the company and the continuous improvement of operations.

1.2 Research Strategy of the thesis

The aim of this study is to develop the sales process of a company operating in the field of industrial automation, power transmission and building technology for the future. Lean Management and Kaizen principles at the basic level of strategies are used to assist in development. The aim is to create the process as efficient as possible by simplifying a few sub-processes in the company's operations and, as a follow-up, by improving and streamlining operations and day-to-day operations in the future. With the guidance of Lean, the aim is to generate maximum added value for the customer and at the same time minimize the generation of unnecessary waste within our own operations.

According to Kaizen, operations can be improved in tiny steps and can be improved by pruning and speeding up the unnecessary functions of various prosesses, as well as by continuously developing the entire process and continuously improving its components. The development of the insignificant steps is of great importance in the company's operations in a psychological sense.

The study utilizes the customer-led and sales operating model that has been developed within the company for many years, as well as the new, one-year-old version, which has been updated in cooperation with employees. One purpose of the work is also to simplify the process model in a form that is understandable and easy to illustrate for everyone, and in addition, to evoke a new way of working to achieve the company’s new goals through teamwork.

Changes typically require you to pass outside the comfort zone, but in a certain period of time, the positive results of the change will show an improvement within customer satisfaction and the experience, and at the same time an increase in the meaningfulness of your own work.

A company that adheres to the Lean principle and its employees understand the value of the customer and focus on the continuous development of the added value of their own main processes. The better and more consistently the processes are constantly developed, the more the company's turnover and gross margin, among other items, increase and add value. In the same development process, a positive image of a reliable supplier and a strategic partner that takes their needs into account proactively and proactively is created for customers.

The various organizations of the company have slightly individual targets in industry and infrastructure, so not all of the practices presented in the thesis apply directly to all of their sub-processes, but the intention is to provide new ideas to apply to their own processes.

1.3 Research questions and the aim of this thesis

Research questions are the following:

- How the company can create its sales process more efficient and simpelr as before?
- How does the company intend to develop its processes and continue to develop them in the long term?

The company spends a large number of time on various sales processes. The development and continuous improvement of aspects of sales processes would help the company to operate and advance a pre-defined strategy now and in the future. This thesis describes the basic principles of Lean and the Kaizen strategy and how utilizing and applying these strategies with parallel developing actions would help the company's existing sales process in the day-to-day work of its employees.

Lean and Kaizen strategies are long-term development methods, so utilizing them requires commitment / time from the company and its employees to develop it. At the same time, development must be continuous. Time usually performs its job, and changes in behavior that seem unnecessary in advance become new routines over time, and the area of comfort has grown unnoticed.

In order to develop operations, a separate committee must be established, to which a responsible person is appointed, who coordinates the activities of the committee and is responsible for preventing matters from progressing. The company's internal sales organization also needs to be changed slightly, within the company's boundaries, in order to provide the best starting point for a new trend.

1.4 The structure of this thesis and its methods

The thesis reviews Lean and Kaizen strategies and the supportive actions so that their ultimate purpose becomes a form that is understandable to all employees. Once the above strategies and actions have been reviewed and their best contributions to the company's operations have been shown, the thesis will move to developing a new organizational structure, similar to the Lean and Kaizen, describing how the following subjects would contribute in developing company's processes. These subjects are, for example, a back office, continuous development team and its supervisor and development of flow efficiency in processes.

The structure of the thesis is as follows:

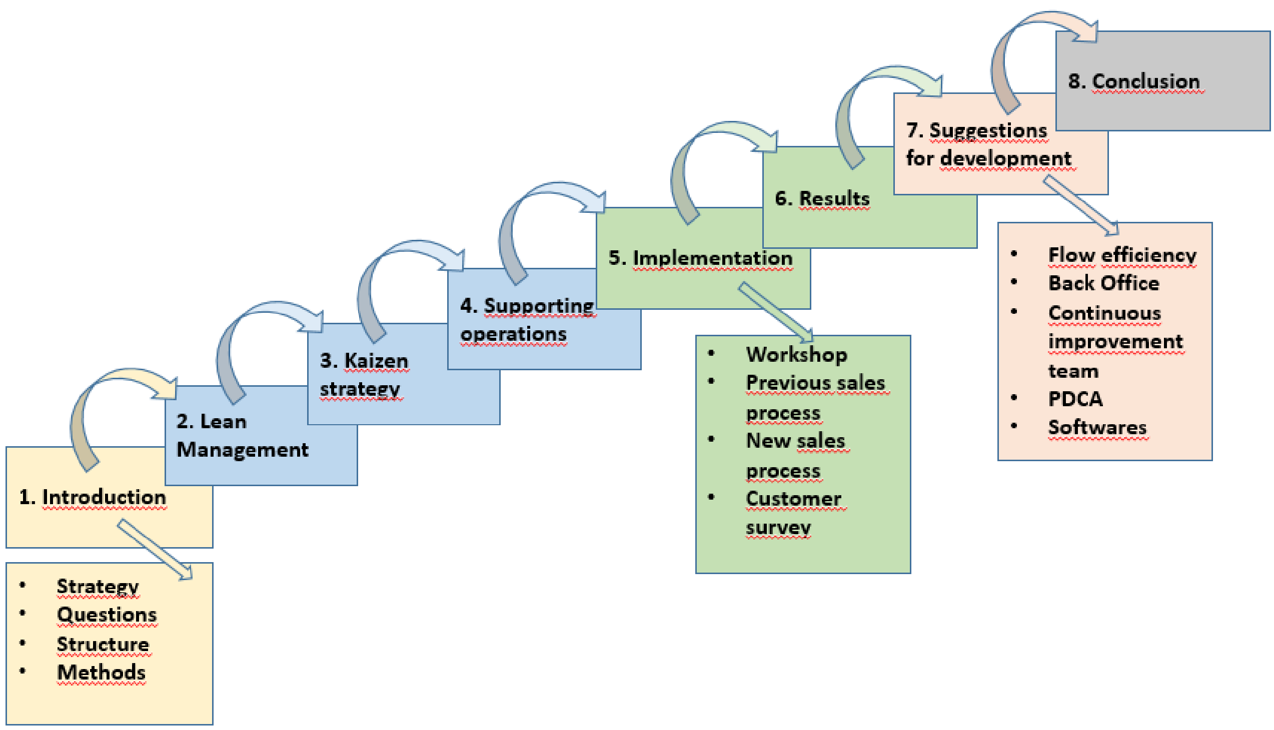

Figure 1. The structure of the thesis (Kohonen 2022)

The work also aims to highlight how these lessons have been utilized in larger companies and what benefits they have gained from the effective use of Lean and Kaizen in their processes. However, the purpose of the work is not to find fixes or remarks in all sub-processes, but at the same time to provide the company ideas for performing the work, streamlining operations, eliminating waste and continuously improving.

Finally, the company is proposed to make quick, easy-to-implement changes to its strategies and day-to-day operations, as well as recommended changes for the longer term, the development of which requires more research and attention. Rapid-term changes will help in this development later. The actual results will emerge in the longer term, as the change will initially be large in the company's work culture.

However, the utilization of strategies has already been shown to work in many other companies operating in a similar field, so this company also has every opportunity to create a more efficient and developing company within its own industry. The goal of everything is to develop customer relationships in an even smoother and more streamlined direction.

The various steps of the pre-sales process description and their modification to match the development strategies described above are reviewed in the end. Descriptive examples of these are provided in the appendices at the end of this thesis.

2 Research methods

2.1 Research methods, qualitative research

The characteristics in qualitative research are, that practical information is converted into new theory and simulteanously is aimed to understand the research subject. Useful knowledge can be collected easily, for example, through interviews, after they are analyzed and pulled together to create new information. Qualitative research is suitable in situations where there are not enough information about the research subject or theory.

A human aspect must also be considered and understood in sales because every person is an individual and lives through their own feelings in the mutual meetings. The role which whole sales organizations play in managing customer relationships are crucial for the development of the company (Hague;Hague ja Morgan 2004, 61-63).

Sales strategy and sales processes can also be measured quantitatively, as a simple value can be given to customer relationship management. And to quantify would mean to constrain the interview within certain parameters for which the sample size is ill suited. In terms of data quality and sample size, a depth interview would yield more representative data, as Kuosa describes (Kuosa 2017, 19).

One other reason for using qualitative over quantitative research, other than the thoughts of development of the sales personnel, was that the B2B qualitative research is about understanding the human aspects of the business. The employees and customers are emotional human beings and that is also what they brought to the table when a meeting with clients and executing parts of the sales process were executed (Hamersveld ja de Bont 2008, 259-260). The feelings they have can't be quantified, and they may reflect on how things are managed in the organization, whether good or bad (Kuosa 2017, 20).

2.2 Why qualitative research method was chosen?

The preference for qualitative material means that empirical material is used as research material, which can be texts, discussions, interviews, observation diaries, images, or spaces in which an activity takes place. Sometimes numerical data, such as various statistics, can also be of interest for qualitative research. In this case, however, the materials are interpreted qualitatively and, for example, what the classification method means in relation to the final result is considered.

Second, the preference for qualitative data means that data are not edited primarily in numerical form, although simply calculating things from the data can sometimes support qualitative analysis. Thus, a qualitative study does not usually deduce results depending on how many of the interviewees talk about something.

Qualitative research focuses on words rather than numbers, depth rather than breadth. Its methods are exploratory; they seek to unearth the opinions, thoughts and feelings of respondents. It is most commonly used to help inform new concepts, theories and products. First developed within the social sciences, qualitative research is now widely used to inform market research, by gaining unique consumer insight from a wealth of data.

The research method chosen in the preliminary studies of the improved sales process was, as mentioned, qualitative, as it is intended to understand the sales strategy and the sales process more broadly from the point of view of the perspectives and views of the company's own employees and their customers.

2.3 How the initial review was conducted?

In this qualitative research, the search methods and yearly processed customer surveys were taken as one basis for the primary data gathering. The data gathered were analyzed together among the sales personnel with the supporting theory, customer reviews and partly author's own work experience in the company.

The surveys were handling the basic questions about the bilateral trade and its development, like like quality of the deliveries, designing, services and products.

The questionnaire was sent to selected customers, categorized into sales categories A + B and C + D, in order to obtain the most comprehensive picture of the initial situation of the sales process and to be influenced by each selected customer. The aim of the survey was to find out the current good practices as well as the problem areas and development opportunities.
The problem areas and development ideas revealed in the survey of the current situation were used to develop the sales process and to clarify the status of possible development targets in the sales processes and the possible bottlenecks and overlaps in them. The aim was to involve as many personnel as possible who have a direct connection to the business between the two companies within the customer survey and the implementation of development ideas.

2.4 Customer loyalty and customer experience

All of the company's operations are aimed at a positive customer experience and achieving customer loyalty for a longer period of time. The quality of operations is intended to show that the company is the best option in terms of quality and service for industrial customers operating in various industries. Below is an example of a study conducted by Temkin Group on customer loyalty and the customer experience. This can be considered as an effective indicator for the continuous improvement and development of a positive customer experience and the company's operations.

Loyalty: 86% of people who feel they have had an efficient customer experience are likely to buy again from companies that provided an appropriate customer experience. Of the people who experience an inappropriate customer experience, only 13% are likely to buy from the same company again.

Customers who feel they have had an exquisite customer experience are 11 times more likely to recommend the company to other clients than customers who feel they have had a weak customer experience. The percentages are 77% and 7%. The customer experience is thus directly attributable to the growth in the number of returning customers and new customers (Luoto 2019).

2.5 Customer survey, a structured interview

Customer satisfaction surveys have been conducted with a structured interview. A structured interview, also known as a form interview, is always conducted with the same interview questions throughout the study for all interviewees. The interviews were chosen as the research method because they were assessed as the best data collection method for compiling the definition of operational development (Hirsjärvi;Remes ja Sajavaara 2013, 205).

Structured interview is best suited for studies that aim to quantify the data and / or process it by means of statistical analysis. Sometimes open-ended interviews are also included in the form interviews, which can be addressed qualitatively or quantitatively by classifying the answers retrospectively. The number of open-ended questions and the extent of the answers determine whether the open-ended answers in the structured material can be applied to the needs of qualitative analysis (Hirsjärvi ja Hurme 2001, 44-45, 64-65).

The customer survey (Appendix 5) was sent to two different target groups, A + B and C + D, and contained several multiple-choice questions and one open-ended question related to free development proposals for the company. The categorization of customers into the above categories was divided according to turnover and potential. In order to get as much information as possible about the development work, each question had to be answered before the answers could be returned.

The questionnaire consisted of a total of five multiple-choice questions and one open-ended question. The answer options for the four multiple-choice questions were numeric values from 1 to 5, of which 1 means a poor grade and 5 means an excellent grade, respectively. The last open question provided an opportunity to provide free feedback on the development of the activity. Finally, the personal data of the respondent were collected in accordance with the rules required by the GDPR, and the response could also be left anonymous. Time was allowed to respond for one month.

The first question in the survey sought feedback on the quality of the products delivered. The quality of the delivered products is a very important element in the survey as it allows the monitoring of the selected product suppliers and the quality of their products to be maintained. The quality of products is also important for the companies that care for and sell them.

The next question asked for feedback on the quality of service provided by the company. The quality of the service is always closely monitored and this was of great importance for the development of the work. With the free feedback, a couple of development targets were identified to improve the service itself.

The third question concerned the quality of project business planning. This allows the project business unit to mirror its own operations compared to the design of entities, their delivery and the life cycles of projects. The fourth question concerned the quality of the deliveries themselves, which make it possible to monitor the reliability and security of supply of transport companies by comparing the results with their promises to deliver the products on time. All of the above form the basis of the company’s values, goals and strategy (Appendixes 1-3).

The latest question related to feedback was related to free feedback regarding the development of operations. Free comments are just the best answers, because then you get to focus better on areas of development that the customer finds important. At the same time, the opportunity for new trading or things that have not been paid attention to before and that the customer also considers important is also given as hidden answers.

2.6 For what the customer survey doesn’t answer?

The survey may not reveal all the negative feedback, as this is entirely the customer's desire to give one or not just remember to give it a go. This is completely understandable, however, as people are individuals whose current mood cannot always be fully known. Taking this into account at the right time for the quality of the feedback, it is entirely a matter of chance and situation. As a result, there may be large differences in responses when sent at different times.

The survey also does not reveal how quickly the methods selected for process development based on the feedback will actually be reflected in practice and the benefits achieved from them. However, it is a matter of bringing together a variety of different and new ways of thinking and acting and putting them into practice. However, the customer survey provides a good starting point for starting the development of processes and for the first development targets using the methods proposed in this work.

3 Lean management

3.1 Lean Management Model

Lean management is from the automotive industry, from Toyota Japan, which has been creating the Lean Management process. Toyota is using this process development and management model, which has become globally a common model in many industries today. The purpose of Lean model is to create a management process with no errors or interruptions. This process proceeds from the customer’s voice to the finished end product and customer satisfaction. Main idea of Lean is to maximize customer value and keep continuous improvement fluent as Posti expresses (Posti 2018, 6).

Lean organization understands the value of the customer and focuses on growing its key processes all the time. The main perception is that the customers pays our salary. The main goal of the organization is to provide complete added value to the customer through an efficient value creation process without any waste. An important strategy inside Lean is the Kaizen, which indicates continuous improvement. These principles ensure that lean work continues subsequent to the lean implementation project by minimizing the waste (Posti 2018, 6).

The change process of Lean projects is divided into the following stages: analysis, development, implementation and monitoring. Company's employees are participating to the evolution from the very beginning and are actively involved in this development process. This allows the company to find sources of change at all levels of the organization and change quickly when needed. Lean has also become vital in the service industry, especially when more efficient and more rapid processes are needed (Posti 2018, 6).

3.2 Business Process Management (BPM)

To understand the Lean model and its purpose, we must first know and become familiar what the company's processes and sub-processes are and what is the goal of Business Process Management? The functions of the companies consist of core functions and support functions. Core processes consist of a series of these functions, which Kiiskinen, Linkoaho, and Santala define as internal functions that create value for customers (Kiiskinen;Santala ja Linkoaho 2002, 197). These actions lead to products or services that create value for the end customer. According to Hannus (Hannus 1995), BPM indicates the modernization of core processes, which creates added value for the customer and offers the company a competitive advantage in the market.

BPM focuses on these core processes and mostly on the customer value creation functions. In this way, BPM seeks new innovative solutions and questions existing ways of performing processes. (Kiiskinen;Santala ja Linkoaho 2002, 30-38). This is also the foundation of lean thinking where the company invests. Development processes are typically firmly attached to the company's vision, on which strategic decisions are based and what influences the chosen BPM. The goal of companies is to gain a competitive advantage over the other players and competitors in the industrial market (Posti 2018, 7).

The company is proposed to choose Lean Management for BPM because it is believed to accelerate its sales process, increase customer satisfaction and improve the company's core business. If a company wants to achieve this goal, management should change the focus from optimizing separate technologies, resources, and vertical departments to optimizing product and service flows through total value flows that flow horizontally between technology, assets, and departments to customers and their interests.

By removing waste from total value streams instead of individual points creates processes that require less human effort and space. Manufacturing products and services requires less capital and time, as well as less cost and less failure compared to traditional business systems. In this way, companies can respond to the changing needs and wishes of customers in a versatile way, with high quality, low cost and rapid delivery times. Information management will also become simpler and more accurate than in the history, as Lean Enterprise informs (Lean Enterprise Institute 2022).

3.3 History of Lean

Lean is originally from Japan, Toyota's automobile factories, which began to focus on streamlining the production flow of cars (TPS = Toyota Production System). With this enhancement, Toyota has become one of the most successful companies in the world and its products are known around the world. Western researchers gained impetus from Toyota's developed stream efficiency and production stream efficiency to develop the Lean concept.

Subsequent to the wars, there was a shortage of resources, materials, and resources in Japan. Because of this, Toyota had to pay attention to flow efficiency and at the same time should think regarding efficiency in a new way. Toyota wanted to execute the right items, produce the product the customer wanted. They had to gain knowledge regarding:

1. What (product, service) the customer wants to receive?
2. When the customer wants the product to be delivered?
3. What quantities are desired?

From these, a suction flow system was developed in which the car was not manufactured until the customer had ordered it. The order information flowed countercurrently in the production process, so that each sub-process received information regarding what the customer wants, when he wants it and how much he wants it. At the same time, the second stage in manufacturing became the customer of the first stage, etc.

