Improving international child benefit processes with Lean method
Case: Kela

Anniina Kuokka
The purpose of this study was to improve processes of Kela’s international child benefit with Lean tools. The idea was to reduce and eliminate the parts form the process that brought no additional value to the customer and to simplify the process in order to make it more efficient and fluent and to reduce the lead time.

The theoretical part of the thesis consists about process development and process management as one would need to understand the function of processes since they play a much centred role in this study. In addition the theoretical framework discusses about the lean method and lean leading as a tool for improving efficiency in the process. Furthermore change management is being issued as developing processes and implementing lean requires a perspective of this.

The empirical part of the study was conducted as an action research with using sequential, multiphase design, mixed method research. The data collection consisted of multiple phases of data collection and analysis. First there was a quantitative questionnaire where data of the problem points in the process was gathered, after this a Kaizen workshop was held where primary qualitative data was collected in in-depth investigations, and finally a second quantitative questionnaire with the aim of assessing the successfulness of the study.

As a result of first questionnaire and the workshop we found out many problem points that were seen as slowing down the process or preventing fluent application processing and also cooperation matters that needed improving. Consequently many of these issues were changed and several obstacles removed. When assessing the successfulness of the study with the second questionnaire, most of the respondents felt that their work had become more fluent and all respondents felt that the process development with lean was beneficial.

Some problem points and development suggestions are still under progress and there is an aim to thrive for continuous improvement. In addition there has been discussions about doing similar process improvement project also to other benefits.

**Keywords**

Process, Process development, Lean, Lean tools, Action research, change, change management
# Table of contents

1 Introduction .......................................................................................................................... 1  
  1.1 Research Problem, Goals and Objectives ................................................................. 2  
  1.2 Structure of the study .............................................................................................. 3  
2 Case organization; Kela .................................................................................................... 4  
  2.1.1 International child benefit .................................................................................. 4  
  2.1.2 International child benefit process ..................................................................... 5  
  2.2 Previous Lean projects in Kela .................................................................................. 7  
3 Literature review ................................................................................................................ 9  
  3.1 Processes ................................................................................................................... 9  
    3.1.1 Process-oriented thinking .................................................................................. 10  
    3.1.2 Process Management ....................................................................................... 12  
    3.1.3 Process development ....................................................................................... 13  
  3.2 Change management ................................................................................................. 15  
  3.3 Principles and history of the Lean-method .............................................................. 18  
    3.3.1 Identifying value and waste in the processes .................................................... 21  
    3.3.2 Value stream and value stream mapping ........................................................... 24  
    3.3.3 Kaizen ............................................................................................................... 25  
    3.3.4 Lean leading and the concept of continuous process improvement ............... 28  
4 Research methodology ..................................................................................................... 29  
  4.1 Ontology, epistemology and research approach ...................................................... 29  
  4.2 Research strategy ..................................................................................................... 30  
    4.2.1 Data collection methods ................................................................................... 31  
    4.2.2 Validity and reliability of the study ................................................................... 32  
5 Implementing Lean for Kela ............................................................................................. 34  
  5.1 Data collection, 1st Questionnaire, .......................................................................... 37  
    5.1.1 Results of the data collection, 1st questionnaire .............................................. 38  
  5.2 Workshop .................................................................................................................. 53  
  5.3 Implementing the development suggestions ............................................................ 55  
  5.4 Halfway checkpoint ................................................................................................. 67  
  5.5 Follow-up, 2nd questionnaire ................................................................................. 68  
    5.5.1 Results of the follow-up, 2nd questionnaire .................................................... 68  
6 Discussion and Conclusions ............................................................................................. 72  
  6.1 Conclusions of results ............................................................................................... 72  
  6.2 Challenges of the study ............................................................................................ 75  
  6.3 Recommendations and Suggestions for Further Research ...................................... 76  
  6.4 Reflection of own learning ....................................................................................... 77
References ........................................................................................................................................ 79
Appendices .................................................................................................................................... 83
  Appendix 1. Cover letter of the 1st Questionnaire ................................................................. 83
  Appendix 2. 1st Questionnaire ................................................................................................. 84
  Appendix 3. Open answers of 1st questionnaire .................................................................. 87
  Appendix 4. Workshop: What will change? ............................................................................. 88
  Appendix 5. Workshop: Current Processes ............................................................................ 89
  Appendix 6. Workshop: Ideal Process .................................................................................... 90
  Appendix 7. Workshop: development suggestions in a flip board ..................................... 92
  Appendix 8. Development suggestions table ......................................................................... 93
  Appendix 9. Cover letter of 2nd questionnaire .................................................................... 105
  Appendix 10. 2nd questionnaire ............................................................................................ 106
  Appendix 11. Open answers of 2nd Questionnaire ............................................................. 107
1 Introduction

At the current economic situation the pressure of improving efficiency has reached all sectors of the economy and forced all organizations to critically evaluate their functions. There is a need to be more efficient with less costs, to make more with less personnel and with less resources but still maintain a certain quality. In addition to the private operators, the same concern applies also for the public operators; the government and other government agencies and public bodies even though purpose of the business is different from those operating in the private sector. As the private operators primarily seek profit form their operations, public operators are usually non-profit and only seek to operate with as minimum expenses as possible.

The necessity of efficiency improvement have made organizations to seek a solutions from different ways such as process improvement and Lean thinking. Even though the foundation of Lean thinking is in Toyota’s automotive industry it can be applied also to other kinds of industries as well. The core idea of Lean is to create more value to the customers with less resources by minimizing all the waste from the processes, the work that is not absolutely necessary and as a result create a better profitability for the organization. In addition, as processes are also the very core of organizations as well as the base of Lean management, process improvement is crucial when developing businesses and enhancing performance. By understanding the processes and why certain things are done, the organization is able to understand its own operations in a better way and to see all activities as a network of value creating processes and to improve those stages that might need improvement in order to gain better profitability. (Laamanen and Tinnilä, 2009, 47, 52; Lean Enterprise Institute, 2016)

Kansaneläkelaitos, later referred as Kela, the Finnish social security institution that manages the social security matters of those who live in Finland and abroad, as a public operator in Finland has received its share of these pressures of improved efficiency and some changes needs to be done. Even though no termination of employment as a result of the economic situation has yet happened, the pressure for more efficient and productive organization is existing due to the fact that more and more needs to be done with less personnel as new employees might not be hired in the place of the retired or resigned employees. In addition, even though the pressure of the improved efficiency is high the quality also needs to either stay the same or even improve, as the requirements of the customers and society rises. Furthermore Kela’s strategy strives for best service and improved quality, which is a part of the vision and strategy for the future years. (Kela, 2016c)
1.1 Research Problem, Goals and Objectives

In recent times the workload in international child benefit (kansainvälinen lapsilisä in Finnish) has been overcrowded and therefore the processing time of these applications has been prolonged. The main goal of the study was to find out what are the main problems in existing processes of international child benefit in Kela and how can the processes be optimized and the lead time reduced to meet the expectations of the tightened situation. The goal was to improve the lead time and through unification of the working methods improve the productivity of these teams involved into the study, and thus making the operations more profitable. Lead time is the time taken between the initiation of first activities and carrying out the finished product to the customer; in this work it means the time taken between a customer's application arrives to Kela until the customer gets his/hers decision of the benefit. In the beginning of the study the lead time in international child benefit was extremely high and it exceeded the requirements/expectations set for it and therefore there was definitely a need of lead time reduction and process optimization.

The study aims to find out the problems and obstacles within the processes and working methods of the teams that handle international benefits in Kela in order to improve the processes and reduce lead time. Consequently, the current traditions, problem points and development needs were figured out and recommendations for the future were made. As a result of these changes the aim was that the customers will receive their decisions much faster and in a better quality. Improved quality and improved lead time will also result as lower level of complaints from the customers and lesser incorrect decisions that have earlier on employed a lot of the workers.

As a part of Kela’s Stategy for 2015-2018, which consists of three segments, as one segment Kela aims for improving the customer experience, enforcing trust and improving the quality and efficiency of the customer process. In addition, as for strategic goals process development into a more efficient and economically responsible as well as more customer oriented is mentioned. Therefore the study fully supports Kela’s strategic aspirations for the future and present. (Kela, 2016c)

In the starting situation the lead time of international child benefit applications was approximately 82 days (cumulative average during April – September 2015). As a short term goal for the study, to be valuated six months after the beginning of the project, lead time goal of 70 days was set. In addition, a long term goal, to be reached in the next few years, of 50 days was also defined.
Research questions:
1. How to improve processes in international child benefit application processing?
   1.1. What are the major problems and obstacles in the processes resulting that the lead time in the international child benefit is so long?
   1.2. How & with what kinds of solutions and development suggestions the case-organization can reduce the lead time?
   1.3. Will the law, other institutions and the information systems be obstacles for the development of the processes? Will the employees accept the improvement suggestions into their working methods easily?

1.2 Structure of the study

The study started and continued throughout the study with getting familiar with the relative literature about process management and development, Lean method and change management. The study started in October 2015 and continued up to May 2016. However it is still ongoing as many of those development suggestions that rose through this study are still unfinished and the process of continuous improvement is never-ending.

The study consisted of two questionnaires and a workshop, the questionnaires can be found in appendices 2 and 10. The aim of the fist questionnaire was to involve everyone and to gather development suggestions and problem points for further development, the results were also utilized in the workshop. After the first questionnaire a Kaizen workshop was held. Only part of the employees could participate into the workshop where there were several assignments and discussions concerning the current process and the desired stage of the process that would be aimed to. As a result of the workshop an ideal process was drafted and a list of development suggestions gathered.

After the workshop the implementation of the changes and development suggestions started during which all employees were kept informed about what is happening. In the end of the study a 2nd questionnaire was implemented in the aim to review the opinions of the employees of how the development project has went in their point of view and if it has been helpful. In the future the purpose is to continue the development continuously and encourage the employees to bring out development suggestions or problem points whenever they meet them.
2 Case organization; Kela

Kansaneläkelaitos (Kela), the Finnish social security institution, manages the social security matters of those who live in Finland and abroad and have the Finnish social security coverage. Kela operates under the supervision of the Finnish Parliament and the content of the social security is determined in the legislation. The Finnish social security consist of wide range of benefits for different kind of situations in life that the people might need, such as benefits for the small children and their parents, unemployment, sickness, pensioners, etc. Among the others things Kela has the function to do research, statistical work and reporting on social security matters. (Kela, 2016a)

This study focuses on Kela’s Centre for International Affairs as all international aspect benefits and their processing has been centred there. More specifically the study focuses on improving the processes and unifying the working methods within the teams that handles family benefits that have international aspect. In the beginning of the study these teams consisted of 19 employees plus the two team leaders that run the teams. The researcher has been working as a team leader in the other team since 2014. The teams handle applications and matters of international aspect in child benefit, child home care allowance and private day care allowance as well as all parental allowances. This study focuses on international child benefit as it is the biggest one in volume wise of the previously mentioned. Additionally, at the beginning of the study, there was 10 employees from other teams in Kela’s Centre for International Affairs that handled international child benefits as a part of their job.

Kela’s Centre for International Affairs was established in January 2014, before this there were twelve international units that processed international matters in Kela. International child benefit processing time was long before the establishment of Kela’s Centre for International Affairs but after the establishment the situation was fully realized as all the work was moved into same work queue. In order to dissolve the backlog a lot has been done since January 2014 and the situation has been improved significantly. However, a lot of improvement is still required in order for the lead time to be acceptable and reasonable for the customers.

2.1.1 International child benefit

Kela pays child allowance for each child living in Finland under the age of 17. In some cases, child benefit may also be paid for children living abroad. Child benefit is paid to the parent with whom the child lives. The amount of the benefit depends of the number of the
children in the family (same household). Kela also pays single parent supplement for those parents taking care of their child alone. (Kela, 2016b)

Those cases where the family is moving to or from Finland or part of the family is living or working outside of Finland are being handled in Kela’s Centre for International Affairs. In these cases it might be necessary to apply EU-laws or other international laws and possibly contacting other foreign institutions and therefore they require the skills of the special unit and are being centred into Kela’s Centre for International affairs.

### 2.1.2 International child benefit process

All benefits processes in Kela follow similar process stages that are common to all benefits. These stages are represented in Figure 1. In the process charts there are different roles for those that operate in the process, these roles are; service advisor, mail handler/scanner/indexer, benefits handler and expert. This study focuses into mainly into the process that is operated by the benefits handler, however the study bypasses also the roles of the others. (Kela, 2016d)

**Figure 1. Process stages that are common to all benefits, modified from Kela (2016d)**
In addition to the common process stages, each benefit has its own process descriptions that however follow the common form. Moreover there are usually numerous other processes that bypass the process in question and needs to be followed on the side. In international child benefit there are two main processes to follow, the basic process of child benefit and the common process of all international family benefits. (Kela, 2016d; Kela, 2016e)

In the beginning of the process the documents are being scanned in indexed into Kela's own information system, OIWA. OIWA (Own Integrated Work Area) is Kela's own information system that is designed for customer service and for benefit processing. It gives the benefit handlers the ability have a general impression of the customer's situation quickly. In OIWA, there are separate work queues for each benefit and the documents after scanning are listed into these work queues. If the customer has left the application through Kela's E-service, the documents are listed directly without the process participation of the scanner/indexer. (Kela, 2016e; Kela, 2016f)

As the benefits handler starts the process, he/she picks the work from the queue as it has been stated in the work shifts. The benefits handler starts to get to know into the customers overall situation in OIWA by looking through the family information, cohabiting partners, belonging to Finnish social security, other applications and benefits, contacts and looking through the application. After this he/she checks that all necessary documents and contacts are attached to the case. Hereafter the necessary information e.g. bank account number and the correct date of arrival is registered (not if it has arrive through E-service) into CICS, an information system where the actual decision is being made. CICS (Customer Information Control System) is an online transaction management system by IBM that is used in Kela together with OIWA for benefits processing. (Kela, 2016e; Kela, 2016f)

In case the benefits handler notices that additional information from the customer is required, the customer is contacted (primarily via phone) and the additional information is requested. The additional information is always requested until a due date and the information is documented into the comment box of OIWA. Also a letter or message through the E-service can be used. For the letters, there are various letter-templates that can be used with formatting, designed to different situations. If the benefits handler is unable to do anything else on the matter, the case is being left waiting into the work queue. In addition, if the benefits handler notices that the person is not covered by the Finnish social security system, and there is an application pending or it's not yet been submitted, the child benefits application needs to be left waiting during the process of the Finnish social security coverage. (Kela, 2016e)
In international child benefit the next step is usually to apply for a short personal identification number, if the necessary information for it is present. In the cases e.g. where a person does not live in Finland but is needed in the decision process (most often a child of a Finnish worker living in another EU-country) if they don’t have an actual Finnish social security number a short personal identification number (just to be used inside Kela only) needs to applied. (Kela, 2016e)

Next in majority of international child benefit cases a request for information is sent to the competent EU Member State institution with an SED-form and the case is being left to wait for a response. SED-forms are Structured Electronic Documents that has been designed for communication of data between institutions within the EU region which will be done through EESSI-system (currently still the documents are being used in paper form before the electronic system is being established properly). Depending of an EU Member State in question, but on average getting the responses to a SED-form takes several months. (Kela, 2016e; European commission, 2016)

The SED-form is sent usually in cases where part of the family lives in another EU-country and there is a need to confirm the family relationships, ask for additional information and to find out which country ought to pay the family benefits in full amount and which as a supplementary benefit. The primary and secondary payers (the one who pays supplemental benefit) needs to be solved according to the Regulation No 883/2004 of the European Parliament and the council on the coordination of social security systems (EY). Supplement benefit is paid in cases if those benefit that are paid form the secondary country are bigger than those of the primary country, the amount of the supplement is the difference between these two benefits. (Kela, 2014)

As the cases vary a lot and some might be very challenging, consultation of more experienced co-workers or even lawyers might be needed. After all needed information is received, the application can be resolved and a decision can be given. The benefits handler uses all information that is available in Kela and prepares and resolves the case with the help of decision templates and phrases that are premade for various occasions. After this the case is provided with sufficient commenting and the necessity for secondary measured/effects to other benefits needs to be checked. (Kela, 2016e)

2.2 Previous Lean projects in Kela

There have been few previous Lean projects in Kela and in Kela’s Centre for International Affairs. One lean project was done with the help of a consulting company in the end of
2014 and it was done in a team that handle Finnish social security coverage. In addition Lean has been implemented through observations of the work into one customer service unit in 2015 and into international pension teams in 2014 in Kela’s Centre for International Affairs. The observations were done by the process owners.

The results of the lean projects have been good and there has been many improvements that have been implemented as a result of these projects. In addition, some improvements into cooperation between the different teams and units have been established and shared. However, this Lean development project that has been implemented into international child benefit has been by far the most intensive and more thorough than the others and much more issues has been improved and changed.
3 Literature review

The theoretical framework of the study discusses process development and process management as one would need to understand the function of processes since they play a much centred role in this study. In addition the theoretical framework discusses about the lean method and lean leading as a tool for improving efficiency in the process. Furthermore change management is being issued as developing processes and implementing lean requires a perspective of this.

3.1 Processes

Laamanen and Tinnilä (2009, 108, 116-121.) describe processes as logically connected activities that lead into the ultimate goal of transforming the inputs (material or information) into the outputs (the product or service delivered to the customer). Processes are all about the ability of the organization to understand its own operations and profitability. The core idea of the process-oriented thinking is to create value to the customer through the chain of activities called a process, process-oriented thinking is that processes always start and end to the customer. Another principle is that processes always start with some sort of planning and end with evaluation, of which purpose is to encourage the continuous development of the processes. (Laamanen & Tinnilä 2009, 41, 52.; Virtanen & Wennberg 2007, 116.; Laamanen, 2004, 52-53).

According to Kela’s process handbook (Kela, 2013), in Kela the processes often include Kela’s own employees form different units but also often operators and cooperation partners outside Kela. In addition the processes in Kela fulfil the following criteria:

- A process is all those repeated actions that we do to serve customers both inside and outside the organization
- The processes cross organizational boundaries and are usually independent of organizational structures
- A process always has a customer that receives a service or product
- A process starts with a customer need and ends into fulfilling that need
- In process thinking one is interested in how the work is being done
- A process is an ensemble of a combination of connected activities and chores (Kela, 2013)

Processes are often divided into core processes and support processes but in some occasions also some other definitions are being presented. Core processes are functions that support the core functions within the organization, the functions that are essential for its
operations and add primary value to the customer and are the reason why the organization exists. Support processes are functions that exist for the reason to support and enable the core processes. Support processes are important but no organization solely exists just to perform supportive processes. (Virtanen & Wennberg 2007, 118.)

Process owner is a person or a team responsible of the development, function and results of the process. They are responsible e.g. of the planning process, work methods, information systems, developing the process to improve efficiency, measurement and reporting. The goal of the process owner is to create a process with first class performance ability. Process owner is also responsible of the constant development and improvement of the process. (Laamanen & Tinnilä 2009, 127)

3.1.1 Process-oriented thinking

The aim of process development in this study is to detect whether or not the employees are following the current processes but also to detect if there are problems within the current processes or ways of working that causes delays.

The roots of process-oriented thinking are deep in the history of the organizations, yet it has been described as process-oriented thinking only in the proximate past. As for the public sector the process-oriented thinking came in the 1980’s and 1990’s as the way of thinking rooted into management and development activities. Nevertheless in public sector the process thinking differs slightly from the private sector as the public sector’s process-oriented thinking is directly connected into the government’s performance requirements particularly with regard on social impact. (Virtanen & Wennberg 2007, 64-65)

In Kela there has been systematic improvement of processes and quality since the early 21st century and Kela’s board of directors approved in fall 2010 the policies of moving into process-oriented thinking. Processes are the core building blocks of Kela’s operations and structure of development into which the requirements of operations as well as the support means in practice can be drawn to. The aim of process management in Kela is to lead the operations as a whole and to diminish the downsides of only partial optimization, to unify the quality of services in the whole country and reduce overlapping work as well as change attitudes into more cooperative nature according to Kela’s values. Kela aims to give the best service within the public sector which gives the course to constant and determined process improvement that requires cooperation and dialogue that questions the current practices. (Kela, 2013)
According to Laamanen (2004, 49.) there are some differences in an organization that has adopted the process-oriented thinking (process centred organization) as compared to an organization centred organization (functional). These differences are being presented in table 1 in an extreme sense.