Once the information had passed through the entire chain, the first part of the production was ordered for itself and production could begin. This way, each stage of production knew when the parts needed to have them in order for their own part to be taken care of on schedule. In the major picture, the goal was to proceed as quickly as possible from sourcing parts to manufacturing the product, delivering it, and receiving payment from the customer again. The raising of excess capital was wary of.

For intermediate products, no interim storage was desired, and efforts were made to eliminate anything from the flow process that could possibly slow it down. All unnecessary functions (inefficiency and waste) were sought-in to eliminate. 7 various forms of unnecessary waste were identified:

1. Production / overproduction
2. Waiting
3. Transportation of materials and products
4. Work / overtime
5. Storage
6. Movements and movements of workers
7. Errors that cause the job to be redone

This way of thinking and acting required all staff to take responsibility for the whole and the quality and that everyone performed right from the start. Problems during the production phases were considered as a positive object. They had to be identified, detected and permanently removed so that the error did not progress to the customer.

According to Modig and Ahlström (2013, 78) the word “Lean” was introduced in 1988 when an article by John Krafcik “The Triumph of the Lean Production System” was published in Sloan Management Review. In this article, the fragile production system used by Toyota with its minute warehouses and buffers, compared to heavy production systems, was initially provided the name fragile, but due to its negative tone, the word was changed to Lean.

3.4 Indication of Lean?

Lean has the ability to simplify value. Simplification seeks to understand what is proceeding on in the process rather than trying to optimize something that is too complex to understand. Lean is a form of efficiency, a flow efficiency strategy based on just-in-time and visual control. The most important matter in flow efficiency is the time it takes to identify a need to satisfy it.

3.4.1 The 4 principles of Lean and focusing on the implementation of Lean

Originally, Lean has had 4 main principles in the beginning. These principles are:

1. Teamwork in all levels
2. Communication / continuous communication
3. Efficient use of company's resources and the elimination of waste
4. Continuous improvement

Womack and Jones have continued and developed the development of concepts, and as a result, in their publication (1996), they describe and advise on how a company should operate if it wants to be Lean. In this work, further developed, new principles focusing on implementation were born:

1. Determine the value from the perspective of the final customer.
2. Identify all phases of the flow and remove those that do not produce value (waste)
3. Arrange the value-generating steps so that the product flows smoothly toward the customer.
4. When the flow is complete, allow customers to drag the value upstream.
5. Once these four steps have been completed, the process begins from the beginning and continues until a situation is reached in which complete value is produced without waste.

Modig and Ahlström (2013, 80) represent that with adhering to these principles, organizations can begin to streamline their operations and improve the flow efficiency of their processes and further out of resource efficiency.

3.4.2 Resource efficiency

Some companies are resource efficient, emphasizing the efficient use of all value-creating resources. Correspondingly, flow-efficient companies focus on the unit being processed. In both cases, the unit is the customer.

Resource efficiency is a form of efficiency and indicates the efficient use of all resources. One of the basic principles in the industry is that the execution of a task is broken down into minute parts and the execution of the parts is left to a variety of people or organizations.

Resources are also utilized and made more efficient by bundling small tasks together so that individuals or organizations repeatedly perform similar tasks. In this way, the main focus is on the resources needed to produce the product and service, such as staff, premises, machinery, tools, etc. Resource efficiency measures how much a resource is utilized in relation to a enabled period of time.

At a higher level, the effectiveness of various combinations of resources, such as a department or an entire organization, is measured. Resource efficiency thus shows how well an organization uses all its resources.

3.4.3 Flow efficiency

Flow efficiency is a form of efficiency. In this particular case, attention is paid to the efficient use of resources from traditional concentration.

In flow efficiency, the main focus is on the unit being processed in the organization, for example, in industry, the unit is products that are processed from various materials. In the service sectors, the unit is the customer, whose needs are met by various functions. This efficiency is called flow efficiency because the focus is on the unit (customer, product, or service) that flows through the organization. This is called the flow unit.

Correspondingly, the flow efficiency can be determined by how many flow units are processed in a provided period of time. When looking at flow efficiency, its value is determined from the perspective of the flow unit itself, i.e. the time at which the flow unit receives a value. In organizations, flow efficiency shows how well an organization refines its flow units and the value they receive (Modig ja Ahlström 2013, 17).

3.4.4 Understanding flow efficiency and its concepts

It is important to know, know and understand all the processes in a company and how they work because flow efficiency is created in them. Every organization has processes. They can be development processes, procurement processes, production processes, sales processes, and so on.

There are value-producing functions and non-value-producing functions. In flow efficiency, all non-value-producing process parts are removed and value-producing process parts are combined. It is important to define the processes from the perspective of the flow unit, e.g., from the perspective of the customer. In effective flow efficiency, the time that the flow unit (customer) receives a value is a certain length compared to a certain period of time, i.e. whether the company adapts to the customer's situation and thus ensures suitable flow efficiency.

For example, does the vendor (resource) handle multiple flow units (customer, product, or service) at the same time, or is the vendor only one resource contributing to the added value of the flow unit (customer, product, or service)? The more flow units (customers, products or services) a seller has when using resource efficiency, the less attention the customer (flow unit) receives and at the same time the added value they receive. Does the customer then feel that they are receiving enough added value and experience an appropriate customer experience in the sales process?

Figure 2 shows the difference between resource efficiency and flow efficiency (Modig ja Ahlström 2013, 21). This can be compared, for example, to the relationship between sales and the customer.

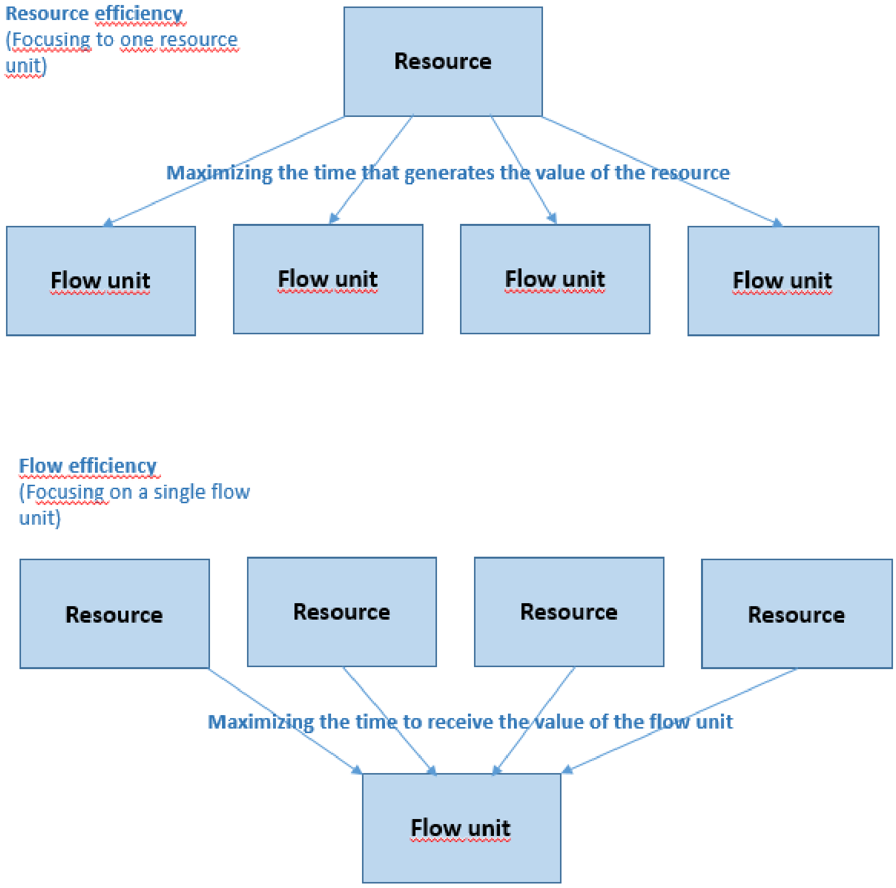

Figure 2. Differences in resource efficiency and flow efficiency in general (Kohonen 2022)

To ensure effective flow efficiency, it is important to keep the flow running, i.e., some resource is available at all times that can process the flow units.

In addition, it is beneficial to note and remember that the boundaries of the organization and system dictate the turnaround time. It is appropriate to be aware of these limits when measuring lead time. Lead time covers the time from identifying a need to satisfying a need. For example, in the sales process, from the need expressed by the customer until the customer is satisfied and has received the desired service and / or product at the desired time.

The above-mentioned form of flow efficiency requires the company to change the organizational structure so that there are sufficient resources to ensure a sufficient flow rate. This would indicate, for example, setting up a new sales support organization as a link between sales and purchases. Establishing a support organization does not necessarily suggest hiring new employees, but redesigning the organization to fit the flow of work and needs.

This sales support organization is called the Back Office, BO. I am referring here to the amount and time of the resource used by the sales I mentioned earlier to serve each customer. Sales, the sales support organization BO, purchasing, manufacturing, and logistics are all resources in processing the turnaround time for a customer, product, or service (flow unit). BO is a new concept for the company, so it will be described and opened in its own part in this thesis.

The dimensions of flow efficiency are value and need. A value is formed when something occurs to the flow unit and it travels. The need can be divided into immediate and indirect needs. The immediate need is for a concrete operation and result, for example the manufacturing of a gearmotor or a pneumatics product. The customer who pays more for the production receives the gearmotor, or other component, as an express delivery, in which case the immediate need and the indirect need (customer experience) is satisfied.

Once the throughput time and value-producing functions are defined, the flow efficiency is defined as: The flow efficiency is the sum of the value-producing functions relative to the throughput time. At the same time, the background efficiency denotes the frequency of value transfer. The value received by the customer can be increased by increasing (or alternatively decreasing) the value transfer rate.

Flow efficiency is not regarding accelerating value-producing activities, but regarding maximizing the frequency of value transfer and trimming non-value-producing activities. That is, how we maximize the value we receive from the customer by adjusting the right flow rate for the end customer and the company’s employees.

Next, a presentation of a new form of flow efficiency vs. an old resource efficiency in a company can be seen in Appendix 4 (Figure 2). In the example, I use Sales as the unit that performs resource efficiency. The performing unit can, of course, also be another department from the company's organization.

If Sales is only one part of utilizing flow efficiency in this example, there will be time to focus more on customers, listening to their wishes, and proactive sales work. In this way, the customer feels being appreciated and feels receiving more added value when working with the company. This same phenomenon also applies to other units involved in the same flow, not just sales.

Every part of the organization involved in flow efficiency has an equally important role to play as part of the sales process, which aims to satisfy the best customer experience. Lean’s mission is to develop and ensure smooth flow efficiency in each unit.

Organizations typically consist of many processes. However, the misconception is that processes are typically limited to formal work routines. Work routines can typically be documented in individual systems and usually describe how a task is performed and in what order. However, the work of the organization is typically performed in processes that also generate flow efficiency.

There are also processes that are not documented. Companies typically have their own main processes that cover the route from the customer’s order to the delivery of the product or service. There can be more or fewer processes, only the flow processes in them matter. The flow limits of the organization also affect the flow process.

3.4.5 The paradox of efficiency

The efficiency paradox is a waste of resources, not only at the level of the individual but also at the level of the company (Modig ja Ahlström 2016, 95). Many companies emphasize focusing on resource efficiency rather than flow efficiency, and frequently maximizing resources becomes the main goal itself. This has negative effects on the company from both the company's and the customer's point of view.

The paradox is that focusing on maximizing the use of resources also increases the workload. Sources of inefficiency that cause negative effects include long lead times, multiple flow units, and the need to restart work (Modig ja Ahlström 2016, 46-48). The long lead time indicates that the customer's primary need is not met, creating new needs, secondary needs that did not exist before. It causes a chain of causes and effects, followed by a number of new problems (Modig ja Ahlström 2016, 50).

There is a general need for companies that focus on resource efficiency to handle several items at the same time, which increases the requirements for the individual and creates secondary needs as a result. Focusing on resource efficiency increases unfinished flow units, that is, multiple flow units at the same time, which causes problems in managing structures (Modig ja Ahlström 2016, 53-54).

Delays occur when an individual has to open the same email or start the same job again or more than once. It takes time and effort to classify the work and the measures taken themselves are the reason for returning to the matter several times. Dealing with several items at the same time poses mental challenges. If the task could be performed at the same time, secondary needs would be avoided (Modig ja Ahlström 2016, 57-58).

Long lead times, multiple tasks to be restarted, and multiple flow units are structures that cause secondary needs. When secondary needs arise, it is frequently followed by a secondary need. A spiral of secondary needs is formed, as a result of which there is numerous extra work in the process that is not creating value for the customer (Modig ja Ahlström 2016, 59).

Condensed into an efficiency paradox, focusing too much on resource efficiency highlights the factors of inefficiency that cause problems. Problems allow rise to secondary needs, frequently followed by additional secondary needs that cause concern to the company. The problem with secondary needs is that they cause extra work that not performs value for the customer. By focusing on flow efficiency, secondary needs that cause additional work are eliminated (Modig ja Ahlström 2016, 65).

3.5 Lean Management today

Lean management is becoming more popular and used in large companies today. These companies have also acted as role models for small and medium-sized enterprises, which have recognized the benefits of customer satisfaction, improved quality, costs and delivery times.

Lean Management is not a cost-saving program, but a procedure of thinking that runs through every process and sub-process of a company, with the goal of improving the added value generated for the customer, eliminating waste and continuously improving. This is both the way the company operates and the way it takes care of the customer. A change in Lean thinking and operating requires much from the top of the company if it wants to be Lean.

The new way of operating (i.e. in this case lean transformation) requires more energy from the organization than the old so-called stable situation and if this energy is not available, the old way of executing items will be reversed. There are minimum requirements for embarking on a change journey. All three of these questions must be answered in the affirmative:

1. Does the vision of senior management include long-term development? Or is the focus only on short-term profitability?
2. Is top management committed to staff development in the long term? Or are people only seen as a cost-effective workforce?
3. Are there continuity in the current thinking of top management? When the leadership changes, what occurs to the timing?

If all three are not answered positively, the only option, according to Liker (2003), is to use short-term tools, then cultural change is not possible.

3.6 How to think Lean and how to implement Lean to the company

Lean thinking and the transition to a procedure of operating requires a new way of thinking, a new organizational culture and a new way of managing from the company, as it affects the daily routines of every employee. Lean is not a cost-saving program, but a transparent process in which each employee’s knowledge of their own job image is viewed in a method that increases the knowledge and efficiency to perform so and how to develop it to eliminate as much waste as possible.

Adopting a new way of thinking is not so simple, because people are individuals, ie individuals who have developed their own way of performing work over the years and at the same time an individual way of thinking regarding executing it. Initially, a new way of thinking can cause difficulties for individuals as the process goes into their own area of discomfort, but as experience increases, this is only beneficial as shown in figure 2.

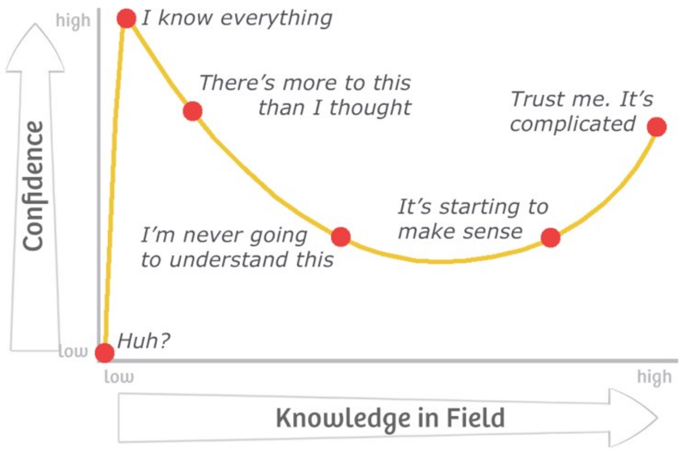

Figure 2. Confidence vs. practical experience in the field (Van Valkenburg 2018).

A standard is set for the work to be implemented to form it easy and transparent to follow. The setting of standards and their transparency will allow management to monitor the progress of development and whether there is a commitment to implement this chain in each area so that the chain is not interrupted and that maximum added value for the customer is achieved (Schipper ja Sweets 2010, 4-7).

The objectives of the Lean model are assessed by measuring and comparing the actual results of intangible and tangible products and services with the expected results, where key ratios are based on productivity speed, errors, and the lead time (Mann 2010, 31). While the main relationships mentioned are very concrete, lean is not just for the manufacturing industry.

It is commonly used, for example, in customer relationship management, which requires the definition and continuous improvement of value chains (Hannus 1995, 217). Thus, the Lean model is suitable for both industrial and service sectors that have complex processes but also have reproducibility, allowing measurement and processes.

The Lean model cannot be separated from the functions of an organization. It must start from the premise that organizations need to change, and it must serve the processes that create customer more value. Tuominen's Lean model should support the company's day-to-day operations and be in line with its future strategy. The company must know the mission, vision, values, strategy and goals that are desired and that form the basis for lean development (Tuominen 2010c, 12).

As Posti (Posti 2018), Hannus (Hannus 1995, 218) and South African Journal of Industrial Engineering (South African Journal of Industrial Engineering 2016, 79-91) reveal, successful lean implementation is based on strong values and a decentralized corporate culture based on continuous improvement in efficiency and the sharing of tools such as motivation, entrepreneurship and responsibilities.

3.7 Three P of Lean

Lean Gurus Womack and Jones recommend in their book (Womack ja Jones 1996) that corporate leaders and managers must focus on three fundamental business issues in the Lean change. These three lean transformations should channel the change in the whole organization. These key and main fundamentals are:

Purpose: What customer issues should the company address in order to achieve its own success and goals? The main purpose of every organization and the first step in the lean thinking process is: The company must correctly define the value what the customer is looking for. In this way, the company can cost-effectively solve customer problems and the organization can succeed and benefit from it (Womack ja Jones 2007).

Process: How the organization evaluates each main value streams to ensure that each step is valuable, capable, accessible, adequate, flexible, and that all steps are connected by flow, pull, and levelling?

Once the purpose is determined, the company should focus on the process (value stream) by which this goal is achieved. This is the combined result of three processes: the first, product and process development, the second, implementation from order to delivery, and the third, product and customer support during the product lifecycle. These primary processes are possible by executing many sub-processes within the organization (Womack ja Jones 2007).