Table 1. Differences within the thinking, modified from Laamanen (2004, 49.)

<table>
<thead>
<tr>
<th>Organizational centered organization</th>
<th>process centered organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>The problem is in the attitudes</td>
<td>The problem is in the processes</td>
</tr>
<tr>
<td>Employee</td>
<td>Person</td>
</tr>
<tr>
<td>I do my own job</td>
<td>Let’s help others to get the job done</td>
</tr>
<tr>
<td>I understand my own work</td>
<td>It is understood how the work is connected to other processes</td>
</tr>
<tr>
<td>Only individual performance is being evaluated</td>
<td>The process performance is being evaluated</td>
</tr>
<tr>
<td>A better employee driver can always be found</td>
<td>Process can always be improved</td>
</tr>
<tr>
<td>Motivate the people</td>
<td>Remove the obstacles</td>
</tr>
<tr>
<td>Monitor the employees</td>
<td>Develop the competency of the people</td>
</tr>
<tr>
<td>Trust no one</td>
<td>We are all here together</td>
</tr>
<tr>
<td>Who made a mistake?</td>
<td>What made it possible for the mistake to occur?</td>
</tr>
<tr>
<td>Fix mistakes</td>
<td>Diminish the deviation</td>
</tr>
<tr>
<td>Profit is all that matter</td>
<td>Customer orientated; good profit is a consequence</td>
</tr>
</tbody>
</table>

In process-oriented thinking all organizational activities are seen as processes and play their own part in developing the quality. Before managing the organization through processes, all parts of the process must be recognized, described and the process owners must be named. The performance and efficiency of the processes are being measured and through this constant development and improvement is being done. Describing of the process is important and as an American economist William Edwards Deming once put it in words; “If you can't describe what you are doing as a process, you don't know what you're doing.”. (Virtanen & Wennberg 2007, 114-116; Lecklin & Laine, 2009, 40.)

The purpose of processes is to change the resources into activities that support the strategy, to make the best possible solution and structure in terms of societal objectives. Processes set the goal and requirements for the organization’s resources; what kind or knowledge, premises and information technology is required for the processes to function. The cycle of process management and process development is described in figure 2. (Virtanen & Wennberg 2007, 113-114)
3.1.2 Process Management

In the background of process management lies a very fundamental question of how can the organization create value to the customer. Process management is not just defining and describing the processes, even though this is something that very often happens when the core idea of the process management is lost. However, process management do require defined process descriptions because they are important tools for idea clarification, documentation and communication. In process management the aim is to identify the processes (also those that exceed the traditional organizational boundaries) and reform them so that the tasks are performed in a logical order in a more linear way with the intention of all the pointless phases being deleted, the activities that does not bring any value to the customer. Process management focuses mainly into action and the goal is to improve the efficiency of the organization by improving quality. (Laamanen & Tinnilä 2009, 10-15; Virtanen & Wennberg 2007, 113-114)

As mentioned, process descriptions and charts are important, even though they are not the sole meaning of process management. The descriptions and charts of the process are tools for management to control, evaluate and develop the functions. In the descriptions all actions, both core functions and support functions are being defined as well as the cross dimensional connections and hierarchy of the functions. By making the process visible and as illustrative as possible, it helps the personnel to understand their role within the
process and gives the ability to control their part of the process as the process management is based on facts and instead of assumptions. Process management and process development always requires the knowledge of the current process. (Laamanen & Tinnilä 2009, 10-15; Virtanen & Wennberg 2007, 121-124)

3.1.3 Process development

Laamanen (2004, 39, 45.) describes that processes are the structure of development within the organizations and offer a common thread to which all the demands and support structures can be indicated. In order to develop the process, one must be familiar with the process, otherwise one would not have a clue of the matters that in fact should be developed and needed change.

As in all development but especially in process development, it is crucial that all who are part of the development understand what the development is about and what the goals of the development project are. In process development there must always be goals, otherwise it is relatively impossible, even though some organizations still go through it without goals. Goals are usually a combination of performance and results. Usually a good goal contains the following elements; the goals are represented with numbers, there is a component of measure and the goal is time bounded. If the goal lacks some of these elements it is possible that it is not a goal but rather a direction, wish or ambition. In addition to the previously mentioned good goal is also expressed in a positive way, it has been set by the group itself, it has been written down, it is challenging but achievable, it is appropriately far in the future (6 months is a good distance to expect concrete changes) and the goal is accepted by the group and the rest of the organization. (Laamanen, 2004, 202-203; Virtanen & Wennberg 2007, 93.)

Process development often start with analysing the process, choosing the style of implementation and making the development plan. The plan can contain the goals of the development project, new process chart, timetable and responsibilities, resources and other set demands. In process development the commonly used form is Deming’s quality circle “Plan-Do-Check-Act”, also known as PDCA circle (Figure 3). It is a systematic set of steps that guide to continual improvement of the process. The PDCA starts with planning not with knowledge or experience. The planning stage is wide as it is not only the developing the plan but also analysing the problem, identifying the goal or the purpose of the development, brainstorming the solution, evaluating the ideas and putting the plan into action. The next steps is the do-step, where the plan is implemented and after that comes the check - step where made changes are being measured and evaluated, this is where the learning also happens as the problems, progress and success is being issued. The act-step closes
the circle where the needed changes from the check-step are being realized and implemented. In addition there is necessary to reassess the results and think about the things learned during the process. These four steps are repeated over and over again as part of everlasting cycle of continual improvement. (Laamanen, 2004, 209-2010; Pitkänen, 2010, 72, 97-100; The W. Edwards Deming institute, 2016)

Moisio (2008, 15) describes the ideal process that should be the goal for all businesses as following:

- Each phase of the process creates additional value to the customer
- The amount of defects and variation of features is nearly zero
- The production capacity can be used at all times and the maintenance is working anticipatory
- There are no bottlenecks in the processes and the process is flexible so that changes in demand can be responded quickly
- The phase of the process and material flow is constant and in line with the demand
- The production of different products is synchronized and aligned with the demand

According to Kela’s process handbook (Kela, 2013) by constantly developing the processes Kela ensures that the customers are happy, the benefit services are without defects and uniform in quality, there is fluent cooperation between different units, there is understanding of Kela’s operations as a whole and of own role within this entirety and there
is overall optimisation and ensured path that the operations are done in order to reach the goals. (Kela, 2013)

Process development requires change management, in order for the full scope of the change to be understood and the steps, risks and needed management methods are being evaluated and considered. Process development and adapting process-oriented thinking requires courage and management skills because some pressure might be needed to push the organization into thinking its ways of operating in a new way and due to this some change resistance might occur. (Virtanen & Wennberg 2007, 75-77)

3.2 Change management

When developing the processes and implementing new ideologies such as the Lean method to a company one must consider organisations adaptability to change and the possibility for change resistance. Therefore the next chapter will shortly discuss about change management.

Change has probably as many definitions as there are authors, but BusinessDictionary.com (2016) defines change as “the process of causing a function, practice, or thing to become different somehow compared to what it is at present or what it was in the past.”

Change is part of all kinds of organizations and is reaching every one of us. Changes also happen constantly in the operative environment within the organizations and it requires a lot of knowledge from the organization to handle them accordingly. Change needs to be planned and those in charge of the change should have a legitimate change agenda. In order for the change management to success, it should also be defined of what specifically is the change that is desired. The change could be needed to exploit new opportunities or fix deficiencies. (Valpola 2004, 27.; Virtanen & Wennberg, 2007, 72, 93-94)

According to Power (2013) the public administrations and government agencies are the most difficult ones to change mainly because of the excessive amount on bureaucracy in them that causes challenges. Basically Power states that the only key driver or a “push” for a successful change is congressional or administrative mandate. In addition when the changes start to happen they tend to take a lot of time to finish. Power emphasizes that in these organizations the leaders must be even more vigorous and enthusiastic in order for to get everyone involved and to ensure that the vision is communicated properly. (Power 2013)
Valpola (2004, 29-35) defines five stages that needs to be included in change in order for it to be successful. All of these stages need to be performed otherwise the change will not be done properly. These stages are:

1. Definition of the need for change
   - Justification why the change is important and needed and what is going to be reached with it, people need to be excited about the change

2. Creation of common understanding
   - Gives the route map and compass so that the change happens as it has been planned, it also gives the measures with what the performance can be evaluated

3. Ensuring organizations capability to change
   - Realizing the differences and possibilities of organizations with diverse capabilities and taking action based on that. Also involvement and visible change results can have significant impact on the willingness to change

4. Taking the first changes into action
   - The first changes are significant for the entire change as they are being viewed more critically than the latter ones. First changes concretize the start of the change

5. And anchoring all the changes into the organization
   - Anchoring phase might take a long time as it is hard to get rid of the old habits thoroughly but consistency and persistency are the key here

(Valpola 2004, 29-35)

As Valpola (2004, 29.), Kotter (2009, 11.) also states similar types of features for a successful implementation of change. It is crucial that as many as possible would understand the true need for a change. The desire for change is where it all starts from as a team that is committed to the change and can understand the necessity of it usually can adapt to it better and finds ways to tackle the problems in cases where the situation still remains a bit blurry or the strategies are hard to define. Strongly committed teams can communicate the vision and strategy and spread the will for change around them. In change the key is persistency, not backing down when the first problems occur but to add more effort into the change and not giving up until the vision has been reached. After this it is vital also to make sure that the changes made are for good and this is why the changes should be connected to the corporate culture as well as to its structures and systems. (Kotter 2009, 11.)
Wheatley and Kellner-Rogers (1998) as well as Aguirre and Alpern (2014) emphasize on the importance of involvement and engagement of the employees in all level of the organization into the change process, from the top level management to the frontline people. Leaders must learn from the employee's reactions, especially the negative ones, because it reflects of what is important from a different perception and gives new ways of thinking. After completing the organizational change successfully, the employees of the organization have felt more committed to the organization, confident with their own working effort and prepared to deal with change in future. (Wheatley & Kellner-Rogers, 1998)

Kotter (2009, 33.) states that behind a true will for change is always emotions, it is not reached just with sense and thoughts. There are few key points to follow when creating a true will for change in an organization: first people should be told all the important facts about the necessity of change so that people are convinced, at least in a level of thought. However, as mentioned before reaching only the thought level with facts is usually not enough to create sufficient level of will for change, therefore it is necessary that secondly the people must be won over by reasoning and emotions with goals that genuinely inspire and raise the will to act. (Kotter, 33, 42.)