The ideal process is one where every step is valuable and the customer is willing to invest because it creates value for him. The process typically produces an effective result and is typically available. The process is also adequate and works smoothly. The process includes products and services belonging to the product family that move flexibly through the process.

In addition, the ideal process consists of 3 steps, which are flow, drawing and leveling. In the stream, the product or service progresses immediately from step to stage without delay. Pull is required from the next upstream stage when continuous flow is not possible. Levelling is the smoothing of the operation of a process according to the customer's needs (Sgroi, Jr 2013).

People: Once the primary and support processes needed to create value for the customer have been identified, the company should hold someone accountable for each value stream. The persons in this stream of value must commit and coordinate everyone’s efforts. Each value stream moves toward the customer and closer to the customer while raising performance from the current state to a better one in the future.

Performing this requires 2 structures: Implementing a strategy / company master plan and regular improvement cycles for each process and sub-process, frequently performed with an A3 analysis that includes value flow maps. Standard work and standard management are also required at each stage of the process. In 2007, Womack and Jones simplified five steps to these: Purpose, Process, People (Womack ja Jones 2007).

3.8 Transformation of the Lean Management

According to James Womack, the lean thinkers need a complete vision and picture of the company before they can choose the right lean tools. The 3Ps play a key role in implementing this. Purpose, process, and people-focused lean thinkers (figure 3) can use the provided lean tools in the company (Womack ja Jones 2007).

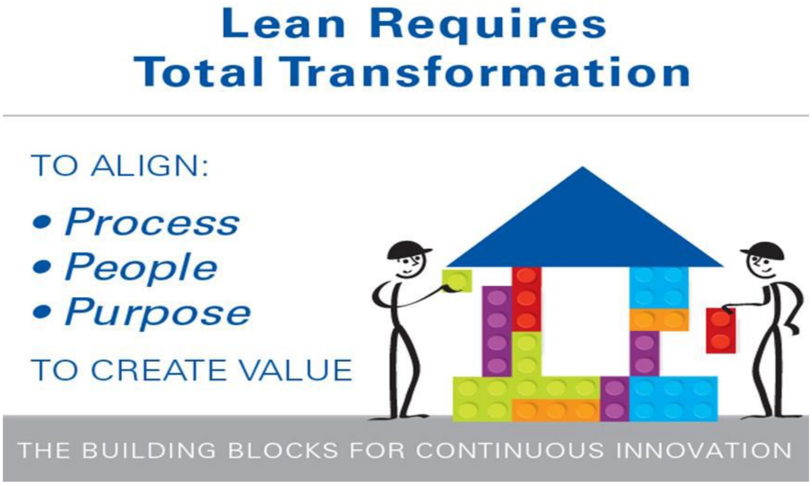

Figure 3. Total Transformation (Womack ja Jones 2007).

The LTF (Lean Transformation Framework) in figure 4 helps us think regarding the five dimensions that needed to be addressed for a successful transformation, and the “management system” sits right in the heart of the framework for a very appropriate reason. A lean management system is like the “Glue” that holds everything together. It helps builds a culture where everyone can become self-reliant and contribute every day to maintaining & improving value driven purpose (Watkins 2019).

A Lean Management systems require robust daily routines to maintain today’s work standards and it also requires them to develop routines that drive them to actively practice improvement. This is operated through “Learning by doing” using scientific Lean methods & techniques for which there are many depending on problem to be solved (Watkins 2019).

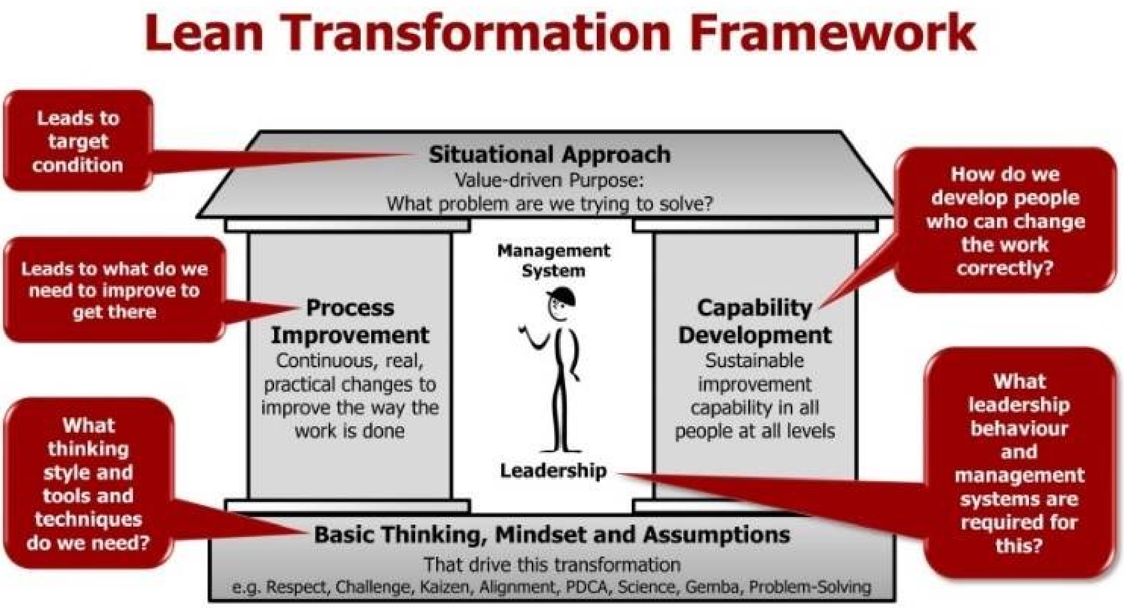

Figure 4. Lean Transformation Network (Watkins 2019).

Leaders can learn scientific methods such as Practical Problem Solving, Rapid Kaizen etc through a frequent and short PDCA cycles, which should be focused on improving the work together with their own development team. These quick PDCA learning cycles need to be deliberately practiced as part of their daily & weekly routines. Learning with others will develop their own skill to teach and coach and improve the work at the same time (Watkins 2019).

What questions are needed to ask ourselves when improving our own Management Routines? Here are a few basic questions to consider by all:

1. What are the wastes & gaps our current management system today? (against Purpose, Process & People)
2. How can we redesign daily management routines to build the right capability and behaviours that support this Lean transformation?
3. How should we hold ourselves accountable to ensure effectiveness and sustainment of new routines and behaviours?
4. How can we improve the purpose and alignment of our Management Routines?

Most organizations do not have a robust diagnostic for leadership to deeply reflect, modify and connect their own management routines & behaviours. Developing a structured method is crucial to enabling leaders to self-reflect on their own management routines & behaviours (Watkins 2019).

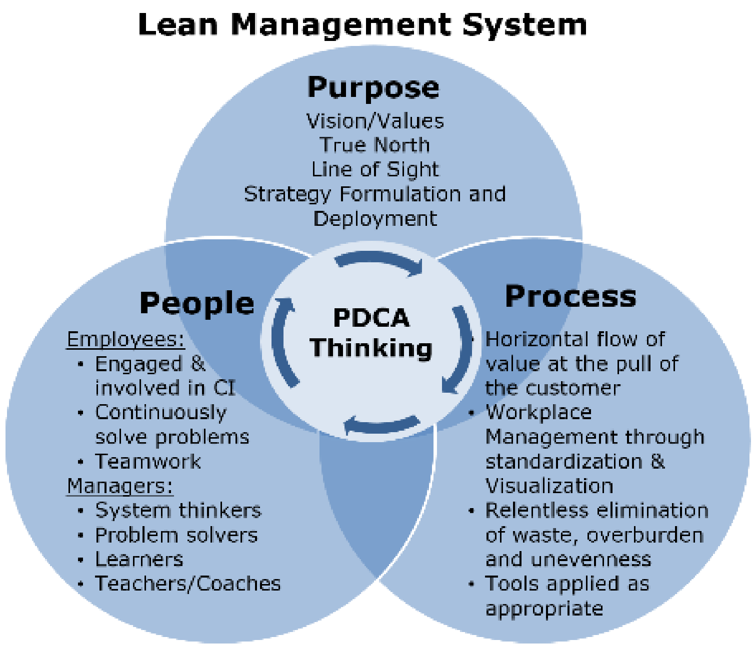

Figure 5. Lean Management System, PDCA Thinking (Watkins 2019).

Company must build a deeper understanding with Leadership of Purpose, Process & People, so their role in Lean management system is clear (Watkins 2019).

3.9 Lean management in the company's own Sales Process

As a company develops its project sales process to be more operational, it needs to think deeply regarding how 3Ps are in the company today. It needs to find out what are the main customer issues that a company needs to solve in order to outperform its competitors in the market. By solving these customer problems, the company should simplify its sales process and focus on customers needs (Posti 2018, 14-15).

The company must also ensure that every step in the value flow of the sales process is valuable, accessible and useful and that they are linked by flow, pull and leveling. For the company organization, this indicates that there must be a person in charge of the sales process who evaluates the value stream in terms of the purpose of the business and the lean process. The characteristics and tasks of this person will be described later in this thesis (Posti 2018, 15).

The company must involve all its personnel in to the lean process in the right way. The goal must also be to continuously improve the sales process. The company should also typically try to simplify complex structures. One way to perform that is to ask the following questions as it develops its new sales or other development (Posti 2018, 15).

1. What is the problem that we are trying to solve?
2. How is it improving our the daily work and how is it building our capability?
3. What leadership actions, measures management systems are required to support us in this new way of working?
4. Are we ready for this transformation and what basic thinking, mindset, or assumptions might comprise among us and in the existing working culture?

Figure 6. Lean Transformation model (Shook 2014).

3.10 Value Stream and value stream mapping

The value chain consists of various required functions, value-adding and non-value-adding, which are necessary to bring a product or service from raw material typically as a finished product or a service for the customer. Whenever we talk regarding a product or service to a customer, there is a value chain. The main challenge is typically to see and become aware of its value chain.

Identifying the value chain starts with identifying the primary raw material and the waste, and from then on learning the whole value chain. First, choose the product or service you want to focus on. Identifying the loss at this early stage is paramount. In order to properly determine the entire value chain, it is the so-called walk through with the development team and draw a picture of everything you find.

Value Stream mapping is helping to visualize more than just one process or sub-process level. It also connects flow of information between a material or service, providing a common development language and a drawn overview of the situation / product / service. At the same time, Lean's basic principles and its solution techniques are linked.

In order to obtain VSM started and the beginning of the activity to be developed, the value chain of the product or service must be described from the beginning to the end. All stages of the value chain, from materials to information flow, must be documented. At the same time, using the icons, the current state of the product / service and at the same time the future state of the product and service are plotted and how the value should flow in that case.

In the current state, the customer's initial data is recorded. A comprehensive value chain survey is then conducted to describe and record the main processes. At the same time, a view of how many main processes there are, is received. The processes are recorded and the value chain is drawn at the same time. Creating an inventory at the same time if the product is under review.

Next, the supplier information is recorded. At the same time, an information chain is formed, in which drawing describes how much each subprocess knows what to execute next. At the same time, in the case of a product, identify in which sub-process the material / product has to be “pushed” forward. Finally, the predetermined processing time of the production and the actual processing time are compared.

An example is a description of VSM in its current state and in the future state are in Appendices 10 and 11. The progress of the product in the process is described there. VSM can be treated and utilized in the same way to develop a service or, for example, a sales process.

Implementing change requires immediate action once it has been described. The change process must be tied to your own business goals. The critical points for success will be, as Memorial University of Newfoundland indicates in its publication (Memorial University of Newfoundland 2022):

1. Management must understand, embrace, and lead the organization into lean thinking
2. Value stream managers must be empowered and enabled to manage implementations
3. Improvements must be planned in detail with the cross functional Kaizen teams
4. Successes must be translated to the bottom line and/or market share

3.11 Value Stream and the process development

All functions that create or will not create value are required, first, to bring a product from concept to launch. This is also known as development value stream. And second, from order to delivery. This is known as functional value stream. These include measures to process information from the customer and measures to convert the product on its way to the customer. The value stream of a company's sales process starts with qualifying the customers and ends with project invoicing. There are several various stages in the middle. All stages of the sales process are presented in more detail later in this thesis (Posti 2018, 16).

At every stage of this sales process, the company must consider the needs of its customers and how it can perform this as efficiently and creatively as possible for the customer. One effective way to describe this project sales process is Value-Stream Mapping (Posti 2018, 16).

Value-Stream Mapping is a simple diagram of each step associated with the material and data flows required to bring a product from order to delivery. From Value-Stream Maps, you can draw a map of the current state that tracks the status of the process today and a map of the future state that shows the potential for improvement identified in the current state map to achieve a higher level of performance at some point in the future (Posti 2018, 16).

3.12 What are the Master Plan and the company A3 report?

A company master plan is a management process that aligns the organization’s operations and functions with its strategic goals. It is a special plan that is made every year and has precise goals, actions, schedules, responsibilities and measures. Another name for the company's master plan is the Strategy deployment (Posti 2018, 19).

The deployment of a strategy (master plan) can begin as a top-down process when an organization initiates the lean conversion. However, once the main goals are set, it should become a top-down and bottom-up process that involves dialogue between senior managers and project teams. The dialogue should address the resources and time available and needed to achieve the objectives. This dialogue is called catchball (or nemawashi) because ideas are thrown back and forth like a ball (Posti 2018, 19).

The aim is to allocate available resources to the desired projects so that only desirable, important and achievable projects are accepted. This allows the company to avoid projects that lack resources or are otherwise difficult to complete. As a company progresses through lean change and experience implementing a policy, the process should evolve much more from the bottom up, with each part of the organization proposing to management to take action to improve performance (Posti 2018, 19).

A Lean organization can call this process strategy alignment or policy management. An example of a company master plan can be seen in Appendix 12 (Shook 2008).

The A3 report has received its name from Toyota. Toyota has created this report template, which consists of the following: The problem, analysis and corrective actions, as well as the action plan, are on the same A3 paper. The paper has graphics many times. This A3 report has become a standard method for many companies to summarize problem-solving exercises, status reports, and design exercises such as value value-stream mapping. In most cases, value is created through lean product development processes (Posti 2018, 21).

This is because almost all faulty project results do not have the right information in the right place at the right time. In general, lean companies spend more development time creating and capturing information than creating hardware. The information is captured and then translated into specific applications where it can be reused in other projects (Shook 2008).

This paper presents a new A3 thinking approach of problem solving to support the Lean Product and Process Development in knowledge based environment. The new approach allows the design team to obtain the scientific knowledge in a structured manner. It also enables them to understand the linkage between hypothesis and practice which results from the new understanding and could be considered as new learning.

This knowledge will support the designers in effective decision making whilst directly attacking the waste during the next of the product development phases and future projects surrounded by the knowledge rich environment.

The aim is to develop a new model that passes beyond lean manufacturing by identifying value and non-value added activities and eliminating non-value added based on proven knowledge and experience by using lean thinking. The LeanPPD model is designed to support value creation in product design for the customer in terms of innovation, customisation and quality as well as providing sustainable and affordable products, as expressed in (Norhairin, ym. 2012). The adoption of lean thinking into problem solving in product development enforces the creation of values for decision making and directly attacks the waste arising from such factors as reinvention and unproductive meetings during product development, continues (Sobek II ja Smalley 2008).

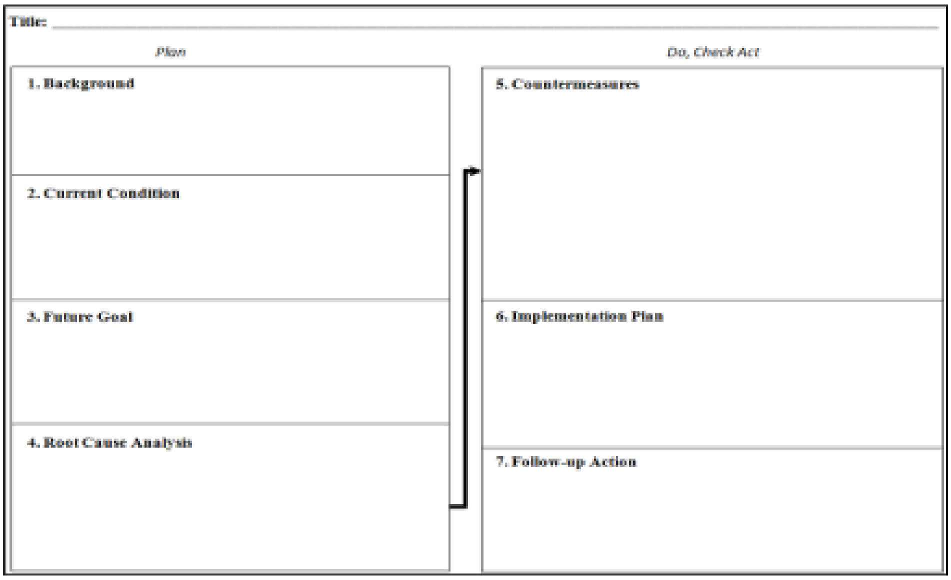

Figure 7. The traditional A3 Template (Shook ja Verble 2022)

When the table is slightly developed, an A3 problem-solving table suitable for the company is obtained, like Shook and Verble have developed in (Shook ja Verble 2022) in figure 8 below.

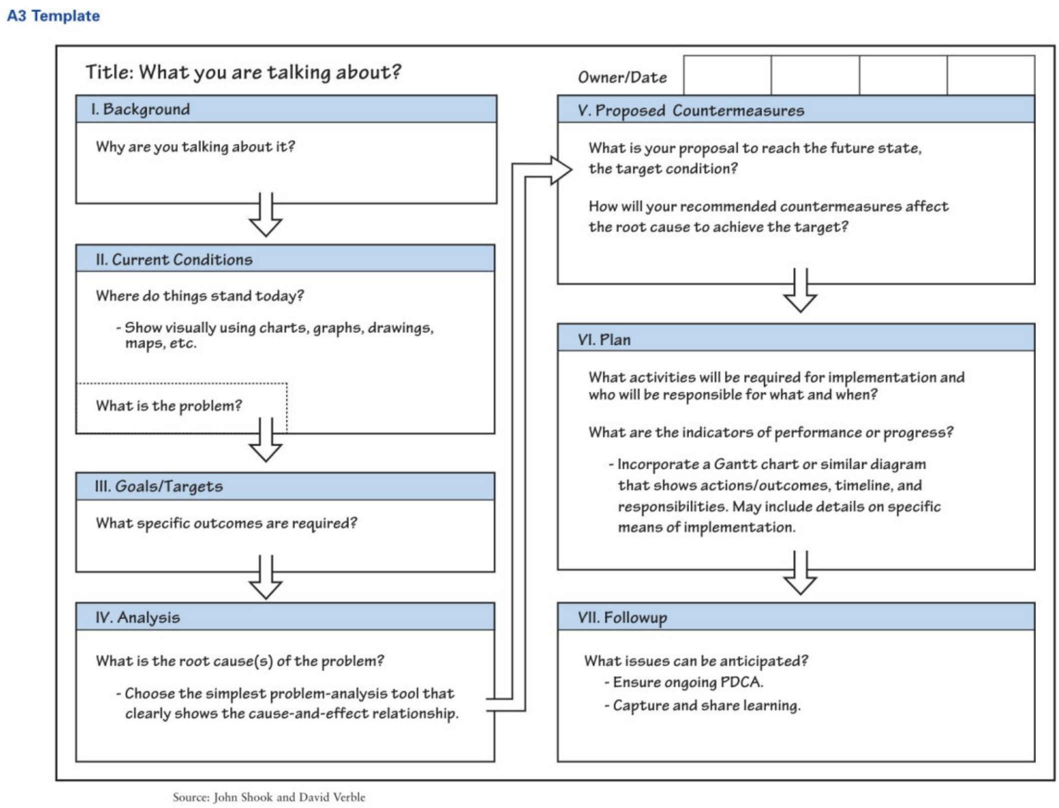

Figure 8. A3 Thinking, A3 Template (Shook ja Verble 2022)

The planning section can also be broken down into minute sections. In the example below, the design is divided into five individual parts in order to take the design step further prior to the actual making step. The steps are, as Limited (Limited 2022) indicates:

1. Problem clarification
2. Containment
3. Problem analysis & breakdown
4. Target setting
5. Root cause

These minute sections can be seen in figure 9 below. Sections 1 to 5 are meant to be executed before section 6 the actual doing, countermeasures and plan.

Figure 9. Overview of the 8 steps in PDCA (Limited 2022)

An example of the benefits of using Excel as an A3 troubleshooting table. The A3 troubleshooting table can be attached to the Planner plan and its tasks can easily be formed there, as in figure 10.

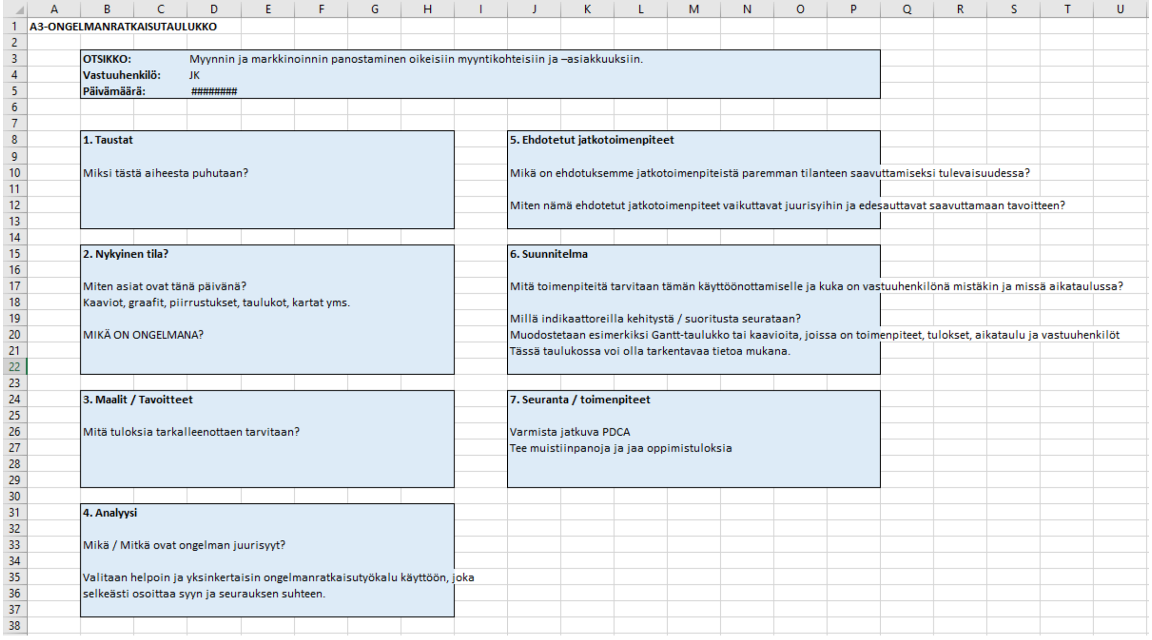

Figure 10. A3 Trouble Shooting Table in Finnish in Excel mode (Kohonen 2022)

Company can continue developing this table for future plans and needs for improvement.

4 Kaizen strategy

4.1 Kaizen ensures continuous improvement

Kaizen is a Japanese philosophy that focuses on continuous improvement throughout life. When you think of Kaizen in the workplace, its operations can improve all of the company’s operations. Kaizen aims to eliminate waste from all systems in the organization by improving standardized functions and processes.

What Kaizen indicates? Kaizen is regarding more than just improving productivity. When Kaizen is implemented right, the process eliminates too much work and teaches people to emphasize and eliminate unnecessary objects from business processes.

KAI	**=**	**To modify, to change**
ZEN	**=**	**Think, produce efficiency, create better**

Kaizen also denotes, creating it easier by studying it, building the improvement through eliminating the waste. Kaizen philosophy assumes that our way of life (working, home, social) deserves to be constantly improved.

4.1.1 Who performs Kaizen in an industrial company and what are the elements?

Kaizen should be used vertically by the whole company infrastructure from workers to supervisors, from middle management to top management. Kaizen is horizontally combining and is the middle part between the company's current status of maintenance and the innovations occurred during the time of production.

The main elements are:

1. **Continuous improvement and change** for the better.
2. **Continuity** of the process.

How to perform it then?

1. By **selecting** an event
2. By **planning** an event
3. By **implementing** an event
4. By **Following-up** to this event
5. **With continuous improvement**

This is also an improvement of both, processes and people. As Kaizen indicates, suitable is never enough, this is a never-ending journey for the companies and all its personnel.

4.1.2 Types of waste

Current thinking in the company is "No waste" but the required thinking must be "Types of waste". First the pain or waste must be found and then it must be analyzed properly. What are items that in that case must be taken into consideration?

Checklist for types of waste:		
Personnel	Work techniques	Work methods
Work procedures	Time	Facilities
Equipment	Systems	Software
Tools	Materials	Plant layouts
Production levels	Inventory	Mindset

Figure 11. Types of waste.

Subsequent to completing the checklist, all the waste must be devided into subsections and types. These following must be kept in mind while processing and improving. There are value and non-value-added work activities where the consentration should be pointed at.

- **VA** = Value added activity that changes raw material to customer expectations.
- **NVA** = Non Added Value = activities that take time, occupy space but do not add value to product or service.

The goal is in eliminating the non-value added activities, the NVAs. Waste must be discovered and eliminated because that is the customer will not pay for from the process.

Example of Kaizen vs. normal problem solving teams:		
	KAIZEN:	**Problem solving team:**
TEAM:	Cross-functional	Cross-functional
TIME:	in 2-10 days	to 3-6 months
INTENSITY:	Creates changes	Recommends actions
FOCUSES:	To the whole process	to single issues
GOALS:	Improves the process / eliminates the waste	Resolves the problem

Figure 12. Kaizen vs. a Problem solving team.

Whatever is operated for the company, ourselves, colleagues, waste should be eliminated. Continuous improvement and change for the better has to be executed and the continuing of this process must be secured. Results shall then be seen, if measured in currency:

NOT ANYMORE:	SELLING PRICE = COST + PROFIT
IN THE FUTURE:	SELLING PRICE - COST = PROFIT

Figure 13. Results measured in currency.

Price is not the only way to measure VAs. If improvement is implemented properly and continuously improved the results can be seen everywhere around you in short or long term period of time.

4.1.3 Kaizen in Sales

Kaizen should be used vertically by the whole company infrastructure from workers to supervisors, from middle management to top management. Kaizen is horizontally combining and should be the middle part between the company's current status of maintenance and the innovations occurred during the time of production.

Below are examples of Kaizen for sales organization how to add these to the daily work, as Ben Lai expresses in his article in (Lai 2017).

1. Working on just one new skill at a time

When focusing to just one skill at a time, the best shall then be performed. By focusing on just one new sales skill at a time, it is maximising the chances of improving in that area. Weakest skills will frequently act as a bottleneck in the sales pipeline. Performing is typically up to the level of our weakest skill, so concentrating the efforts on improving this area first, being sure to measure the results as we proceed. There are books, seminars and trainings specialized to this topic, so there is at least one for literally every step of the sales process (Lai 2017).

2. Working on it until it becomes a habit

Most people do not believe they are disciplined. The truth is that we are all disciplined some way or the other. There are lot's of daily habists what we all perform without noticing it. Disciplines are simply habits that we have worked arduous to create. Once we have decided which skill to improve upon, keeping up at it must be performed until it becomes a part of daily work. Working on that skill is mandatory until it is an effortless habit. There is no specific period for this to occur, so keeping the improvement is crucial until we are satisfied and it comes naturally to us. Once this is achieved, moving on to the next weakest sales skill is in order (Lai 2017).

3. Never stop improving

The compound effect of Kaizen will only work if keeping at it as the long-term strategies generally. Once this is adopted to each of the steps in the sales process, there are typically areas to fine-tune the work. For example, when wanting to look into sales psychology, personal development, or body language, there are literally limitless resources to improve the process (Lai 2017).

4. Adopting a growth Mindset

The first one is regarding the mindset. People must be forever learners, and should have the mindset that improves and that the company will improve. Starting with making the presentations follow the strategy and outlook of our company's official line. Sayings like "you can't teach an old dog new tricks" must be forgotten. If old dogs can learn new tricks, everyone is certainly not excluded from that. Keeping a growth mindset in mind secures that constant improvement occurs (Lai 2017).

5. Change small daily habits

By changing small daily habits by reading books, reading articles, by listening to audio programs shall help in this sales process improvent. Another item what to be performed is to watch educational videos. There are lots of training videos that can be watched via multimedia channels. Attending to live seminars if there's a possiblity to perform that is like investing in ourselves. There are limitless ways to improve minds and skills, finding some way to implement this on a daily basis is important. The main concept in Kaizen is to improve incrementally, just somewhat at a time, but to execute it on a regular basis.

Thinking in the long term, these little objects stack up and they become great structures. Whole business, whole sales training business has been built on these habits of daily reading the books and researching and listening and learning on a constant basis. Establishing a habit of improving a somewhat every day increase interest rates in the future (Lai 2017).

Even the smallest contribution of learning a day can bring great change and development to your daily work and leisure as Pascal Bornet expresses in figure 14 (Bornet 2022) below.

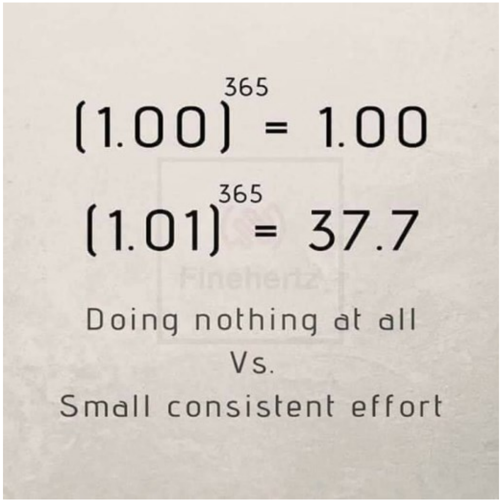

Figure 14. Small daily improvements can result a great change (Bornet 2022)

6. Learn from failures

If wanting to embrace the Kaizen concept in sales and constantly improve, learning from failures must be accepted. Whenever picking up the phone and receiving a rejection, a thought must arise, what has been completed that turn the other person off? If the sales was unsuccessful, calling up the client and ask for feedback is recommendable. “Just for learning, can you tell what were the reasons this deal wasn’t succesful?” If there’s constantly learning from the failures, fearing of failure will be diminished. Failures will be a lesson that can be learned for future instances that are similar to it. That's the whole purpose of failing. Anyhow, failing will occur and that's processed to occur frequently. That's just the reality of the sales profession (Lai 2017).

7. Conclusion

To embrace the Kaizen concept in sales, right mindset, a growth mindset must be kept in mind. Constant improving can occur, and forewer learning, too. The second item that needs to be executed is to establish a daily habit of learning. Whether that's books or audio books, any other media, let's just ensure that operating it occurs on a regular basis in minute chunks. Finally, there is a need to learn from the failures. Every time making a mistake, learning from it, analysing it, shall produce a better result in the future (Lai 2017)**.**

4.2 PDCA, the continuous cycle of Kaizen activity

As described earlier in Lean section, Kaizen's proceeding development can be easily and intelligibly described by the PDCA, the Deming Cycle. This will be a reminder of the importance of continuous improvement in every new description and material associated with the company's sales process. This material can be seen in section 6. The PDCA cycle is a appropriate method for performing changes to employees work processes and improving standards. The letters PDCA stand for Plan, Do, Check, and Act. This cycle is employed by people at many levels of an organization. In many ways, PDCA is a great introduction to Lean manufacturing as expressed by Creative Safety Supply in their publication (Creative Safety Supply 2022).

Like all Lean methods, the PDCA cycle pushes production toward efficiency and seeks to improve processes. Leaders use it to improve standard work methods, teams can use it to perform changes during a Kaizen event, and leaders can use it subsequent to a gemba walk to try out suggestions for improvement (Creative Safety Supply 2022).

Plan: Assesing the current state and looking for improvements. If a problem exists, examination must be performed in detail. Subsequent to that, developing the possible solutions and means of execution must be executed and completed. Gathering as much information as possible in this phase to produce informed decisions regarding how to proceed is recommended.

Do: Trying the plans and making sure every employee involved understands the mandatory changes. This implementation step is the key to acquire accurate results for proceeding.

Check: In this phase, following up to see how effective the changes are must be performed. Spending some time comparing the new state to how structures were previously is clearing up the mindset.

Act: If the changes work, continue using them and form them as the new standard. This shall be the new point of reference for future PDCA efforts.

The PDCA cycle has become an important part of Lean production in many companies. Like value flow mapping, OEE, and Tact time, PDCA can help to identify waste to be removed and contribute to making Kaizen efforts. It is frequently used when a problem has been identified and people need to figure out how to fix it.

The PDCA cycle is a useful way to think regarding improving any process in the workplace, so it’s helpful to teach employees executing it and obtain them involved in to the development process. PDCA is usually group work, but the thinking behind it can also be used to improve individuals ’own roles (Creative Safety Supply 2022).

Below the PDCA cycle in figure 15, originally drawn by (Creative Safety Supply 2022) with additions of the writer.

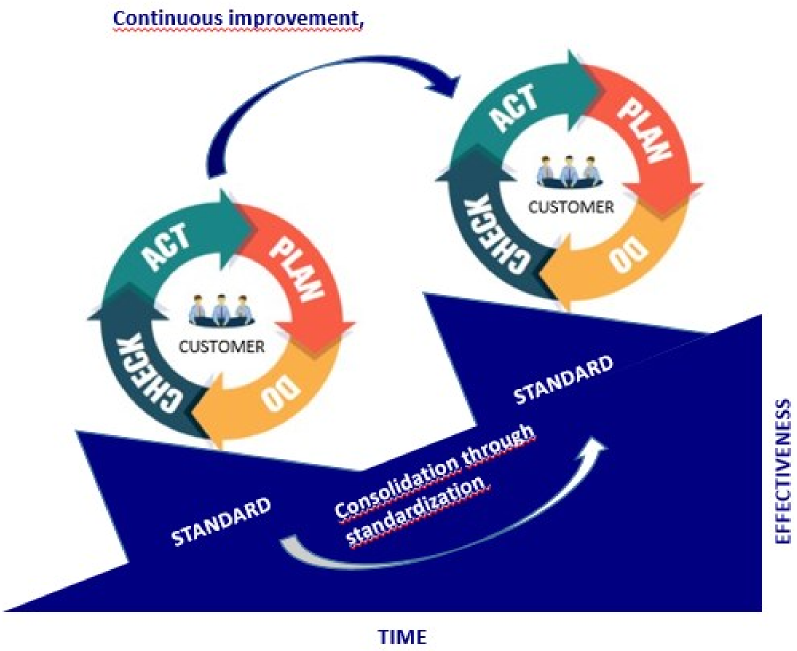

Figure 15. PDCA Cycle (Creative Safety Supply 2022)

4.3 How to implement Kaizen to the organization?

When deploying Kaizen to a new organization, everyone needs to start thinking regarding their work in a new way with three various stages: now, next and new. Now indicates current state, next indicates desired state and new way to how to reach desired state.

This new way of thinking requires much from all employees, especially supervisors, because they need to organize and oversee the following functions in the organization when Kaizen implements in the company as Posti (Posti 2018, 23) expresses the following in his publication:

1. Encouraging the participation of the employees:

Awareness training for all employees is essential. For encouraging the employee participation, certain Kaizen functions must be promoted, and considering sharing financial or tangible benefits once the solutions for Kaizen functions are deployed and implemented.

2. Training and education:

Understanding the importance of Kaizen requires targeted training by colleagues. Supervisors should be trained to understand the Kaizen organization in a vision context that must be thoroughly followed to achieve desired business goals. They should also be taught the need for an

3. Quality level improvements:

Once the training phase is completed, professionals should continue to focus on long-term impact, broad application, alignment with organizational goals and design objectives. Management should form of a core department that conducts Kaizen evaluation and participates in the implementation.

For a Kaizen strategy to work in the company, the company's employees must be satisfied with their work and be interested in working continuously to improve their performance in the company. The Kaizen strategy may seem like a common sense in the development of work, but its effectiveness depends on the ability of the company's employees and supervisors to remain dedicated to it. Developing the right attitude towards the Kaizen strategy and understanding the benefits of the company will facilitate its implementation.