The worst enemy of change lies in all of us and nothing will change or get better unless we change ourselves. Johnson (2002, 26-31) describes that routines and getting stuck in certain ways of thinking or doing things makes people ignorant and unable to prepare for oncoming changes; people get used to doing things in a certain way and cannot or just won’t see or even consider other ways of doing things even though they might be clearly better ones. According to Johnson (2002, 13-14) usually the attitude is the key in change resistance. (Johnson 2002, 13-14, 26-31, 69.)

Change resistance is something that might come across when people don’t understand the true meaning and the need for the change. They fear the loss of losing the routines that they find safe and good. Change resistance can occur at all levels of the organization and the form can differ from just resisting to take part in or adopting the changes to actively and loudly resisting them. The leaders who are responsible of the change should ensure that the communication is done properly and that it is sufficient, the employees are involved to the change and there is an open dialog between the employee and the management about the change. (Lanning, Roiha & Salminen 1999, 137-140)

While Virtanen and Wennberg (2007, 94.) and Business Improvement Architects (2016) state that change resistance is something that should not be frightened as it is a sign of a healthy organizational culture, Johnson (2002) on the other hand gives certainly a more
negative impression of the change resistance in his book *Who moved my cheese?* (*Kuka vei juustoni?*) and basically describes that change resistants are always left behind and those willing to change will be more successful than those that adopt slower.

Kotter and Schlesinger (2008) bring out that even changes that seem to be positive or rational, involve loss and uncertainty and might create change resistance. They represent four basic reasons why people resist change: 1. parochial self-interest 2. Misunderstanding and lack of trust 3. Different assessments 4. Low tolerance for change. Aguirre, Alpern and Post (2013) on the other hand state that biggest obstacle for successful change is “change fatigue” -too many changes are being tried to implement at once. In addition, they highlight that also the fact that there are not enough change capabilities in the organization to deliver the change, to iterate the major changes at last and to ensure the change is sustained as well as the problem of excluding lower level employees to the change process are mistakes that leads to problems. The way the change is being planned, informed and implemented by the senior managers, without the input of lower level employees limits the acceptance and understanding for the change. (Kotter & Schlesinger, 2008; Aguirre et al., 2013)

Kotter & Schlesinger (2008) say there are different ways to handle these different types of resistances, such as education and communication, participation and involvement, training and support, negotiation and agreement, manipulation and co-option and coercion. Business Improvement Architects (2016) also list ways to reduce resistance to change; involvement of interested parties into the planning, a clear definition and communication of the needed change both personally and in written, addressing “people’s needs” and change only matters that really needs to be changed, make the change as flexible as possible, be open and honest, don’t give any possibilities to return to starting situation, focus on the positive aspects and be specific when possible and deliver training programs for basic skills.

### 3.3 Principles and history of the Lean-method

The Lean method and Lean leading is originated in Japan, in the car manufacturing business, from the Toyota’s production systems (TPS). Toyota’s production systems was created in the middle of the 20th century when Toyota needed to create a competitive advantage in order to compete against the American car manufacturers in a very different kind of circumstances and market that the Americans had. They needed fast and flexible processes that gives the customer what the customer wants, when they want it, with the highest quality and with a good price. Consequently Toyota created a method where the processes of design and manufacture were as uniform as possible. This resulted that
Toyota manufactures cars faster, a more reliable way and with a competitive price. In 2016 Toyota was the largest automotive maker in the world and without a doubt the most profitable. (Liker 2010, 3-4, 8, 18-21, Trudell and Horie 2015, Tovey 2016)

Toyota’s production systems, or “Lean” as it is formally known around the world, aims to strive for excellence and its main idea is to reduce the waste within the production processes in order to improve profitability, reduce lead time and improve customer satisfaction. Toyota production system (TPS) always observes matters from the customers perspective, and the first question in TPS is always: “what does the customer want from this process?”. (Liker 2010, 7-9, 15, 27.)

Liker (2010, 7.) emphasized that Lean needs to be approached in a holistic way throughout the entire organization and most organizations fail in adapting Lean because they only focus in certain tools like 5S and JIT (just-in-time) without implementing lean from the top to the bottom and engaging everybody. Lean should be applied to all operations of the organization and especially the top management should be willing and committed to continuous improvement process and investments into personnel which is part of lean. (Liker 2010, 7.)

According to Liker (2010, 6-7, 12-13) there are 14 principles that are the success of Toyota and form the “Toyota way” and are the foundation of TPS. The 14 principles can be divided into four categories: Philosophy, Process, People & Partners and Problem (Figure 4). Most organizations fail when implementing Lean as they only adapt one stage of the 4P’s or only one lean-tool such as Kanban or Heijunka. This only results as temporary improvement as the long term success is not achieved if only partially implemented.
The core idea of Lean methodology is to maximize the value transferred to customer while minimizing all action that don’t bring value to the customer. A Lean organization focuses on its key processes an continuously tries to improve the value transferred to the customer. In lean there are three clear parts that are distinguished from one another: process development, development of people’s behaviour and the utilization of new technology and tools. (Lean enterprise Institute Inc., 2015)

The goal in Lean/TPS is to create a value stream, a flow that is as uniform as possible by constantly decreasing the time and effort used to actions that doesn’t create value. Often it is thought that by creating a quicker process you would need to compromise on the quality, that faster is always more sloppy, but that is not the case when applying a better flow into the process. (Liker 2010, 88, 93-94)

Toyota’s way of leading differs quite a lot from the traditional western way of leading, where organizations are seen as machines and people perceived by the tasks they are performing. There are trained specialists or process owners that decide on the processes and administer them, the managers are supposed to monitor that the processes are followed literally guided by other set measures and goals, whereas the employees that actually perform the processes are not involved into the planning nor encouraged to make improvement suggestions. This creates a hierarchical structure where only trained specialists/process owners are encouraged to think and normal employees are seen as unwise automat and managers as bureaucrats that monitor the following of the rules without any
variation. Toyota does not see organizations as machines but rather as complicated, dynamic and unpredictable as are the people that work in them. Toyota aims to create customs and structures that ensure righteousness and trust amongst the employees in order to create an atmosphere where all employees are not only willing to report problems but also actively taking part in solving them. (Liker & Convis, 2012, 9-14)

Because Toyota sees the organizations as unpredictable, the organizations must be able to adapt at all times. The adaptability and ability to be open for modifications should run throughout the entire organization in all of the processes. And who would be the best to modify the process rather that the employees that perform it every single day? Certainly not the experts/process owners that usually create the processes without ever having to perform it nor the managers that only follow the manuscript of the processes created by the experts. People throughout the organization should be trained and encouraged to think and react accordingly. The employees that are producing the most value to the customer directly are the most valuable resource in the organization and should be invested in. This is one of the key factors in lean-thinking and one major recipe of Toyota’s success. (Liker & Convis, 2012, 13-15)

Liker and Convis (xxi, 2012) emphasize on that no matter how much do you invest into Lean-process, it will not resolve as wanted results unless Lean-leading has been implemented throughout the whole organization, also in the support-functions of the organization. In addition they state that a big mistake is that managers who are not close to the “gemba”- the place where the value is created – are making all the crucial decisions without fully understanding the effects on their decisions in the gemba.

Taking the personnel into account is crucial in Lean, because the employees must be motivated and skilled in order for the Lean to even work. In addition, implementing the Lean model requires from the organization changes in the organizational culture and prerequisites in management in order to implement it successfully, as Lean will inevitably affect to the employees behaviour, customs and practices. This way the transparency of the model increases the consciousness of the employees own work; the knowledge, skills and effectiveness as the things already known doesn’t need to be reinvented. (Kajaste & Liukko. 1994, 8-12, Schipper & Sweets 2010, 4-7)

3.3.1 Identifying value and waste in the processes

In processes there are activities that bring value to the customer and activities that bring no value to the customer. Moisio (2008, 18-20) defines the value and waste of process phases as following:
I. The activities that bring additional value to the customer
   a. The customer is willing to pay for it
   b. Activities that advances or changes the form, suitability or performance of
      the product or service in a way that the customer has required
   c. And activities that are done correctly in the first time

II. Non-value adding activities which however are needed
   a. Necessary but the customers wouldn’t want to pay for it
   b. Activities that cannot be erased because it would lead to misbehaviour and
      wild activities
   c. Activities that has been required by authorities or by law

III. Non-value adding activities
   a. Activity that the customer is not willing to pay for
   b. Activity that spends resources but creates no value in the eyes of the cus-
      tomer → basically activities that does not contribute in creating better prod-
      uct as the customer has required
   c. Can clearly be defined as waste

According to Liker (2010, 87.) most processes contain 90 percent waste and only 10 per-
cent of work that bring value to the customer. The value and waste within a process is be-
ing presented in figure 5 in an illustrative way that shows the different phases of the pro-
cess and the lead time of a value stream before lean and what it might look after lean de-
velopment. (Liker 2006, 29-31; Moisio 2008, 32.)