5 Supporting operations for the whole Sales Process

5.1 What is a Back Office?

A back office, BO, could be the backbone of the company's operations. Its task, in cooperation with the Purchasing Organization, is to ensure the smooth flow of orders and products towards the customer. BO is made up of experts selected from the team who are product experts in their field, as well as employees who develop and research the sales process.

In most companies, the back office is a place where work is performed to support front office work. The front office is the face of the company and all the resources of the company are used to sell and interact with customers and clients. A back office is all of a company's resources dedicated to the actual production of a product or service and all other work that is not visible for the customers, such as administration, delivery tracking, purchasing or logistics, as expressed at (Wikipedia 2021).

In general, the back office work includes roles that affect the cost side of a company's business, and front office work includes roles that affect the return side of a company's business. Although the background office is rarely visible, it is a very important factor in the success of the company's business. They can include functions such as accounting, planning, inventory management, supply chain management, human resources, and logistics (Wikipedia 2021).

Many large companies invest in teams for their sales back office for an appropriate reason. The contribution is growing revenue and significantly improving sales productivity. In the recent Miller Heiman CSO Insights study, they say nearly 66.7% of organisations have a dedicated sales operations team, with a further 9.8% intending to create one in the next year as SalesPod indicates in their revenue (SalesPod 2022).

As they continue in (SalesPod 2022), a highly skilled and experienced back office can deliver even more value to growing sales team. Much more value than just covering the functions at a minimum level in other areas.

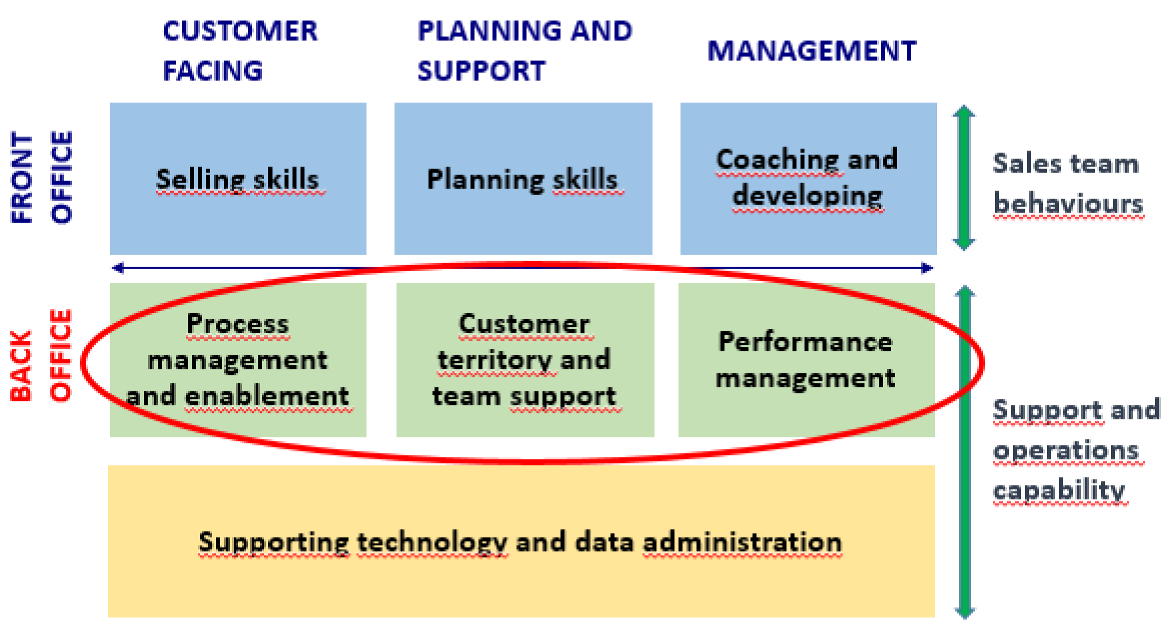

Figure 16. Sales capability model and Back Office, Kohonen 2022.

5.1.1 Process management and enablement of the BO

The background office would help to define the right sales process and perform it available to companys sales team. Effective sales processes speed up the conversion of deals and improve conversion rates. The result shall be that sales team achieves their goals and increases the revenue.

An effective sales process becomes strong when combined with sales facilitation initiatives. The sales team is provided with centrally created sales tools and resources to help the customer navigate their decision-making process. The combination further increases speed and conversion speed as SalesPod expresses (SalesPod 2022).

5.1.2 Customer, territory and team support

Effective management of the customer database can increase sales productivity. Systematic customer segmentation is the beginning, and customers are divided into related groups. Ideally, these segments will be able to identify how the customer buys and how profitable. You can then target the right amount of sales resources to meet your needs and maximize your profits.

Strong area management can bring huge productivity benefits. Management reviews the size, structure, and definition of the role of the sales team. Opportunities are left on the table if there is not enough time to reach their full potential. Strong team support includes creating and managing sales reward programs to motivate your sales team and combine its efforts to produce the most profitable results. Professional sales support for administrative activities such as quoting and tendering can frequently be much more efficient and effective than having each salesperson reinvent the wheel again for these processes as SalesPod continues (SalesPod 2022).

A back office would also have its own supervisor who oversees the group's operations and liaises with the company's management team as needed. At the same time, the supervisor would take care of his or her employees and that they have all the conditions to act as required by the task. The duties of the head of the BO can be compared to the duties of the head of each unit, which includes the development of the unit and the continuous improvement of operations.

Back office is usually responsible for maintaining the ordering and delivery process and ensuring that products and projects stay on schedule. They are also responsible for sending order confirmations and making offers in support of field sales. Their operations also ensure that, for example, field sales can continue their role in the field in the best possible way, ie by being close to the customer and developing larger entities and projects with them, so that sales revenues and revenues from orders and projects are as large as possible.

The close sales cooperation with the customer, assisted by the BO, would also help to promote a positive customer experience and continuous improvement of operations. This could also have a positive effect on the lengthening of customer relationships.

At the same time, BO's operations guaranteed that field sales could have the opportunity to execute proactive sales work instead of reactive ones. Proactive sales work has a much better chance of finding larger industrial investments well in advance of competitors. This would ensure that the company is better known and that it develops a wider range of activities in the industry.

Looking at this activity from the perspective of flow efficiency, sales can continue their own work with the next customer subsequent to the BO has taken over the delivery and follow-up process of taking the next step in the previous transaction. The purchasing organization helps BO find and procure the products needed for the successful deal.

The units work together to ensure that components and products are linked to the right orders and projects and also stay on schedule. If there is anything to note in the ordering / delivery process, BO will contact the customer-responsible seller directly for customer contact and information. If the promised schedule cannot be adhered to, it will require one's own investigation into the cause and whether there is room for improvement in the operation / process (SalesPod 2022).

5.2 Team Leader in Lean and Kaizen development strategies

5.2.1 Introduction

The world is undergoing great change. Covid and climate change have caused lot of concern and adaptation needs for the planet and its people in a short period of time. The changes have been massive and have affected the lives and work of every person around the world. The changes have affected not only people but also the companies they work for. The changes have placed companies in a difficult position depending on the sector in which they operate. This has been a lottery and a day-to-day survival for some, and a success story for the others.

Changes in the world have created the need to modify and change the company's operating methods and processes in such an approach that rapid changes in them could be implemented and cause as few complicating elements as possible. One approach is to develop company’s own processes in such a means that they are as productive as possible and those continuously develop the company's operations. With these, rapid changes and adaptation to the new market situation are more possible than prior to. It is necessary to be able to adapt to rapid changes. Lean and Kaizen strategies are helping companies and their employees move towards a more flexible and agile business strategy.

If a company wants to be Lean, it needs to understand that making a change requires a contribution and making a change is permanent and ongoing. Making the change must be committed to the entire organization of the company, from the floor to the top management. Without a comprehensive commitment to the Lean development process, it is not worthwhile to start that but focus more on developing simple sub-processes using the Kaizen strategy, for example.

Lean thinking and the transition to that way of working requires a new way of thinking, a new organizational culture and a new way of managing from the company, as it affects the daily routines of every employee. Lean is not a cost-saving program, but a transparent process in which each employee’s knowledge of their own job image is viewed in an approach that increases the knowledge and efficiency to perform so and how it is developed to eliminate as much waste as possible.

If a company wants to be a Lean, it needs to establish its own team for this process of continuous improvement. As mentioned above, development must be continuous and those involved in the development process must be committed and have an understanding of what is being created and why. It must be clear in all the company's operations that its activities are typically aiming at the benefit of its customers.

5.2.2 Basis for improvement

Continuous improvement team

Once the team has been established by the decision of the company's management team for the continuous development process, its own leader is elected. Plenty is required of this leader of the committee. He must be aware of the requirements of the company’s processes and the change schedules appointed for them.

The leader must be the ideal person for the company to operate and perform. However, if the company's change process is still in early stages and the leader has not yet been selected, it is advisable for the company to outline the change criteria that can be used to move forward. In the future, the selected leader will determine more detailed criteria for future change leaders through its own activities.

The team must be committed to its future development work, and its members must also develop themselves during the change process through other sub-processes that can be altered. Occasionally the processes are successful, occationally they are not. However, there are typically lessons to be learned from failures for the future.

The team, the company and its employees must also observe that global epidemics are shaping people’s ways of working now and in the future. Working at the office is changing to telecommuting, working for example at home. This assigns its own challenges to the work of the committee. This change is permanent and will cause companies to reorient themselves in a new direction even without wanting to be directed to the Lean mindset.

As mentioned above, the head of the committee will in future determine more detailed criteria for future change leaders and the development of the company's processes. Everyone's voice is necessary to be heard, everyone can have an input. The most important item is constant and efficient communication between everyone involved.

Leader of the committee

Duties of the leader of the committee are:

1. The leader shall **coordinate** the activities of the committee and report thereon to the top management of the company

2. **Define** the objectives, direction and timetable of the committee

3. Is **responsible** for the progress of the issues to be developed and those implementation within the desired timeframe and budget

4. To **elect** persons to the commitee who are committed to its activities and share the same spirit in development

5. **Present** items in pre-defined areas and activities that can be improved

6. **Take into account** the employees at the sites and their opinions

7. **Develop** the employees

8. **Motivate and encourage** the committee and other employees and **engage** them in making the necessary changes through clear examples and insights

9. **Generate** effective and process-oriented decisions

Making an effective decision is typically as strong as its weakest link. However, the fear of failure must not be allowed to influence decision-making. As mentioned above, something new is typically learned from mistakes, and making unintentional mistakes must never be the subject of reproach, but a new development process for future action.

An appropriate decision typically feels sensible and feels right. The leader must trust his own intuition in these cases. If necessary, the correctness of the decision can be verified by other members of the team. The principles of Lean focus on eliminating ongoing waste. The improvement team and its leader must understand the operation of companies' processes and their sub-processes in order to transform those from resource efficiency to flow efficiency and to the smoothest possible operating method and culture.

The leader must achieve all participants involved to the development work in the development teams in all sub-processes of the organization. Groups must be established of like-minded individuals, between whom there must be no friction, unnecessary waste and no use of energy to unnecessary functions and processes. Communication between members must work smoothly.

Those who are clearly unwilling to change will be left out of the process and will be sought for their own role in other activities of the company. This procedure, however must be carried out by listening to the employee and his/her wishes and desires.

The company must empower the leader of the team to utilize existing resources or acquire additional resources in order for the development to proceed and for the elimination of waste to be effective within the processes. These actions must also be continuous improvement, not just a one-time development task for an individual site or process. At the same time, holistic development is the development of both individuals and processes.

The head of the team is responsible for that continuous development process. The manager reports the results to the company's senior management according to a pre-agreed schedule and strives to demonstrate the effectiveness of the changes and the impact on the company's operations.

When a company is committed to continuous improvement, its benefits are directly or indirectly visible over time. In this case, the team is successful in its mission. However, development must be continuous. Leadership is quite multidimensional task. There are so many dimensions that nobody can ever understand and learn all of them.

Leadership

Some companies outsource the development of operations and processes to production engineers and production managers. These employees usually come up with ideas and implement changes in the work areas. Similarly, production workers may feel useless and frustrated if they are not provided the opportunity to influence changes in their own work area and the changes are rolled out without listening to them.

A company that has adopted a Kaizen strategy must consider all employees, from top management to floor-level employees, to improve the process. This process requires an open mind, an open heart and an open will to participate in development.

This development process involves the open and courageous participation of all in the planning of proposals for improvement, in the analysis of the problem, in the preparation phase, in the implementation and in the correction / improvement. Kaizen not only encourages all employees to participate in the change process but it also requires it.

Directors and managers should also take the position that they no longer have decision-making power in all matters, but that everyone can participate in decision-making. However, the most successful Lean projects show that with middle and senior management retiring slightly from decision-making and creating a more open and encouraging work culture in the company, people have been more openly encouraged to propose changes from their own perspectives and roles. This approach creates limitless opportunities for the development of operations.

It must also be in mind that the inclusion of Lean in a company's strategy must not be its only policy. The company defines its own strategy to match the market and improve customer service, and the Lean strategy must be a strong part of that. Typically, a company defines as part of its strategies the maintenance of supplier relationships, staff training, the development of new products, the acquisition of new markets and segments.

Leading the people

Kaizen's goal must not only be economic gain, but its main goal is the development of people. Lean is useless if leadership is negative leadership. A mental change in leadership is essential to receive the most out of Lean. How people are managed is one of the cornerstones of a company’s overall operations.

The company must have management that understands the importance of employee engagement and how much their attitudes and contributions contribute to the success or destruction of the company. Aggressive decisions may bring some momentary success, but at the same time have sown the seeds of the company's destruction.

Lean leaders are people who have their own weaknesses and strengths. At the same time, people with basic negativity communicate a negative change in their message and body language, even though the intention has been to have a positive change. Correspondingly, normally positive people are already able to involve people in their activities.

The reflection of management technologies on development is clear. Weak Lean leadership results in a lack of motivation, poor results, and poor employee experiences. Similarly, effective Lean leadership is not based on coercive control and manipulation, but on thinking regarding the future instead of the past.

Kaizen is simply a state of mind and a philosophy focused on continuous change and improvement, where everyone is asked to have an open mind, an open heart and open will to develop their own and the company's operations towards the future. Changing your way of performing items is not typically easy, and everyone can not even function it, and there is not even a ready-made solution for it. However, Kaizen encourages managers to be involved in the activities of employees and encourages them to integrate into the changes they want.

5.3 5Ps

Business Process Improvement does not need to be an organisation wide initiative. It can be as small as improving one process, or all processes in a particular section of the business. It is important to start the documentation of business processes (Kropman 2019).

Firstly, to be able to assess which parts of the organization will change as a result of the restructure. Secondly, it is important to document the changes in the processes, so these can be communicated to staff. As a result of the restructure, duties will change hence processes will change. Somehow this detail needs to be communicated. A well documented process will do just that (Kropman 2019).

What is the company then hoping to achieve? Which process to start with? How to show results fast? How to keep people engagement in this initiative? The answers for these are in the 5P's:

5P's:	
1.	Process identification
2.	Process documentation
3.	Process analysis
4.	Process improvement
5.	Process implementation

Figure 17. 5Ps

Firstly it is needed to identify what is expected to achieve from this initiative. The list of objectives must be referred and discussed with the management. Agreement on the top 2-3 objectives that are wanted to be achieved must be gained (Kropman 2019).

Secondly, it must be known that selecting more processes for improvement, that probably more manpower is required. If a small development team is only available to assist in the process, the process selection must be then kept small. Once all the above have been addressed, the next step is to identify the business area or particular process that needs urgent attention. This leads to Process Identification (Kropman 2019).

Initiatives must be started by identifying business processes as described before. Questions must be asked which processes exist in the organisation and create a value stream mapping. VSM is a hierarchy that holds the names of all the business processes in the organization or a section of the organization (Kropman 2019).

Some pointers for this:

1. A minimum and maximum limit of tasks must be set that make up the process.
2. Tasks must be counted by thinking at the right level
3. Processes must be separated if they exceed your maximum number of tasks
4. Processes must be named specifically

Once the process hierarchy is in place, the process names must be identified from the hierarchy that have a high impact on the line of business; processes that are directly connected to organization's revenue streams. Also, processes that directly or indirectly impact your customers must be chosen. These are then the processes that the company will want to document in detail to achieve transparency (Kropman 2019).

Process documentation and a variety of analysis must be kept in mind:

• **Value** - Percentage value provided by each process to the business and customer must be understood. Also, understanding the percentage of non-value added activities performed by each process.

• **Time** - How many hours annually are spent performing business must be understood, customer and non-value added activities.

• **Cost** - Annual cost incurred to perform business has to be cleared, customer and non-value added activities.

• **Efficiency** – It is important to understand and compare the process efficiency with the industry efficiency benchmarks.

This quantitative evidence to justify the need for change must be used. Receiving the green light from management is important (Kropman 2019).

Once the process to be improved is discovered, and the analysis has been performed, the next step is to think about optimizing it. Since the best practice is continuous improvement, it is important to try and keep it simple in the first steps. A roadmap for your process improvement initiative must be prepared considering the following at this point:

1. Establishing the Key Performance Indicators: Process key performance indicators must be set that are aligned with an overall business goal.

2. Obtaining the Business Support: Each business improvement idea needs business support otherwise the change will not be a success. Showing the quantitative analysis results to build case is needed. Also, the cost of not taking any action is calculated. Employees must be engaged in the identification of solutions to the discovered process problems.

3. State the goal: KPI's and the overall improvement objective are established at the start of the initiative. The success rate of the process improvement effort post implementation can then be measured.

4. Simulating the processes: Process simulation tools can be used to understand the impact and benefits of each solution before committing to the change.

A primary way to start process implementation is to engage employees in not only contributing to improvement ideas, but also the implementation of the changes. Work packages and tasks can be created to be completed against each approved improvement. Project management methods are used to track the creation and implementation of improvements. Employees shall be bonded into the project management plan, which in turn will facilitate early adoption and buy in of the changes (Kropman 2019).

If the 5P's are kept in mind during the process improvement efforts, it is shown that incremental gains will be seen. These will lead to huge future gains and guide the organisation toward a well refined process-centric mindset. The key to a successful process improvement endeavour is not as to how many processes can be implemented. It is how many implemented made a difference in enhancing business critical processes (Kropman 2019).

6 Implementation

Determining the research problem in the sales process is the first step in the early stages of a research plan. Once the problem to be addressed is known and the topic is limited, the theoretical foundations on which the research is based can be defined for the problem. The first step in this thesis was the preparation of a research plan, which is presented in the process description below in Figure 18. In connection with the definition of the research problem, suitable theories were selected to clarify the key research questions.

The research method chosen in the preliminary studies of the improved sales process was qualitative, as it is intended to understand the sales strategy and the sales process more broadly from the point of view of the perspectives and views of the company's own employees and their customers. The preference for qualitative material means that empirical material is used as research material, which can be texts, discussions, interviews, observation diaries, images, or spaces in which an activity takes place. Sometimes numerical data, such as various statistics, can also be of interest for qualitative research. In this case, however, the materials are interpreted qualitatively and, for example, what the classification method means in relation to the final result is considered.

Another key theory was structured interviews in customer satisfaction surveys. A structured interview, also known as a form interview, is always conducted with the same interview questions throughout the study for all interviewees. The interviews were chosen as the research method because they were assessed as the best data collection method for compiling the definition of operational development.

Structured interview is best suited for studies that aim to quantify the data and / or process it by means of statistical analysis. Sometimes open-ended interviews are also included in the form interviews, which can be addressed qualitatively or quantitatively by classifying the answers retrospectively. The number of open-ended questions and the extent of the answers determine whether the open-ended answers in the structured material can be applied to the needs of qualitative analysis.

Customer survey form has been described in Appendix 5 and the results of the survey can be seen in Appendix 7. The follow-up and testing of the implementations themselves are excluded from this thesis, as the results will only be visible after months or years.

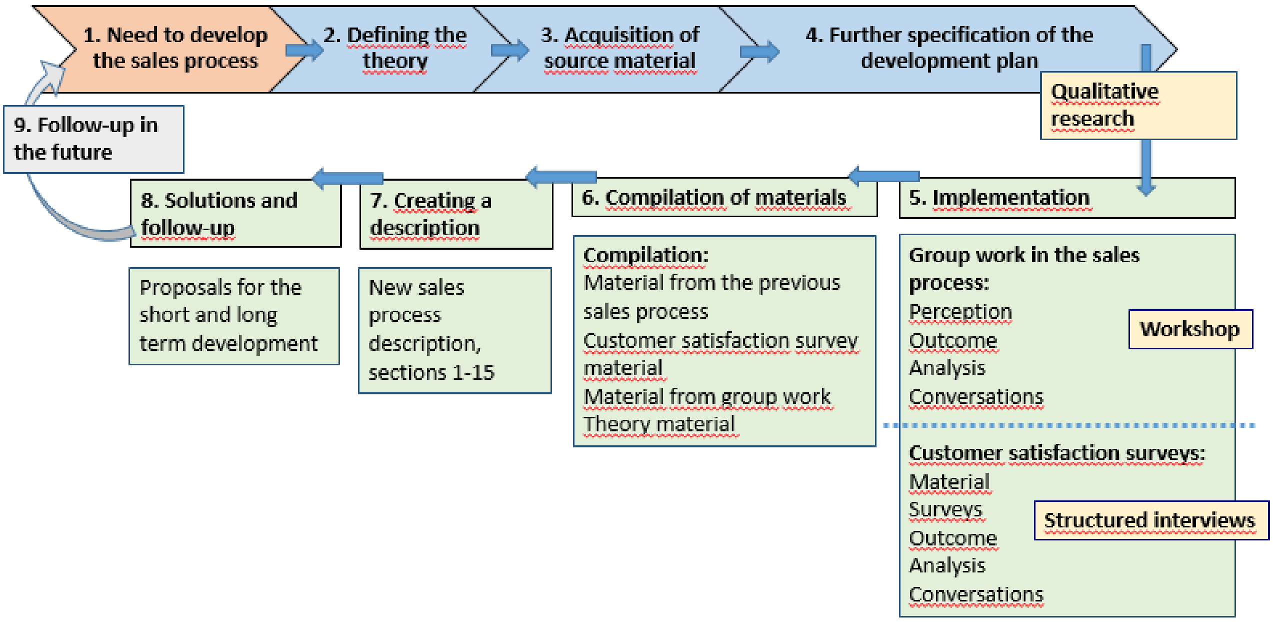

Figure 18. Description of the process for determining the research problem

6.1 Workshop of the sales development process

Workshop of the sales development process was carried out within the company's sales personnel by documenting the previous sales process based on the previous instructions. This part was processed in the autumn 2020. In order to improve the previous sales process, maintain the current customers and acquire more new customers, the sales functions needed to be further crystalized and the actual sales tools developed to be developed further.

This included examination and re-evaluation of the process, as well as the development of new practical sales tools, helped in streamlining the process and forming the guidelines how the sales process ought to be conducted in the coming years, just like Soini presented (Soini 2014, 7). This examination provided valuable information on how the employees previously wanted the company to develop in the future and what added value everyone can bring more to developing the sales process and improving the customer experience and added value.

Feedback from the customer surveys was also taken into account in planning the various stages of the sales process and taking them forward in this development. The regular customer interviews and questionarys from 2020 were part in this qualitative research. Based on this mutual review and development of the previous sales process and the consideration of customer survey, the sales organization developed an improved sales process that supports the company's future strategy and development.

Figure 19. Development of the improved sales process phases ongoing by the sales personnel 15.10.2020 (Grandell 2020).

6.2 Description of the new sales process and it’s phases

Appendix 8 shows a diagram of a normal sales process used by various companies, as in this particular company how the previous sales process was described. In this particular case, there are now numerous sub-processes in the new sales process phases, each of which has been designed to be modified in such an approach that the sub-processes are in a comprehensible and readable form. This ensures that these sub-units can be improved afterwards in accordance with the Lean and Kaizen strategies.

These commonly used descriptions of both the sales process itself and its sub-processes have now been redesigned in the modern form in this thesis. Visualizing the pages helps so that those become memorable and at the same time resemble a new graphic layout and to be used in development and, for example, updates for ISO9001 quality standard.

Visualization is modern and at the same time the subject and purpose of the pages and is much easier to remember for those exploring the process than traditional diagrams. Differences to the previous process description are visible in the bottom of the page. The new sales process has one sub-process more which is meant to be the continuous development section (15). The inclusion of this sub-process on the main page of the sales process reminds everyone of its importance and necessity if and when the process requires continuous development in line with the company's strategies in the long run.

The purpose of this new sub-process (15) is to highlight the need for continuous development for the future development of the whole sales process. The PDCA is very strongly involved in this description as it is built around continuous development and elimination of waste through other ancillary measures. Further development of these sales process phases are in section 6 in this thesis and Appendix 9 includes the description of the developed New Sales Process Phases, including the new phase 15, continuous development section.

6.3 Previous sales process vs. new sales process

As mentioned earlier, the previous sales process material was previously in several different documents. Each section had been written by a different employee, so they were slightly different in wording and layout from each other.

In addition, they were stored in various locations in the company's internal network environment. Redesigning the description of the sales process simplifies the process for future development needs and helps eliminate waste that does not add value to the company's operations.

Consolidating the previous sales process into a new one will eliminate waste (Non Added Value) in at least the following types of waste: Personnel, Mindset, and Work Methods.

As the staff embraces the description of the new sales process, and especially the new section 15, Continuous Development and Improvement, it will boost efficiency to the company's sales operations. Co-operations and work processes can be harmonized, and this alone will speed up the flow process in the day-to-day work of employees and the entire sales process. In addition, new ways of working help to learn new things, as they are found to be helpful in everyone's daily work and its meaningfulness. As the sales process simplifies and speeds up, there is still time to do things that add value to the company and its customers.

Mindset brings with it a new approach to things and self-development to improve the company's operations. As mentioned earlier, everyone's personal attitude plays a role in advancing the common process. Therefore, setting up a continuous improvement team ensures that the issues to be developed are constantly monitored and monitored. However, because all people are individuals, not all activities can be left to individuals.

As you learn and stick to new ways of working, your comfort zone becomes larger unnoticed and over time. In this way, the standard for doing things yourself has increased and this, in turn, has unnoticed increased the efficiency of your own work. This, in turn, creates added value in daily work. When everyone adopts this mindset together, the effects will be reflected in the company's operations, even in the short term, by further streamlining the process and creating even better conditions for flow efficiency to work.

6.4 Customer promises

The company's new customer promise is as follows: The company will bring smarter technology to its facilities and industry. It creates smart, energy-efficient solutions and new innovations for the current and future needs of its customers. Thanks to these, the company can have a significant impact on both people's daily lives and the environment. The company wants to be the uncomplicated partner for its customers. That's why it provides its customers under one roof with everything they need, from design and components to commissioning and maintenance - if they want it, they get everything turnkey. Efficiently, effortlessly and responsibly. Then smarter.

Based on this promise, the company guarantees its customers the widest possible entity based on its own more than 90 years of experience. The market has changed a lot in recent years, so it is important that the largest possible entities can be managed as agilely and flexibly as possible.

Compared to the previous customer promise, energy-efficient solutions and the environment have become a new thing. The management of promises already targeting these targets is of paramount importance and requires the company to continuously develop both the product expertise and the management processes required for their sales and product expertise. Therefore, the flexibility and easier customization of the sales process are important in the long run. The new sales process description responds to this as it requires continuous development and improvement.

7 Results

The workshop conducted by the sales organization and the survey of the current situation with the help of customer surveys provided a relatively comprehensive picture of the current state of the sales process and customer relationships, as well as the development targets proposed at the end of the work. Mapping out the current situation was an integral part of this research work, and this helped to understand the sales process as a whole and how to take customer needs into account when modifying processes.

The results of the interviews showed that recording the processes as a whole helps further development and takes them forward in accordance with the standards and requirements achieved in the company. This research work focused on clarifying the initial situation, recording and unifying processes, taking into account customer survey, and further developing the entirety.

7.1 Customer survey results

The questionnaire was sent to the contacts of about 200 customers, taking into account the A + B and C + D classification. Response rates were 12% and 20% in both groups. This is quite normal response rate for online surveys. Of course, not everyone who receives a survey wants to respond or give feedback or just not notice giving it.

The quality of the products was rated among customers with grades of 4.55 and 4.6 with a maximum value of 5. This answer supports the idea that the quality of the products is already at a good level at the beginning of the development work. It can also be interpreted from the same grade that the product selections have been successful in the past and no further action is needed. However, research and monitoring of new products is important to maintain the level required by the market.

The quality of the service provided by the company received grades 4.3 and 4.6 with a maximum value of 5. This answer supports the idea that the quality of services was already at a good level at the beginning of the development work. However, it can be seen from the answers that the value of some answers was 3, which means a good result in principle, but there is still room for improvement. When interpreting open answers, delivery schedules and better information about them emerged in the development proposals. These were taken into account in the selection of tools to improve the sales process as well as the importance of setting up a Back Office.

The third point, was the quality of the design. The quality of the design received grades 4.5 and 3.5. The quality is already at a good level and no more time will be spent on developing them in this work, as these answers will have to be interpreted differently when the target is in a different business unit in the company in relation to this development process. In the future, however, the need for and meaningfulness of new tools in this part of the organization can be viewed and examined.

The fourth point was the quality of deliveries. This was rated 4.5 and 4.2. Although the results are at a good level in terms of grades, this section provided the best feedback in the open feedback section. Attention was paid to these when the new description of the sales process and the necessary methods were started to be reviewed and utilized in the new process description. The results also show that the company is already well on its way to developing a new one, so making changes doesn't necessarily mean making very big changes to doing it on a daily basis.

However, the market is changing rapidly at home and abroad, so the continuous development and improvement of the sales process will help the company to be faster and more agile in its own operations in the future. This plays a big role in the company's long-term goals.

The customer satisfaction survey can be found in Appendix 5. The answers to the survey and free feedback can be found in Appendix 7.

7.2 How the workshop results were turned into the new sales process?

The sales organization initially met for a joint training session to begin researching sales processes to bring it in line with today's market requirements. The creation of the daily plan also focused on what measures the company should consider and implement in order to improve the company's competitiveness and to keep up with the challenges brought by digitalisation or the constantly changing competitive environment.

The plan also recorded what actions the company was currently seeing to take in the future to enable it to meet its targets over time. Initially, the results of the customer satisfaction survey were examined and the feedback received was recorded. At the same time, old sales process material that was in several different documents was taken into investigation because each section had been written by a different employee and was stored in different locations.

The sales teams were divided into their own small groups, and each group was given its own block of the sales process to analyze, led by its own group leader. The groups recorded the steps of the processes and withdrew to discuss them in their own groups. Each subprocess of the process (1-14) was recorded on the board in its own block. Once the general description of the process and the preliminary proposals were ready, they were started to be discussed in groups.

By discussing previous information in small groups, they reviewed and thought about its meaningfulness and functionality in today's work environment. Outdated data was deleted and at the same time new ideas within the groups were brought under the new sub-processes. Each group went through their own part of the process and by everyone's decision and changes, they were recorded on the board under each sub-process. This provided a coherent description of the new process and what it should contain today and instruct you to do.

The previous sales process, which was scattered in various documents, was recorded and drawn as a cart wheel diagram (Appendix 8). The previous sales process had thus taken on a new, easier-to-interpret form.

In this way, all the old and irrelevant information that would have created unnecessary waste today when applied with previous instructions was eliminated from the previous process. In addition, the redesigned chart is easier to interpret, communicate and edit. In addition, the unification of things helps to better understand the overall picture of the process.

The author of this thesis has taken this previously improved strategy and the customer survey from 2020 as a basis for his work in order to further improve and accelerate the development process with the help of Lean and Kaizen strategies.

8 Suggestions for development of the sales process

The goal is to get the benefits of the company’s new sales process description to support the company’s business as quickly as possible without compromising on quality by implementing them after careful consideration and evaluation.

The internal development goals of the company are those that require considerable knowledge of the company's operations and can be done with a reasonable amount of work. The development targets are those that have become apparent in customer surveys and in the development of the sales process carried out by the company's own sales organization. One such measure is the creation of a Back Office, for example. The other is the continuous development team and its leaders.

External resources, in turn, should be utilized for staff training, which requires greater work input and expertise in process development and their strategic functions for demanding functions. Examples of such trainings are Lean and Kaizen trainings.

Meetings are planned and scheduled for these development projects, where these problem areas and development ideas are reviewed and supplemented where necessary. These meetings develop and harmonize operations from the perspective of both salespeople and the company's management, as well as the company's production manager.

One of the internal development targets can also be the introduction of Microsoft Planner software, to which the A3 problem-solving tool can be easily integrated. For the use of the Planner software, it is agreed that what objects are recorded there and what is analyzed there, so that everyone has a unified approach and all the necessary information about the development object.

Development activities for which the company needs expertise and resources from outside its own organization were staff training. Lean and Kaizen training is plentiful in the market, from training to the very basics. These trainings, which directly affect the sales organization, will also improve the competitiveness of the target organization now and in the future.

In the future, the activities of development activities can be measured with the result indicators already available in the company and their interpretations. The development of the sales process was based on analyzes of the company's customers as well as the changed market situation. In connection with the implementation of the development, the entire sales process must be discussed and analyzed as a whole. The creation of a sales strategy, ie a sales plan, focuses on what measures the company should consider and take to improve the company's competitiveness and to keep up with the ever-changing market, the challenges and opportunities brought by digitalisation.

The company has a plan to increase its turnover in ten years (Appendix 3). At the beginning of this plan, goals and objectives were created for the company's operations for the following years. The targets for turnover, EBIT and market share were recorded in the plan. The plan for the future also recorded what actions the target organization was currently seeing to take in the future so that it could achieve the targets set for certain time horizons.

The following sections of the thesis review proposals for measures for both the short and long term to achieve the above objectives.

8.1 Continuation of the development process

As previously described, if a company wants to be a Lean, all of the company's processes must be continuously developed into a smoother direction according to Kaizen. In this particular case, each sub-process is accompanied with a new PDCA pattern with a graphic image of the customer in the center to remind and help the employees that all the activities are aimed to a positive customer experience, a long-term customer relationship, and that the customer is typically at the center of all actions in progress. By following these topics above, the process becomes more agile and faster.

The new sales process and its sub-processes are pointed and as described and agreed in Appendix 6. These new graphically designed process sections should be adapted to action by the marketing department to the new process description of the company to facilitate the visualization of the new sales process and the easy editing of the instructions later.

All activities, both in the sales process and in other supporting development activities, focus on the continuous improvement and development of the above. There is also other simulteanously acting activities which are helping in this progress in the future. These main actions are mentioned below in immediate actions.

Development can be a specific point or event in each sub-process that has received attention during the sales process. These could be, for example, delays, provision or delivery of the wrong product, an installation error in production, or a hardware failure during commissioning and installation. These deficiencies must be addressed immediately, the cause of the situation investigated, how it is remedied / taken care of and who is responsible for this remedial action. These improving maneuvers support the flow efficiency by removing occurred bottlenecks from the flow.

Some of the companies have the ISO9001 quality standard system, which also requires the continuous development of the processes in order to adhere to the standard now and in the future. Lean, Kaizen and the supporting actions will help in this development because the similarities between these standards and strategies are visible.

If there are not enough tools provided for ISO9001 to generate and sustain the change process, all the methods, suggestions and ideas in this thesis will help to take the advantage of the tools in the Lean and Kaizen strategies and with the supporting, simulteanous actions mentioned above. Company is suggested to consider these supporting development actions with the following keypoints mentioned below for immediate action in the process to help remove waste and to create a smoother sales process for the future. By starting the progress with these it also creates the foundation for the long-term development progress and actions (Kropman 2019).

8.1.1 Lean management for Business Management Model

Business Process Management (BPM) consists of tools to generate the sales process improvement. Company´s goal needs to be clear for having more agile salesprocess than before. This is evaluated by the continuous improvement team and with it's leader. Elements for this team's actions are:

The company needs to identify it´s key business processes. These processes have a direct impact on the organization and its customers. All the processes are documented to ease the handling of the development. Company must identify the voices of the customers. These voices are being handled and interviewed yearly with the mentioned customer surveys. All the relevant data is collected and stored for later use.

Development of a Current Value Stream Map. This can also be carried out by external experts to ensure that everything is needed for identifying that is included in completing each portion of the process if this can not be proceeded with the current personnel of the company. A detailed flowchart must be created about this information, for what is being done and what are the reasons for that. Measuring the process and its costs, direct and indirect must be identifyed which are needed for the process.