Figure 5. Waste in a value stream (Liker 2006, 29-31; Moisio 2008, 32.)
In Lean manufacturing when talking about waste the three M’s are usually presented; Mura, Muri and Muda. The most commonly known is Muda - the non-value adding work that consists of eight types of waste (see below) that extends the lead time, causes movements in vain, creates excess inventory and causes delays. The other two M’s are a little less known but not less important. Muri means the overloading of people and machines by pushing the limits beyond natural boundaries; unnecessary stress is being handed to the employees and machinery by for example lack of training, unclear or not well defined ways of working, wrong tools and poorly defined measures of performance. This leads to safety issues and defects and quality issues in the product. Mura means irregularity within the processes and can be thought as a results of the other two M’s. It means uneven burden of the work and fluctuation of product volumes. (Earley 2016; Liker 2006, 114-115)

Toyota’s Production systems have identified eight main types of wastes that Liker (2010, 28-29) describes as following:

1. Over production
   - Making more than is required or needed at the very moment
2. Waiting
   - For parts, information, instructions, equipment, other parts of the process to complete in order to move to the next stage of the process
3. Unnecessary transportation
4. Over processing or incorrect processing
   - Completing unnecessary phases or ineffective processing because of bad tools or design which causes defects or unnecessary movements. Also by producing a higher quality products than necessary results as a waste
5. Unnecessary inventory
   - Storing parts, pieces, documentation ahead of requirements
6. Unnecessary motion
   - All unnecessary movement that employees must perform during the process including walking, searching, reaching etc.
7. Defects
   - Rework, inspections, incorrect documentation
8. Underutilized Skills & capabilities
   - Wasting creativity, skills and capabilities by not listening to the employees

When identifying the value and waste, the investigation and evaluation of the current state of the processes and visualizing the future process is important. The organization should define the process (of each product or service) throughout so that it is visible and clear
what happens during the time period starting from when the order for a product comes un-
til the finished product is delivered to the customer. When the current processes are clear
the organization should question the current state by asking a question of what can be
eliminated, simplified, combined, automated and how can we enhance flexibility in the cur-
rent process?. (Liker, 2006, 87-90; Moisio, 2008 26.)

The purpose of analysing and improving the process is to cut down the quantity of work
which results as shortened lead time. The aim is also to improve the process manage-
ment which increases delivering certainty, decreases defects and increases customer sat-
isfaction. All the previously mentioned results as an improved productivity and perfor-
ance of the organization. (Moisio, 2008, 27.)

The difference between the traditional process improvement and lean-improvement is that
traditional process improvement focuses solely on improving the efficiency locally such as
improving the run time of value adding activities or making the activities perform faster.
This affects very little to the whole value stream as most processes have very little amount
of value added activities so the difference might be minimal. In Lean-improvement the
whole idea starts with eliminating the non-value adding activities, the waste, this is where
the vast part of the development process comes from. In Lean-development the flow of
the process is improved and the amount of work is lightened and eased by eliminating the
waste and unnecessary work. (Liker 2006, 31-32)

3.3.2 Value stream and value stream mapping

Value stream consists of all processes, both the value added ones as well as the non-
value added ones that are performed by different people in different workstations in order
to create the service or product to the customer on basis of the demand. In order to recog-
nize and identify the value-adding and non-value-adding activities and steps within pro-
cesses and information flows, value stream mapping is used in lean environments to map
and analyse them. Value stream mapping is not just eliminating waste but also reducing
variability and levelling equipment utilization. The core idea is to produce exactly what the
customer is requesting. (RTDOntline.com; van den Berg & Pietersma 2015, 203-205.)

Value stream mapping is used to identify the possibilities and opportunities in lead time
reduction by recognizing (and then eliminating) the waste and other non-value-adding ac-
tivities. The mapping process starts with selecting a value stream in the organization
which need more specific review. Same type of products, services or product families that
have same type of processing may perhaps have so similar value stream so that only one
value stream map might cover them all. Usually the first value stream that is to be
mapped is the one with most volume. (EMS Consulting Group; van den Berg & Pietersma 2015, 203.)

The value stream mapping process is usually done by a cross functional team that is very familiar with the processes and are open minded about changing it. The first stage of value stream mapping starts with an illustration of the current stage map where all processes, information flows and other important data is being visualized. This happens by walking through or imagining the process and at the same time illustrating it e.g. into a flip-chart. The illustration gives a better view of the value-adding and non-value-adding activities that are currently within the process. After illustrating the current state the next step is to visualize the future state map where the waste is eliminated and a lot of the non-value adding activities are diminished. Important factor is also that the new plan follows the organization’s strategy. The future state map becomes the plan for the future value stream and process and the third stage is to start to implement the changes needed to make the current state to resemble the desired state as closely as possible. After this the monitoring of the progress and continuous improvement starts, this can be done e.g. with PDCA (see chapter 3.1.3 and figure 3). (EMS Consulting Group; Moisio 2009, 16, 49-50; van den Berg & Pietersma 2015, 203.)

The challenges may occur when implementing the desired stage as often people are used in doing things in a certain way and given the freedom to do so too. Everybody should respect the agreed method of working so that the designed ideal process produces the desired results. (van den Berg & Pietersma 2015, 205.)

3.3.3 Kaizen

In Toyota and Lean development the name of constant development of performance is called Kaizen. Literally Kaizen means change (kai) to become good (zen). Kaizen can be used to solve many kinds of problems such as process inefficiencies, quality problems and delivery and lead-time problems. Key elements of Kaizen are quality, effort, willingness to change and communication. (van den Berg & Pietersma 2015, 181)

The Kaizen model suggest that the improvements start with eliminating first the waste (muda) (different types of waste described earlier) and after the elimination or reduction of waste and inefficiencies, the “good housekeeping” should be put in action, which consists of the 5-Ss:

1. Seiri (tidiness) – Simplifying the work by sorting out what is necessary for the work and what is not
2. Seiton (orderliness) - Improving efficiency by making measured decisions about the distribution of e.g. materials, files and equipment

3. Seiso (cleanliness) – Everyone should be involved and obliged to keeping things organized and clean

4. Seiketsu (standardized clean-up) – Part of effective means of continuous improvement is to regulate and institutionalize the process of keeping things in order

5. Shitsuke (discipline) - Everyone should be made personally responsible to live up to the other 4-Ss (this can make or break the “housekeeping”)

After the housekeeping the last part is the standardization of the practices, which makes it easier for everyone to follow and to improve constantly. (van den Berg & Pietersma 2015, 181-184)

When organizing a Kaizen event/Kaizen workshop the process owner should always take part into the Kaizen event as well as those employees that actually perform the process. However, the team that is taking part of the event should not be more than 15 persons so that the conversations and the implementation stays under control. (Liker 2006, 276-277)

In the Kaizen-event small groups are created in order to do investigation and implement small changes with aim to strive for continuous improvement. Kaizen events usually last about a week and in them the participants analyse the current process, create a Lean vision for it and start the implementation. Kaizen event is implemented by the following steps: the goal and the problem must be defined, facts should be analysed, possible outcomes created, the solution should be planned and then implemented, and then the solution should also be checked and secured. (Liker 2006, 276; Schipper & Sweets 2010, 103-104; van den Berg & Pietersma 2015, 181-184).

Liker (2006, 278-279) presents the progression of Kaizen workshop as seen on figure 6. It all should start with defining who is the customer and what does the customer want and what are the measurable goals of the workshop. The team participating to the event should identify the processes that support or bring added value to the customer. The next step is to illustrate and analyse the current state of the process; identify all the process phases and categorize the value-added and non-value added activities. All the development ideas should be documented and discussed. After the documentation of the current stage the team creates and visualizes the future i.e. the desired state by discussing and considering all improvement ideas that came though the previous stage, this can be done e.g. with post-it notes onto a flip board. Once the development suggestions are done and the desired process documented an implementation plan should be done where responsi-
bilities and characterizations of the changes desired are identified. The next step is to realize the future plan, to create a project plan that answers questions what, why and when. The last step is about evaluation of the progress and results. After the workshop the implantation of the desired state should continue and the concept of continuous improvement should be adopted. After the evaluation the next phase is to start the process over again as in PDCA-cycle. In addition there should be check points in designated periods of time to check how the implementation is going and in what the state of the developments is. (Liker 2006, 278-284)

![Diagram](image_url)

Figure 6. Kaizen event. Modified from Liker (2006, 279.)

Liker and Convis (2012,107.) emphasize that, contradictory to the common misconception, Kaizen is not only a one-off event where all the problems are being confronted and changes implemented, it is part of everyday leadership and a path of continuous improvement; day-to-day (maintenance) Kaizen also. The belief is that improvement can’t be constant if it’s only left to small group of process development experts that work for the senior management. Therefore, constant development can be possible only if all employees are engaged into the process of constant improvement and are keen (and given the possibility to) take action in case a problems occur. (Liker & Convis, 2012, 13-19)

It is important to bring out the problems quickly so that the maintenance Kaizen is agile and immediate, and not let the problems build up. Important is also that the problems and development opportunities are not only recognized fast but also fixed fast without delay and unnecessary bureaucracy inside the organization. Here it is important to engage the employees that are nearest to the process, so that they are keen to report the problems and help solving them. True Kaizen only happens when the team is truly responsible of the process that they perform; they operate them and constantly seek ways to make it better, it’s important that the process management, understanding and improvements are close to the gemba, in the team that are closest to the process. When Toyota makes a process improvement, it has two goals; to improve the process in order to get better results and to develop the employees (Liker & Convis, 2012, 107-109, 118-119, 125-126)
The core idea of Kaizen is that nothing is ever perfect and everything can be improved, you can never reach the perfect “Lean solution”. Even if the process would be perfect and without waste today, circumstances change and it might be filled with waste tomorrow. (Liker & Convis, 2012, 31.)

3.3.4 Lean leading and the concept of continuous process improvement

The cornerstone of continuous improvement is that all are familiar of the methods and the actual process that is being changed and to which the continuous improvement is being targeted to. This is crucial in order for everyone to know the variables in the processes and aim for shortening it by interfering when they meet any variables different from the aimed ideal process. If the process developers are not familiar of the actual process, it might be that more damage is done than actual improvements. (Kokkonen 2007)

Liker and Convis (2012, 4.) state that Lean practisers have come into the conclusion that in order to maintain the changes brought by Lean, the company must fully engage the top management and create a culture of constant improvement. The company should change the organizational culture where people tend to work in their own way in order to reach the personal numbers and goals into a culture where people focus on to the customer and to the constant improvement of value streams that deliver the value to the customer. Liker and Convis (2012, 4, 6-7) add to this that achieving culture change is a lot harder than organising a single training or communication session, but still achievable when being consistent about the effort. If Lean is only implemented in parts of the company there is a threat that the changes are not lasting as regression normally takes place if Lean is not implemented throughout the organization. This is a result of the misconception that Lean is only a one-time effort rather than a constant ongoing process that needs to happen in all the employees from managers to the workmen. Still, Liker and Convis (2012, 6-7) doesn’t deny that there can be great benefits also in implementing Lean in only parts of the organization.