Root Cause Analysis about the process for identifying all barriers preventing the business process from reaching its defined improvement requirements. Company must develop the ideal value stream about its process. At first company must put aside what it known to be true of the current process and identify the barriers to reach the defined success actions. With this and ideal process map must be created that will address the root causes of all identified issues, problems and challenges in the current process.

Developing the solutions and a list of possible implementing options are being generated. Best possible options and solutions are being chosen to ensure that these will overcome the root causes. Finally a detailed implementation strategy is being created to ensure that the solutions are successfully realized. It includes who needs to do what, when and what resources are needed (Rissanen 2002, 72-78).

The company is suggested to consider choosing Lean Management for BPM because it is accelerating its sales process, increasing customer satisfaction and improving the company's core business. If a company wants to achieve this goal, management should change the focus from optimizing separate technologies, resources, and vertical departments to optimizing product and service flows through total value flows that flow horizontally between technology, assets, and departments to customers and their interests.

Lean management enables teams to deliver faster by managing their workflow efficiently and focuses on delivering value from the customers' perspective. Integrating continuous improvement efforts into process and a continuous learning system will be transformed to the organization. In this way also the optimization of the teams performances will be seen as a continuous effort. Further on, with continuous improvement efforts it is ensured that quality of the processes, as improving the team performance will positively impact the process performance (Kanbanize 2022).

8.1.2 From resource efficiency to flow efficiency

It is important understand all the processes in the company and how they work because flow efficiency will be created in them. Every organization has various processes. They can be development processes, procurement processes, production processes, sales processes, and so on. There are value-producing functions and non-value-producing functions. In flow efficiency, all non-value-producing process parts are removed and value-producing process parts are combined.

It is important to define the processes from the perspective of the flow unit, e.g., from the perspective of the customer. It is also important to know and consider by changing the development plan from resource efficiency to flow efficiency according with section 2.4.5 "Understanding flow efficiency and its concepts" by planning and establishing a separate BO and a Continuous Improvement Team as described in the following sections.

Flow efficiency will allow the company to better understand the process as a whole as well as its performance over time. By quantifying the process performance, it is possible to realize the required actions that need to be implemented aiming at delivering stable and fast products or services to the customer. This consequently leads to enhanced customer satisfaction.

These measures can be done in the organization of the company without major changes. The resources of the organization are sufficient to form these new units of the organization at no additional cost or large changes. Establishing the BO is in the following chapter.

8.1.3 Establishing the BO

The company is suggested to consider about establishing a back office into the organsation with the following actions. By this way, waste from the unnecessary work of the front office would get significantly lower and liberate time to spend it in, for example, face-to-face meetings with the customers. This is a way to reduce waste and to save time from unnecessary work in the front office. Establishing the BO should go as follows. (31 West Global Services, Nancy Pais 2022)

A plan for the operations of the BO must be evaluated. Creating a plan to optimize back-office operations is important. A good plan aligns all the different moving parts in the environment—systems, people, schedules, tasks, and business priorities. This in turn unlocks new efficiencies and cuts costs. Investments in management technologies helps BO executing their plan. Workforce and workload management must be considered in this case. These technologies streamline back-office operations and align all its moving parts, including tasks from different systems, employee schedules and availability, business priorities, and service level commitments.

Optimizing the employee performance. Employees are the most important part of the back office. They must be optimized to really impact the process efficiency and its productivity. The key point in this is knowing who is available for which type of work. Without this knowledge, wrong persons could be executing work which doesn't belong to them in critical situations. A task list for the BO Team must be developed. Funneling all work items and tasks from all the different systems into a single global task list is imperative. It will provide a complete visibility into the whole scope of the back office. It's essential if tracking the planning and schedule resources are needed.

Prioritizing the BO tasks based on business rules. Creating a global task list will help prioritizing the task list based on configurable rules. From this opportunity the advantage must be taken. Prioritizing tasks ensures that critical or time-sensitive jobs don't get stuck behind non-critical, non-time-sensitive ones. Assign tasks to the right people for BO operations. Assigning tasks to the right people boosts productivity. Automatic, rules-based task assignments to assign jobs must be used. These eliminate the problem of workers taking the easiest tasks over the more critical ones, the need for supervisors to manually assign tasks, and concerns over unfairness and favoritism.

Forecasts and schedules for your BO must be created. Understanding workloads and priorities enables the company to make more accurate predictions on workforce needs. It helps the company better handle changes in task volume, differences in task times, and measures alterations in performance and it helps to effectively manage more employees, reducing the supervisor to worker ratio. In most companies, the back office is a place where work is performed to support front office work. The front office is the face of the company and all the resources of the company are used to sell and interact with customers and clients.

Many large companies invest in teams for their sales back office for an appropriate reason. The contribution is growing revenue and significantly improving sales productivity of the company. In the recent Miller Heiman CSO Insights study, they say nearly 66.7% of organisations have a dedicated sales operations team, with a further 9.8% intending to create one in the next year as SalesPod indicates in their revenue (SalesPod 2022).

In the beginning, the BO is made up of the company’s own employees and each is assigned their own role in the team to the best of their ability in sales. The leader is also selected to take care of the BO's operations and its development. The leader must definitely be a person who has been influential in the company for a long time and who has known the company and its processes for a long time.

8.1.4 Establishing the Continuous Improvement Team

If the company wants to be a Lean, it needs to consider establishing its own continuous improvement team for this process of continuous improvement. As mentioned above, development must be continuous and those involved in the development process must be committed and have an understanding of what is being created and why.

Each member of a continuous improvement team will represent a function or process within the company so everyone is included. The continuous improvement team shall be in place to manage the process and immerse the group in an environment conducive to improving the company's environment and culture. The following eight-step process shall be taken care of when establishing the team. These actions will, as completed effectively, be able to influence company culture in a positive way. (UltraConsultants, McGregor, Gary; 2017)

The continuous improvement team shall be actively engaged in defining and implementing projects while managing the overall process. The team is immersed in every aspect of the process and could be a leader or participant in a project or development. However, this assignment is not a full-time job for the participants of the team.

Team members are chosen with an aspect, who are high-powered performers and likely to become future leaders of the company. Clearly stated requirements will be mentioned up front so all team members understand that continuous improvement team membership is a special reward, and will be over and above their normal duties within the company. Each continuous improvement team member will represent a function or process within the company and be fully empowered to make project-related decisions for their area of responsibility.

An ideal team size shall be 4 to 6 people, if this is possible to arrange within the company's current staff. This will allow deep relationships and a solid sense of companionship to develop the processes. Keeping the team size in this range will also reduce scheduling challenges for meetings and allow the team to manage internal discussion efficiently.

Continuous improvement team environment must be created. Projects will be actively addressed after significant discussion among the team members. This discussion will ensure a significant commitment to marshaling the resources necessary for a successful implementation process. It should also mention the availability of said resources so the project can be completed in the allotted time frame.

A balanced scorecard of performance metrics has to be created if possible. This step involves creating a balanced scorecard of performance metrics that will provide immediate feedback on the effectiveness of the implemented projects. The team does not have to concentrate to financial metrics, these will be managed by senior management. The focus for the continuous improvement team will be managed by measuring process cycle time, productivity of a given process, outputs divided by inputs, and inventory reduction.

Regular meetings must be held. Developing a consistent rhythm is critical to the creation of an environment where the transformation effort becomes part of the organizational culture. The transformation lead team will meet at weekly to track the status of active projects. Weekly meetings will be warranted when new projects are launched or when obstacles to success are encountered. Attendance of every member should be required at every meeting.

The tasks required to complete projects must be managed. This step in the process is when real work begins. Of the many opportunities for improvement within an organization, all of them are worthwhile. However, all projects will not have an equal financial impact or can be handled simultaneously. When managed effectively, projects shall be completed successfully and on time.

The whole company shall always be informed about the development via good communication to all employees via monthly group meetings. A monthly newsletter should also cover these development infos. An effective communication program will educate and energize the entire company. Over time, the communication program will cement the change process solidly into the company culture.

A solid relationship with senior management is important to have. It is mandatory to keep the boss in the loop. The properly defined continuous improvement program will fit solidly into the company's long range plan and support both near and longer term goals. A report from the continuous improvement team to the management team will be a fixed agenda item at monthly staff/performance review meetings. This will be supplemented with reports on the performance of team members covering both accomplishments and areas for development.

As many other members of the management team in both the Kaizen blitz events and longer-term projects will be involved. This involvement will serve as another means of anchoring the culture change throughout the company.

What the company will benefit from this improvement team?

By creating an effective continuous improvement team it will provide many benefits to company culture. The results for all these efforts will come about by driving the long-term changes in culture and behavior the new system will make possible. Making this happen requires the discipline to define and manage projects using the continuous improvement tools like Lean.

8.1.5 Adapting PDCA Deming cycle in daily sales processes

Company has already taken the PDCA into action in forms of the new sales process. These cycles are adapted clearly for each new description of the sub-prosesses to remind the importance of continuous development and the customer. The PDCA cycle will be a appropriate method for performing changes to employees work processes and improving standards. PDCA cycle pushes production toward efficiency and seeks to improve the processes. Leaders can use it to improve standard work methods, teams can use it to perform changes during a Kaizen event.

PDCA is already visible in the new, complete sales development process (Appendix 9), and can be seen there as section 15. This section explains the importance of the continuous development of the sales process in the future and should not be overlooked in the future. Each subprocess of the sales process (1-14) has got its own PDCA circle in the middle of its own process to remind everyone about the development and continuous improvement of the process.

Every employee in the company is also required to report new ideas and suggestions for improvement, either to their own supervisor or to the continuous improvement team. The PDCA has been reported earlier in the previous sections of this thesis under theory.

8.1.6 Taking the advantage of A3 Thinking and problemsolving

It is suggested that PDCA with simulteanously using the A3 Thinking and Problemsolving table will be taken to the development actions as it is implemented in the company for PDCA-compliant problem solving and continuous improvement, as in (Sobek II ja Smalley 2008).

The aim is to develop a new model that passes beyond lean manufacturing by identifying value and non-value added activities and eliminating non-value added based on proven knowledge and experience by using lean thinking. These following steps of the A3 Problemsolving shall be taken in action if needed in each subprocess of the new sales process by following these simple steps as follows.

The problem must be indentified. Since the purpose of the A3 process is to solve problems or address needs, the first, somewhat unwritten, step is that the problem or need needs to be identified. The current state of the situation must be captured. When the problem is found and clarified, it's time to capture and analyze the current state of the situation. It is suggested that problem solvers observe the work processes firsthand and document the observations and gather around a whiteboard and check each step in the process. It is important to write everything to have a clear vision about the matter.

The size of the problem must be quantified. These are, for example, long cycle times, customer deliveries that are late, errors reported per quarter. Data must be written down to keep the visualization as clear as possible. A root cause analysis must be conducted. When the process is visible, it must be figured out the root cause of the efficiencies. Questions like, where do we suffer from communication breakdowns, where do we see long delays without activity or what information are we needing to collaborate more effectively/smoothly can be asked in this point. The pain points must be documented.

Countermeasures to address root causes must be deviced. These countermeasures are ideas for tackling the situation; the changes to be made to the processes that will move the organization closer to ideal by addressing root causes. These countermeasures should aim to specify the intended outcome and the plan for achieving it, to create clear, direct connections between people responsible for steps in the process, reduce or eliminate loops, workarounds, and delays and define the target state.

Once these countermeasures have been selected, defining the target state is easy. In the A3 process, it is needed to communicate the target state through a process map. Note where the changes in the process are occurring so they can be observed. A plan for implementation must be developed. When target state is defined, a plan for how to achieve it can be developed. These implementation plans will include a task list to get the countermeasures in place, who is responsible for what and due dates for any time-sensitive work items. The team must document their implementation plan in their A3, figure 20.

A follow-up plan with predicted outcomes must be developed. This follow-up plan allows the improvement team to check their work. It will allow to verify whether the current condition is well enough understood to improve it. A follow-up plan is a critical step in process improvement because it will help team to make sure that the implementation plan was executed, target condition was realized and expected results were achieved.

Everyones participation is important. The goal for this systemic improvement is that it improves every part of the system. This is why it's vital to include everyone who might be affected by the implementation or the target state in the conversation before changes are made. Building consensus throughout the process is usually the most effective approach, which is why the team chooses to include this at each critical turning point in the A3 process. Depending on the scope of the work, it is also be important to inform executives and other stakeholders who might be impacted by the work.

It's time for implementation. The implementation as discussed must be followed by observing opportunities for improvement along the way.

Evaluate the results. It's critical to measure the actual results and compare them to the predictions in order to learn. If the actual results vary greatly from what was expected, a research must be done to figure out why. The process must be altered as necessary, and implementation repeated and followed-up until the goal is met.

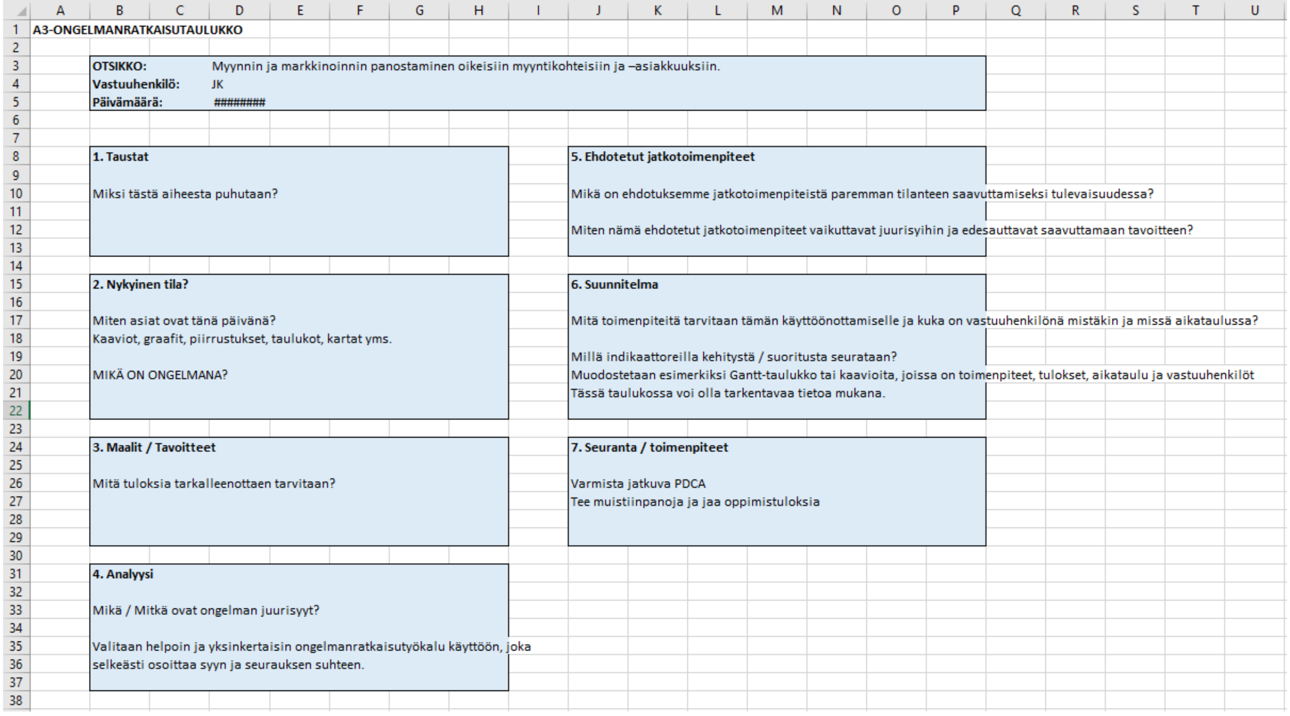

Figure 20. A3 Problem solving chart in Finnish

8.1.7 Using the Microsoft Planner in daily work and development

Microsoft Planner is a project management application developed by Microsoft that allows teams to create, assign and organize work visually. With this application, the company will facilitate teamwork better, as well as progress visibility and coordination.

Microsoft Planner will be used for a range of project management needs such as addressing time management concerns, ensuring work is equally distributed, brainstorming new ideas, managing a marketing campaign and preparing for a client meeting.

The following figures, 21-25 are examples of how to use Planner software as a planning, development and marketing utility tool in the company. The A3 troubleshooting table, in case of development or problem solving, will easily be attached to the Planner plan and its tasks can easily be formed and shared with the development team.

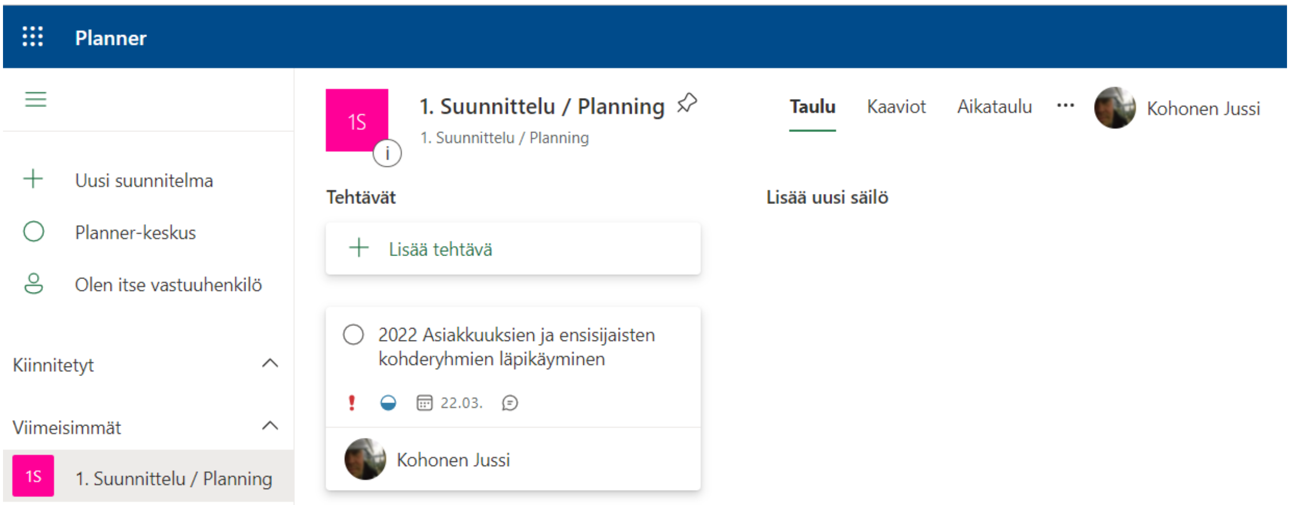

Figure 21. Planner, New Plan and Add Tasks (Kohonen 2022)

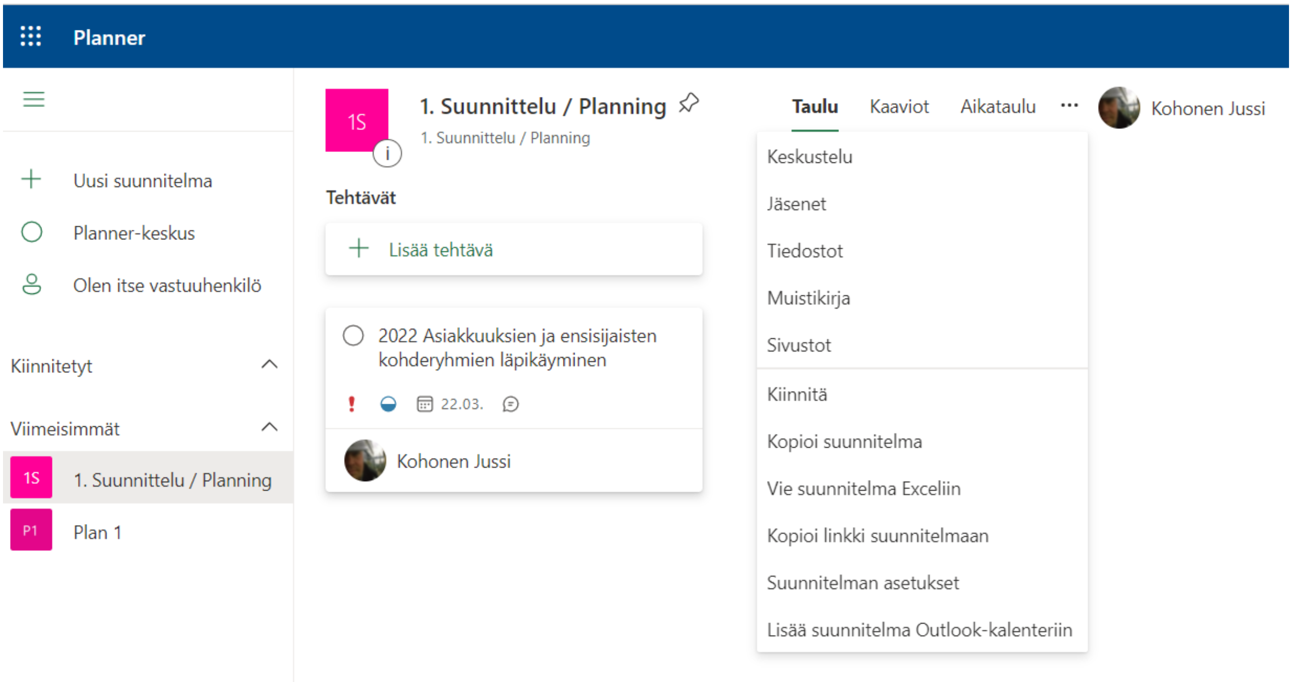

Figure 22. Planner, Blackboard. Transferring information to various platforms and team members (Kohonen 2022)

Figure 23. Planner, Editing Tasks (Kohonen 2022)

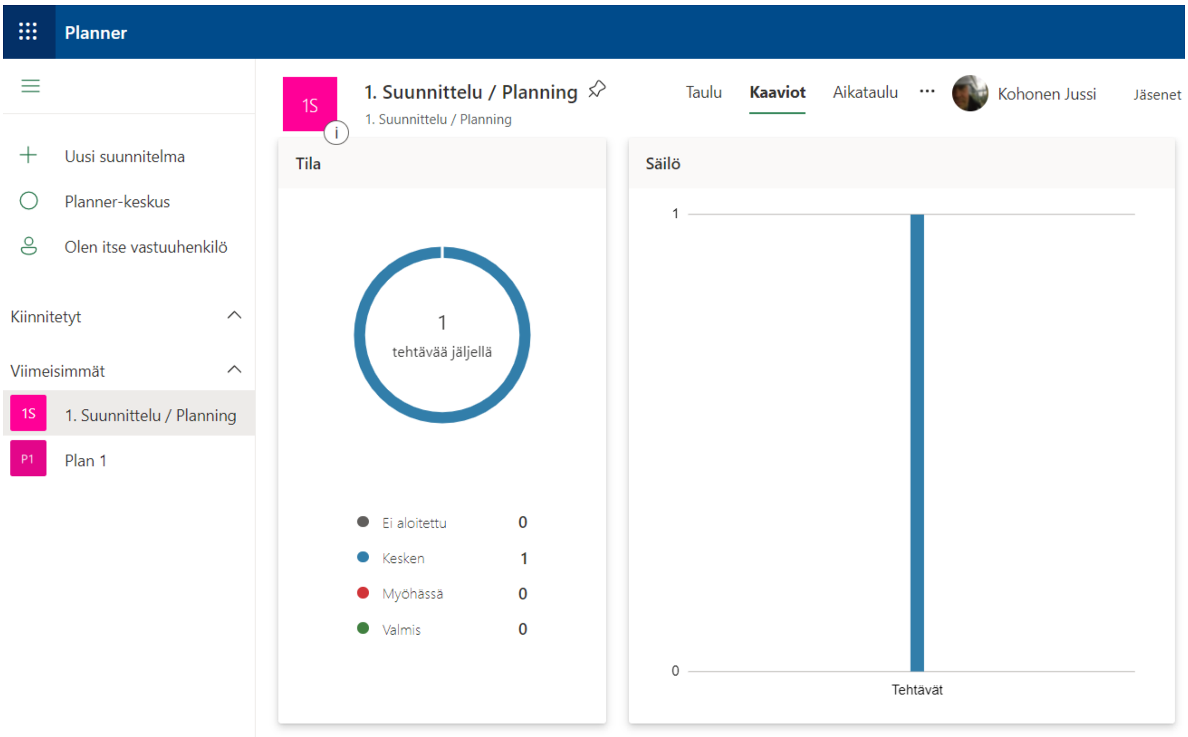

Figure 24. Planner, Charts (Kohonen 2022).

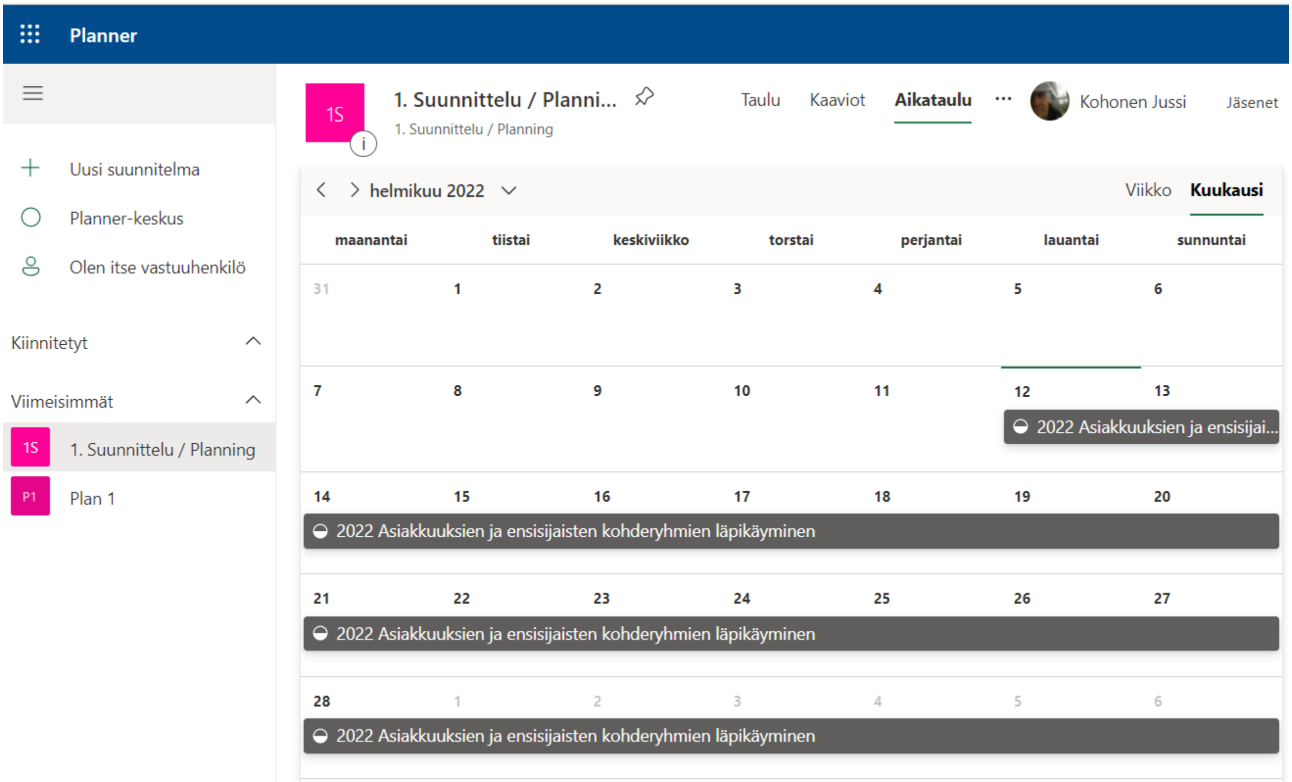

Figure 25. Planner, Schedules (Kohonen 2022).

8.2 Long term development suggestions

Long-term development plans require more careful planning and attention than the quick-schedule plans mentioned above. Quick-scheduled and immediate plans are easier to for a company to implement at first than longer-schedule plans in the beginning of the development. Longer-term recommended development plans for the future development steps are mentioned in the following section.

It is crucial that the longer term development starts with the development of the personnel. Without this solid base for continuous improvement it is not possible to take the other suggested plans and strategies any further. It is all about the people and how their attitude can be lifted up for the next level of thinking Lean.

Continuous development of individuals to support their strengths and weaknesses is suggested. Awareness training for all employees is essential. For encouraging the employee participation, certain Kaizen functions must be promoted, and considering sharing financial or tangible benefits once the solutions for Kaizen functions are deployed and implemented.

Supporting and organizing training and encouraging and committing to the long-term development of the company in the ways and processes mentioned above. Understanding the importance of Kaizen requires targeted training by colleagues. Supervisors should be trained to understand the Kaizen organization in a vision context that must be thoroughly followed to achieve desired business goals.

Once the training phase is completed, professionals should continue to focus on long-term impact, broad application, alignment with organizational goals and design objectives. Management should form of a core department that conducts Kaizen evaluation and participates in the implementation. For a Kaizen strategy to work in the company, the company's employees must be satisfied with their work and be interested in working continuously to improve their performance in the company.

This willingness is measured every year in mutual feedback sessions with their supervisors. The Kaizen strategy may seem like a common sense in the development of work, but its effectiveness depends on the ability of the company's employees and supervisors to remain dedicated to it. Developing the right attitude towards the Kaizen strategy and understanding the benefits of the company will facilitate its implementation.

8.3 Reliability and ethics of the thesis

The world is undergoing great change. Covid, climate change and wars have caused a large number of concern and adaptation needs for the planet and its people in a short period of time. The changes have been massive and have affected the lives and work of every person around the world. The changes have affected not only people but also the companies they work for. The changes have placed companies in a difficult position depending on the sector in which they operate. This has been a lottery and a day-to-day survival for some, and a success story for the others.

Changes in the world have created the need to modify and change the company's operating methods and processes in such an approach that rapid changes in them could be implemented and cause as few complicating elements as possible. One way is to develop company’s own processes in such an approach that they are as productive as possible and those continuously develop the company's operations. With these, rapid changes and adaptation to the new market situation are more possible than before. It is necessary to be able to adapt to rapid changes.

In this qualitative study, the aim of the theory and the empirical part was combined
The most suitable topics for Lean and Kaizen strategies, as well as a few support functions to develop and improve the organization's sales process. In addition to these theoretical sources, the study collected data through a customer satisfaction survey for the organization’s customers, which was developed in conjunction with the sales organization.

The customer satisfaction survey ensured that as much information as possible was available to clarify the status of customers and to make the new development measures as comprehensive and diverse as possible. In addition to extensive data collection, the survey gave the sales organization the opportunity to participate in further development itself and to influence the future operating models and tools of its own work tasks. The involvement of staff in development activities also provides good opportunities for continuous improvement and development.

The utilization of external resources and materials as part of this development work helped to achieve the development goals set for it qualitatively. However, the development of the sales process using the methods and tools described earlier will be left to the company in the future. However, measures have already been taken and new descriptions of sub-processes with PDCA have already been taken forward in the sales process itself, so that the visual appearance and the basis for further process development with PDCA are in order for the future.

As Flow Efficiency, Back Office, or the Continuous Improvement Team has not yet been implemented or established at the time of writing, this leaves little question as to how the proposed issues will yield visible results and in which areas there is still room for further improvement and development. In addition to individuals, in the future the company will have to find out and consider how well this development will improve the company's competitiveness now and in the future.

The organization has not previously implemented such a development measure for sales and the sales process, which incorporates the Lean and Kaizen strategies used by even large companies. For this reason, however, it can be assumed that time and restraint will be needed to take the proposed changes forward in order to achieve a successful and forward-looking sales process that is progressive and achieves the company's goals. However, I strongly believe that the proposed measures will have a positive impact on the day-to-day operations of the company, its competitiveness, and the improvement of customer satisfaction and experience.

I base these conclusions on my own short-term experiences of the benefits already seen during development, not to mention the final version, as well as my discussions with company staff. However, it should be borne in mind that this development project is based on the previous sales process of the company in question, so the results of this work should be viewed critically, especially as regards their applicability to another company and its organization.

9 Conclusion

As a result of the work, a qualitative study was created, which deals with the development of the company's sales process and its unification into a better and more flexible form. The theoretical framework of this work is familiar at the theoretical level with the Lean and Kaizen strategies as well as a few support measures applied in the development part of the target company of this study.

As a result, a new sales strategy was created for the company, which will serve as a guide, operating model and guide for the entire company's personnel in the transition to a flow-efficient operating model. At the beginning of this thesis, two research questions were asked about the research, which were as follows:

1. How the company can create its sales process more efficient and simpler as before?
2. How does the company intend to develop its processes and continue to develop them in the long term?

The development work and theory has shown that the transition from resource efficiency to flow efficiency, the structure of the Back Office, the establishment of a continuous development team and the training of staff require further development in the sales process. In addition to these four factors, it is important to make sales process descriptions easier to handle.

The sales process is a broad and multifaceted set of different functions from design to the end of the product or service lifecycle. Ensuring customer continuity in cooperation with the entire organization of the company guarantees a functional partnership that creates more added value for the customer.

The sales process should always be well-planned and clearly focused on the sales of the organization’s service or product and the way their customers operate. With a good plan, sales process model and preparation, not only do you achieve more successful sales than you do, but it is also done efficiently in terms of time and money, without forgetting work comfort and customer satisfaction.

Lean thinking works in sales as well as in any other industry ever including production. It does, of course, require that it be applied to that need and that the limits, requirements and possibilities of the activities of the target organization be understood. In order for these three things to be fulfilled, the organization must always be committed to Lean thinking from the top manager to the employees and understand its content, or at least be willing to find out about it.

Adapting Lean thinking to the entire sales process and its development also requires familiarization and research on how it has been adapted to the sales process in the past, what problem areas and opportunities it has seen. The core of Lean thinking, i.e. continuous development and improvement, can be excellently applied to the development and improvement of all processes. For just like anything else in a rapidly changing world, sales require constant time and improvement.

Almost all of the Lean thinking tools can be utilized in whole or in part in sales work. In this work, the biggest benefits will come from the transition to flow efficiency, the establishment of a sales support organization, a Back Office and a continuous development team, and the PDCA Deming Circle. Flow Efficiency, Back Office, Continuous Development Team, and PDCA tools have served as the basis for this qualitative study in developing the company’s sales process.

The topic of this thesis was the development of the company's sales process with the help of Lean and Kaizen strategys and a few support functions. Preliminary development work in this thesis was carried out by opening the company's old sales process description and a customer satisfaction survey. In the opinion of this employee, the completion of the thesis and the company that was an integral part of it and the practical development work aimed at it was a very instructive and challenging whole.

The target organization in this development project was industrial automation and a long-term Finnish family-owned company in the industrial sales sector. The thesis consisted of an introduction, theory, research, conclusions, recommendations and a summary. In addition, the new sales process description in the thesis got a new, more visual look. The introduction chapter reviews the course and structure of the work and opens up the nature of the research and its goals, as well as the desired goal of the development work. The introduction discussed why the development work carried out in this thesis was important and sensible for the company to implement.

In order to be able to achieve the goals set for this work, the theory chapter of this work introduced both Lean thinking and Kaizen theory. The source works of the theory are the literature on theories of sales and Lean thinking, as well as scientific articles and publications. The theoretical chapter started by collecting a theory related to sales work about Lean and Kaizen strategies and their utilization in many different ways. In addition, a few support functions were reviewed in theory, such as the purpose of the new Back Office.

After the theory, it was the turn of the research part. The structure of the study consisted of customer satisfaction surveys and the company's old sales process description. The results were reviewed using data from customer satisfaction surveys rather than old data from the sales process. The next chapter of this thesis reviewed the answers to the research questions set in the introduction and on what grounds. In addition to the answers to the research questions, the chapter evaluates the results of the thesis and considers what kind of actions the target organization should take in the future in terms of developing the sales process.

The aim was to develop the sales process so that the simplest methods currently available could be added to make them easier to understand and implement. This decision was supported by previous, well-conducted customer satisfaction surveys, discussions with colleagues, and the author’s own view on how best to take development forward. Quantitative research, as well as the structured and thematic interviews held under it, were part of the decision-making process for the development and direction of the research. Different companies always have their own ways of doing things, so this way of getting started is not suitable for everyone without changing some ways of working and areas for development.

The limitation of the work was that its results cannot yet be presented until the development of Lean Management has begun in the company. This can take months, even years, before noticeable results can be seen. Further development can be thought of next by taking the idea and operating model to the company's other business units for consideration. However, each business unit is different in its approach, so this could require slightly different approaches to take the ideas written forward.

In the last chapter, a conclusion of the thesis was reviewed. After the summary, a list of sources and appendices can be found in this work.

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