Liker and Convis (2012, 13-15) state that one of the key things in lean leading is a constant path of self-improvement for leaders and creating an atmosphere where also the employees can improve themselves. In addition removal of obstacles and placing challenges and goals so that teams in all levels of the organization can be involved into the process of constant improvement and reaching the long-term goals. The managers work as coaches within their teams and guide the employees to consider other processes and work phases that are connected to their work and to be in contact with others in order to evaluate and improve the ways of working. (Liker & Convis 2012, 13-15; Virkkunen 2002, 31.)
4 Research methodology

Saunders, Lewis and Thornhill. (2012, 128) represent the research methodology in the form of an onion (Figure 7); the researcher must start making the research choices of the outer layers moving step by step into the core, where the actual research problem lies. The layers of the onion are respectively research philosophy, approach, methodological choice, strategy or strategies, time horizon, and techniques and procedures. (Saunders et al., 2012, 128)

![Figure 7. The research onion, modified from Saunders et al. (Saunders et al., 2012, 128)](image)

4.1 Ontology, epistemology and research approach

Saunders et al. (2012, 130-132) state that ontology is about what is true (nature of reality) and epistemology is about methods of figuring out those truths (relationship between the researcher and reality). The aspects of ontology is objectivism and subjectivism. In objectivism the social actors are considered as external and the researcher and the people researched are considered as objective and independent. In subjectivism the social phenomena are created from the perceptions and consequent actions of social actors. In this study the chosen ontological aspect will be subjectivism because the nature of the subject
studied is such that the social actors and personal perceptions of the people involved into the study cannot be excluded as they will be present.

Epistemology, however, consists of pragmatism, interpretivism, realism and positivism as the aspects of how to “figure out the truth”. According to Saunders et al (2012, 129) different research philosophies are suited for achieving different things, and it all depends of the research question that the researcher is seeking for an answer. In addition the chosen research philosophies can be thought as assumptions of how the researcher views the world. The research philosophies can be divided into four aspects; pragmatism, interpretivism, realism and positivism. In pragmatism the assumption is that concepts are only relevant if supported by action and the practical consequences are most important meaning for an idea. Interpretivism focuses on to the value of interpretation when creating knowledge and advocates that it is crucially important for a researcher to understand the differences between humans as social actors. Realism relates into scientific enquiry and the essence of realism is that what we sense is reality and there is a reality independent from the human mind. In positivism the data is mainly collected from observable reality and causal relationships and law-like generalizations are searched in order to create credible data. (Saunders et al., 2012, 123-159)

In this study the epistemological assumption is based on interpretivism because the reality of the study is quite subjective and the researcher must understand the subjective meanings and the reality behind the social factors that affect into the situation.

4.2 Research strategy

Action research will be the research strategy in this study. The reason why the action research was chosen is because the researcher is also part of the case organization and is also part of this development project. As a methodology action research allows also the researcher to take a more active role in the research so that the researcher can also improve the operations, evaluate and investigate as a part of the process. Action research is a process of inquiry that is both emergent and iterative as its goal is to solve real organizational problems through a participative and collaborative approach. Action research uses different forms of knowledge and will have an affect also after the study to the participants and the organization. (McNiff & Whitehead 2011, 7; Saunders et al., 2012, 183.)

Action research differs from other research strategies for its explicit focus on action in various stages of the process. According to Kananen (2009, 9-13) the action, research and change happen simultaneously in action research and they are all very closely linked to practical problems, identifying them and eventually eliminating them from the work that is
being investigated. Action research is action that has been thrived from the participants of the research rather than directions and development action dictated externally. The aim of action research is that the change that is reached will be permanent and continuous, therefore the actual action in the research in very important. In action research the main goal is to promote organizational learning in order to produce practical outcomes through identifying issues, planning action, taking action and evaluating action (Kananen. 2009, 9-13; Saunders et al. 2012. 183-184).

Participation is an important part of action research as it is a social process where the researcher works together with members of the organization in order for together to improve the situation within the target organization. The cooperation of the members of the target organization is crucial so that the researcher can investigate the existing practices and the researcher and members of the organization can together improve the situation and sort of become co-researcher together. According to Saunders et al (2012, 184) Schein (1999) emphasizes that participation is important due to the fact that if the personnel of the organization is part in developing the change they are more likely to adopt the change more easily. (Saunders et al. 2012, 183-184).

4.2.1 Data collection methods

Quantitative research method is mainly used to data collection techniques or procedures that collects, generates or uses numerical data, such as questionnaires, graphs and charts. On the contrary qualitative data collection technique is for data collection techniques or analysing procedures that creates or generates non-numerical data, such as interviews. (Saunders et al., 2012, 161.)

Saunders et al. (2012, 166, 674-675) describe mixed method research as a research strategy where both quantitative and qualitative research strategies and analysing procedures are applied, either at the same time or after another. The research method in this study is mixed method as both quantitative data collection (in the form of the two questionnaires) and qualitative data collection (workshop) was used. The data collection proceeded so that first there was a quantitative questionnaire, after this a workshop, where primary qualitative data was collected, and finally a second quantitative questionnaire. As a result we can state that the data collection was sequential, multiphase design, mixed method research because the data collection consisted of multiple phases of data collection and analysis. (Saunders et al., 2012, 166-167, 674-675)

Questionnaire is a general term for all data collection techniques where a same set of questions that are in a predetermined order are being represented to each respondent. It
gives the opportunity to gather quantitative data which can then be investigated and analysed quantitatively using graphic and inferential statistics. (Saunders et al. 2012, 177, 679.)

In addition, as for the data collection technique a Kaizen workshop was held where primary data was collected in in-depth investigations. More about Kaizen workshop on chapter 3.3.3 and in chapter 5.

4.2.2 Validity and reliability of the study

According Saunders et al. (2012, 192) the consistency of the findings from the data collection techniques and analytic procedures as well as the repeatability of the results can be referred as reliability. There are several threats to reliability of the research and in order to avoid these threats the researcher must seek ways to be methodologically rigorous in the way the research is planned and implemented. The research process must be clearly thought through and evaluated and it must be made sure that there are no false assumptions made nor does it contain logic leaps. The threats to reliability can be:

- Participant error – meaning any factors that might unfavourably effect in the way a participant carries out part of the study
- Participant bias – meaning any factors that might result as false answers by the participant
- Researcher error – meaning any factors that might alter the interpretations of the researcher
- Researcher bias – meaning any factors that might affect for the researcher to make preconceptions when recording or interpreting participants’ responses

(Saunders et al. 2012, 192)

It could be considered that the comments given in the workshop could have been affected by the presence of the two managers and as a result a possible participant bias needs to be considered. However, all were still given the opportunity to answer anonymously into the questionnaire invalidates the possibility of participant bias that might have been in the workshop. For that reason the fact that both questionnaires in this study were anonymous, there was sufficient time given to the respondents to answer and all were beforehand encouraged to respond as truthfully as possible, in addition the fact that the response rate in both was adequate and there was not variables from which any certain respondent could be identified (e.g. gender) gives reliability for this study. As for the researcher error and researcher bias, all development suggestions were discussed multiple times with the whole
team and the possibility for corrections or more specifications that were required were given. This way the researcher made sure that all were understood correctly without misconceptions, which also gives reliability for the study. Taken into notice all the above mentioned, we can conclude that the reliability of the study was rather good.

Whereas reliability is important when it comes to research quality it is not sufficient by itself to ensure good quality of a research but also validity needs to be assessed. Validity means how well does the data collection methods measure the matters that they were intended to measure and whether the research findings are what they actually acknowledge to be about. (Saunders et al. 2012, 684.)

As for the external validity (can the findings be generalized to other relevant settings or groups?) we can state that as a part the results can be generalized, at least inside Kela in parts or processes that are similar to the processes of international child benefit. This because at least some of the developments that came though this study were also simultaneously implemented in other teams and units, e.g. the change in the application process of short identification number. In addition the ideal process that was created in the workshop was also represented by a team member of international family benefits team to all the teams that handle Finnish social security coverage (about 50 employees) because of their request.

When considering the validity and reliability of the research, objectivity is one thing that needs to be considered because the researcher had prior knowledge of the matters and is currently part of the case organization. However, the prior knowledge and the position of the researcher within the organization can bring both advantages as well as disadvantages to the research as the researcher might already know about the possible bottlenecks and has some power within the organization to change these processes. In addition the chosen research strategy and method brought objectivity to the research as all the employees that handle international child benefit were allowed to participate into the study.
5 Implementing Lean for Kela

The development project was arranged with phases of analysing, developing, implementing and follow-up. Ensuring that the employees had an active role in each phases of the project played a significant role in this study. The aim of the research was to identify the waste within the processes, of which the most crucial one is the unnecessary use of time. The main goal was to reduce the amount of mistakes, delays and unfinished work.

The project started with analysing some statistical information about the processing of international child benefit applications, investigating the lead time analysis (Kela 2015). As stated earlier, in the starting situation the lead time of international child benefit applications was approximately 82 days (cumulative average during April – September 2015). In addition by examining the statistics of the lead time we realized many things that result as bottlenecks in the lead time. As seen on figure 8, where the lead time analysis is represented, even though we process new applications quickly (on average in 2 days), an application that is potentially ready to be resolved, is waiting to be done total of 23 days. In addition the time that the application spends in waiting for additional information is on average 20 days and the time waiting for other parts of the process to finish, usually resolving of Finnish social security coverage or some crucial information from a foreign institution, is very long being on average 51 days. (Kela 2015)

Figure 8. Lead time analysis in the beginning of the study, cumulative average during April – September 2015 (Kela 2015)
In addition to the statistics, a sample of 40 cases were randomly picked from all the resolved international child benefit application that had been done during first quarter of October 2015. These 40 were divided between the researcher and two named process owners, who also took part in arranging the workshop, the researcher getting 20 cases and the others 10 cases to analyse. From the cases we picked three cases as an example to the workshop (see part “workshop”). In addition we identified some bottlenecks from the statistical information as we looked though the more specifically. The bottlenecks were mainly about the prioritization of the work and co-dependency between the international child benefit application process and the processes of other benefits (mainly Finnish social security coverage) which causes the work major delays as it sits waiting in the work queue. Furthermore, the two process owners, who were also arranging the workshop, did some observing before the workshop with our employees to see how we work in order to have a better understanding what the process and application handling is in reality in international child benefit.

As mentioned earlier, the data collection was sequential, multiphase design, mixed method research as the data collection consisted of two questionnaires that were implemented as a Webropol survey and a workshop which was attended by part of the employees that handle international child benefits. Both questionnaires, the cover letters as well as the workshop was all in Finnish because Finnish is the native language of most of the employees. In addition, the skills of English language is limited for some employees and therefore it would have definitely limited the response rate as well as the common usability of this study because of linguistic issues. Questionnaires and cover letters as appendices 1, 2, 9 and 10.

During the whole development process it was emphasized that the process should be viewed in the customer’s perspective. All the employees were introduced the principles of lean very briefly and encouraged to bring out factors that create challenge and obstacle for the work. Several meetings about the project were held in order for to keep everyone aware of what is happening. The study started in October 2015 and continued up to July 2016, the timetable of the study is represented in the table 2.

Table 2. Implementation timetable of the study

<table>
<thead>
<tr>
<th>Implementation timetable of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.10.2015 - 16.10.2015</td>
</tr>
<tr>
<td>Few meetings with the managers and process owners about the implementation plan of the project, sharing responsibilities etc.</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>7.10.2015</td>
</tr>
<tr>
<td>19.10.2015-</td>
</tr>
<tr>
<td>4.11.2015</td>
</tr>
<tr>
<td>12.10.2015-</td>
</tr>
<tr>
<td>22.10.2015</td>
</tr>
<tr>
<td>5.11.2015-</td>
</tr>
<tr>
<td>6.11.2015</td>
</tr>
<tr>
<td>27.11.2015</td>
</tr>
<tr>
<td>1.12.2015</td>
</tr>
<tr>
<td>and 3.12.2015</td>
</tr>
<tr>
<td>15.12.2015</td>
</tr>
<tr>
<td>16.12.2015</td>
</tr>
<tr>
<td>19.1.2016</td>
</tr>
<tr>
<td>17.2.2016</td>
</tr>
<tr>
<td>26.4.2016-</td>
</tr>
<tr>
<td>6.5.2016</td>
</tr>
<tr>
<td>11.5.2016</td>
</tr>
<tr>
<td>July 2016</td>
</tr>
<tr>
<td>Continuous</td>
</tr>
</tbody>
</table>
The first questionnaire was sent at the end of October 2015 before the workshop, and it was sent to 29 recipients. The results from the questionnaire where gathered and utilized in the workshop. After this, the workshop was arranged in the beginning of November 2015 where some employees of the teams participated into finding ways to improve the processes and reducing the lead time.

After the workshop all employees that handle the international child benefit were invited to several meetings where the results of the 1st questionnaire and the workshop were looked over and the implementation of the development suggestions started. After this more meetings about the progress and future steps were held in order to keep everyone up-to-date.

The 2nd questionnaire was sent about six months since the start of the project in April 2016 in the aim to review the opinions of the employees of how the development project has went in their point of view and if it has been helpful. In the future the aim is to continue the development continuously and courage the employees to bring out development suggestions or problem points whenever they meet them.

5.1 Data collection, 1st Questionnaire,

The research method was a qualitative research in the form of a questionnaire, which was created with Webpropol and was sent as an email link to total of 29 employees that process the international child benefit applications. The total amount of people who handle international child benefit at the time was 29, and the link to the questionnaire was sent to all of them in the aim to let everyone to be heard and be allowed for their opinion to be said, even though all could not participate to the workshop. From these 29 persons that the questionnaire was sent to, 24 persons answered to the questionnaire making the response rate to 83 percent. There was a cover letter attached to the e-mail where the purpose of the questionnaire was explained (Appendix 1).

The questionnaire (seen in appendix 2) contained a total of 9 questions of which two were multiple choice questions with Likert scale, five were open questions and two were in the purpose to investigate the respondents background (how long they had been processing international child benefit applications and whether or not they handled appeals and corrective decisions). The aim of the questions were to mix both open questions and multiple choice questions in order to get as wide perspective of the issues and problems as possible.
When the respondents were asked about how long they had been processing international child benefit applications, the distribution was quite even between the respondents as 29 percent of the respondent had been handling international child benefits for less than 2 years, 38 percent for 3 – 5 years and 33 percent more than 6 years. In addition 29 percent (7 respondents) handled appeals and did corrective decisions and 71 percent (17 respondent) did not (Figure 9.).

Figure 9. Distribution of how long the respondents had been processing international child benefit applications

5.1.1 Results of the data collection, 1st questionnaire

All in all basically the same matters repeatedly reoccurred in most of the questions, especially in the open questions. Therefore, in order for not repeating the same answers and matters over and over again, the results of the first questionnaire are represented here so that results of the two multiple choice questions are presented first separately and then the combination of all open ended questions together. All the answers of the open questions can be founded in appendix 3. In addition, it was noticed that the background information of how long the respondents had been processing international child allowance application or whether or not they handled appeals and corrective decisions did not have
barely any affect to the answers. If there was differences, these results are presented, otherwise the differences were not significant and therefore are not issued.

**Multiple choice questions: Functionality of the process**

In the question 6 the respondents were asked to choose in a scale of 1-5 (1=totally agree, 2=somewhat agree, 3=neither agree nor disagree, 4=somewhat disagree, 5=totally disagree) a choice that best described their opinion on the statement. In figure 10 the answers for questionnaire question 6 are illustrated. All in all the processes were considered as reasonably functional as no one totally agreed and only 13 percent (n=3) somewhat agreed with the statement of “The process as a whole in its current state isn’t working”. Majority of the respondents (66 percent) either somewhat disagreed or totally disagreed with the statement.

![Figure 10. Question 6. Functionality of the process](image)

The procedures of the process were considered clear because 87 percent of the respondents either totally agreed, somewhat agreed or neither agreed nor disagreed with the statement that “the procedures of the process are not clear”. 33 percent of the respondents felt that the processes contain useless operations (they either totally agreed or somewhat agreed), 25 percent somewhat agreed and 42 percent neither agreed nor disagreed with the statement of “The process contains useless operations".
In the answers of the statement “Operations in different processes are overlapping” there was quite big differences depending on how long the respondents has been handling international child benefits; 71 percent of those who had been handling international child benefit for less than two years somewhat agreed with the statement whereas only 25 percent of those who had been handling international child benefit over six years somewhat agreed with the statement. Here we can conclude that either those who have been handling the benefit longer, might be more familiar with the processes than those who have been handling it lesser time and therefore know that there is not much actual overlapping, or we could also interpret it so that the more you have been handling the benefit the more blind you go for the process and cannot evaluate it critically whereas those who are quite new to the benefit can still see it with novelty and question the phases more critically.

The processes of other units were not seen as complicating own work as 46 percent of the respondents either totally or somewhat disagreed with the statement of “The processes of other units make our work harder”. 29 percent (either totally or somewhat agreed) of the respondents felt that it takes a lot of time to correct mistakes. On the other hand 46 percent somewhat disagreed with the statement.

Out of all respondents 37 percent either totally agreed or somewhat agreed with the statement that “The ways of working are not unified”. The difference of depending on how long the respondents has been handling international child benefits was seen also here; about 57 percent of those who had been handling international child allowance for less than two years either totally agreed or somewhat agreed with the statement that “The ways of working are not unified”, whereas the corresponding percentage of those who had been handling the benefit for more than six years was 37. In addition 50 percent of those who had been handling the benefit for more than six years somewhat disagreed with the statement.

**Multiple choice questions: Biggest obstacles for fluent, legitimate and fast application processing**

In the question 7 the respondents were asked to rate on a scale of 1-5 (1=very big problem, 2=big problem, 3=unable to say, 4=quite small problem, 5=not a problem at all) how big of a challenge/obstacle the matter is for fluent, legitimate and fast application processing. The results are being presented in the figure 11.
The difficulty of finding the instructions was seen as the biggest challenge for fluent, legitimate and fast application processing as 62 percent of the respondents rated it into a either very big or big problem. Also 54 percent of the respondents rated waiting for other teams/units cases and 50 percent of the respondents rated getting the needed information from the customers into a either very big or big problem.

In addition about 38 respondents felt that editing the customer letters was ether a very big or a big problem, however in turn about 58 percent did see this as a quite small problem. Too fast working pace was seen as a very big or a big problem by 42 percent of respondents, but again on the other hand 42 percent did not see it as a problem (answered to be quite a small problem or not a problem at all). Negligence was seen as a very big or a big problem by 33 percent of the respondent, however 46 percent of the respondents felt that it was either quite a small problem or not a problem at all.

Those who had been handling international child benefit for less time felt that problems in information systems, technical tools or lack of them were much bigger problem than those who had been handling international child allowance longer time; about 15 percent of those who had been handling international child allowance for less than two years and 44 percent of those who had been handling international child allowance for 3-5 years saw this as a very big or big problem whereas those who had been handling the benefit for more than six years saw this as not a problem at all. Here we can determine that those who have been handling the benefit for long time might know few gimmicks and trick about the technical issues that could be shared with the others. Correspondingly we can also interpret it again so that the more you have been handling the benefit the more used you go for the process and the problems that occur often, whereas those who are quite new to the benefit can still see it with novelty and question the phases more critically.
Open questions: Issues that occurred most often in the answers

As mentioned many same issues were mentioned in several answers in almost all of the questions and therefore are represented here as combination summary of the matters that the respondents felt were the worst time eaters, problem points or issues that needed attention.

Information exchange with the foreign institutions

The need for improvement of cooperation with foreign institutions was emphasized a lot in the answers, for example in question 3 (appendix 2) when the respondents were asked to describe the biggest obstacles for fluent application processing, out of 22 responses 13 mentioned the cooperation with foreign institutions.
It was mentioned that the information exchange with some of the countries is rather bad (Norway, United Kingdom) and almost non-existent with some (Denmark, Germany, Bulgaria, Greece). From the previously mentioned countries the SED-forms are being returned with defects and without needed information or it could be possible that even no answers are being received. This was thought to be confusing and unfair for customers.

Many respondents brought up that it would be good if all EU-countries had the possibility to change information electronically or had a common information system. There was also wishes about the possibility to change information (SED-form and additional questions) through secured e-mail connection with other institutions also, Norway, Sweden and Poland was mentioned, as at the time it is only possible fluently with Estonia. In addition there was suggestion that the sent SED-forms could be saved somewhere for future needs (annual checks) like we do currently with those that have been sent to Estonia. Overall it was realized that the use of SED-forms is very slow and it would help if there was electronic SED-forms which could be partly filled automatically from the system or the SED-forms would be otherwise simpler.

Additionally there were ponderings of the necessity to send SED-forms into another country just to get a confirmation of family relationships. There was also a suggestion that the SED would be sent to the other country just to inform them after a decision and they would only respond if the family does not belong to the same household (which is a necessity for Finnish child benefit) or they need to inform something else significant.

The respondents wished that English language would be used by us in all cases when there is information exchange with other institutions (currently it is possible for all institutions to use their own official languages) and that those employees using SED-forms would have linguistic levels (English & Swedish) at a certain level so that misunderstandings can be excluded. In addition it was suggested that we would request the other countries to use English in information exchange (in SED-forms and letters) so that the processing/answering could be faster.

Other development suggestions considering information exchange with foreign institutions:

- There were requests that a list of contact persons in other institutions would be formed so that you could call or email these persons in case additional clarification is needed.
A wish that SED-forms that are sent to Poland could be sent to the head office and they could then forward them to the municipal offices (currently there is a wish from Poland that the SED-form are being sent directly to the municipal office where the family resides).

One respondent felt that there is differentiation in ways of working or handling the cases: some employees double check matters in cases that could be resolved right away; e.g. ask unnecessary things from foreign institutions

Problems in the application form

Overall the issue of incompletely filled application forms was mentioned by many, for example in the for example in question 3 (appendix 2) when the respondents were asked to describe the biggest obstacles for fluent application processing, out of 22 responses 11 respondents mentioned problems in the application form, as it results to prolonged lead time, because due to the incompletions in the form and as a result additional information must be requested from the customer. The issue was mentioned reoccurring in almost all of the new applications left by the customers regardless of which way it has arrived (through customer service desk, online service, post).

There were some information that is needed in the international child allowance application processing but it is not asked in the application form (in paper form of in the electronic form) and wishes of adding these questions to the form were presented:

- BIC-code for a foreign bank account number
- Foreign social security numbers of the whole family
- The address of the family in the other country
- Family relationships: a clear question whether or not the person has a spouse in another country and the reason for living separately.
- A question of who is the child living with (we need to know if the child belongs to the same household with the applicant)
- In addition it was mentioned that the bank account number should be able to receive through word of mouth

Templates for customer letters and phrases and templates for decisions

Many brought up that they felt that the phrases and templates for decisions or letters were not up-to-date in international matters and that they should be formatted into more suitable form and add some for different type of situations. In question 3 (appendix 2) when the respondents were asked to describe the biggest obstacles for fluent application processing, out of 22 responses eight respondents mentioned problems in the letter templates and four respondents mentioned the phrase templates for the decisions.
It was mentioned that because the phrases doesn’t suit for international cases it makes the process very slow because they need to be formatted a lot. Especially the respondents mentioned that in cases concerning termination of benefit because of termination of employment, overpayments and the recoveries of overpayments, the phrases are insufficient. In addition there was a specific request for two new phrases; one for a situation where a child moves to another country and a phrase about the economic activity of the applicant.

About the letter templates there were suggestions that they would be more customizable, e.g. so that behind additional screen you could choose variables that apply for the specific situation. Especially the template about the possible right to apply family benefits in two countries was mentioned and there was a wish that a similar template for a situation where the child is not living in Finland would be formed. In addition there was a wish that to a template of common additional information requests a question of six month retrospective application period would be added. Furthermore it was brought up that a letter concerning an increase for families of more than one children is often hard to understand for foreign customers. The amount of child benefit increases according the amount of children eligible for the benefit and the right for the increase is only if all the child benefits are granted to the same person (Kela, 2016b). The difficulty of understanding the letter might rise from the fact that usually the language skills of foreign families (usually refugees) are limited. In addition because the amount increases only if all the child benefits are granted to the same person. The foreigners (especially) have hard time to understand this as the family usually has only one bank account into which all benefits are received to not depending on to who the benefit is actually granted.

**Technical difficulties**

Many respondent brought up that CICS is quite stiff and old-fashioned as a system and requires often different kinds of gimmicks and tricks in order for to complete a decision. Especially few problem points were mentioned that bring additional troubles;

- Technical issue when the system informs you to “check the spouse information from an earlier stage” and doesn’t let to continue. This often leads to a situation where you will need to do two decisions in vain and the system lets you do only one decision per day (see following issue). Problems also occurs when the system forces to check the decision from far back retroactively which causes a lot of troubles and takes a lot of time.
• The issue that the system lets you do only one decision per day. This confuses the customers when they received decisions about the same matter several days in a row.

• In the cases where the customer applies both child benefit and child homecare allowance and Finland is the secondary country to pay the benefits (The family has a right to get family benefits also from another EU-country, which pays the benefit in full amount and Kela pays the difference, family benefits in Finland deducted with the family benefits of the other country) there are serious issues because of the technical issues (not enough room for all information). This might lead to cases where unnecessary overpayments are born, which are then eliminated in the next decision (the decisions are sent on different days as a result of the previous problem). This causes a lot of confusing situations to the customers but also problems to the benefits handlers.

All in all it was also noted that if the technical issues cannot all be eliminated, at least the gimmicks and tricks should be brought into everybody’s knowledge.

**Finnish social security coverage**

In general it was noted that the cooperation with the teams that handle Finnish social security coverage should be improved because it confirm a fluent process for the customer because both are quite dependent of each other. The respondents emphasized especially about how important the Finnish social security coverage in a whole (the teams that work with it and the “benefit” it self) is for international child allowance. In question 5 (appendix 2) when the respondents were asked if there could be ways to improve the handling process of international family benefits by improving cooperation in Kela between different team or units, out of 17 respondents eight respondents mentioned cooperation with the Finnish social security teams.

In many circumstances international child benefit cases need to left waiting for the decision on Finnish social security coverage and the waiting times can be really long in some situations. Some respondents noted that the best case would be that all of those who solve international child benefit cases should have a knowledge also in Finnish social security coverage so that they could solve both benefits simultaneously, the cases wouldn’t need to be left waiting and the customer’s case would proceed in the best way possible.

Two respondents suggested that we should form work-partners so that the pair would consist of one international family benefits handler and one Finnish social security handler so that the pair could then solve the cases together at the same time without unnecessary
waiting. Furthermore the respondents hoped that there would be open discussion about the cases and interpretations that consider both international family benefits and Finnish social security coverage.

Some respondents hoped that those who handle Finnish social security coverage cases would use more the specifier “vakuuttaminen ratkaistu (Finnish social security coverage solved)” in OIWA and those solving the international family benefits would use the specifier “*etuus (benefit)” so that the cases that involve both benefits can be more easily spotted from the other cases. In addition there was a wish that for those teams that solve Finnish social security coverage it would be necessary that they would reminded of what cases bring out automatic impulses in OIWA to international family benefits, so that they are more aware of the situation and do not trust the system in vain.

In few answers it was mentioned that there is some overlapping work done in the teams that handle the international family benefits and those that handle Finnish social security coverage as both do annual follow-up in certain cases to make sure the applicant still works in Finland. There was also pondering about the issue of whether or not the follow-ups are done with same principles and if the customer is being contacted from both benefits whereas only one contact would be enough.

**Defects in guidelines/instructions or the fact that they are too scattered**

Five respondents out of 22 mentioned problems in the guidelines and instructions in the question 3 (appendix 2) when the respondents were asked to describe the biggest obstacles for fluent application processing. Many respondents mentioned that the issue of the guidelines being too scattered around (the instruction can be found from e-mail, network drive and in intranet) is a big problem, and it delays the work a lot because you spend time in finding the right instruction. In addition the fact that the guidelines are changed a lot can be very confusing because you might not remember where from you can find the latest information.

There was a suggestion that all instructions and guidelines would be taken either to the network drive or into intranet and they would be in a logical order with clear titles. Furthermore it was mentioned that there is a lot of silent knowledge present that has not been written down. All in all the guidelines that can be found in the intranet about international cases were found as defective, insufficient and unclear.
Unnecessary work in OIWA

The respondents mentioned several issues of unnecessary work that they felt that could possibly be eliminated entirely:

- Barriers to payments (maksuesteet in Finnish)
  - In some situations there can be even three OIWA-impulses about the same case, just with different specifiers
  - There should be enough people to do the barrier to payment-cases each month, so that the customers situation could be considered as a whole and the whole package could be taken care at once (instead of just the one barrier of payment-case) and still there is time to take care of all the barriers to payments-cases before the deadline
- The issue that payment orders (maksuosoitus in Finnish) need to be done with assignment orders in OIWA, everyone should be able to do them by themselves
- The need for municipal statement when underage child applies for the child benefit for themselves
- The cases of processed condition override (käsitelty-tilainen ohitettu in Finnish) with the specifier of child social security coverage should be eliminated as they are useless work
- The necessity of all follow-up and technical follow-up impulses was also questioned

The process to apply for the short personal identification number

Six respondents out of 21 mentioned the process of applying the short personal identification number in the question 4 (appendix 2) when the respondents were asked if there are clearly matters that could be done more easily or are simply waste in the process or ways of working. The respondents brought up this part of the process to be quite time consuming, especially considering that it is only used for technical reason inside Kela and is no use for the customer. It was emphasized that this part of the process might take several days and is also otherwise time consuming especially for those cases where the family has many children as you will need to fill out a form (internal purposes only) out of each child and then transfer these forms to OIWA all as a separate documents. After this these documents will be transferred to a different team and they handle actual the short personal identification number reservation.

It was suggested by many of the respondents that those who handle the international child benefit could reserve these short personal identification numbers by themselves without the other team or at least the requests should be able to do without the form just writing the information down into an OIWA-comment.
Registering the applicants information to the system first hand

Few respondents brought up the problem of not registering the applicants’ information the first time when the application is taken for processing. This leads into unnecessary request of further clarification and could prolong the processing time because if the information is not registered the benefits handler might miss to notice that there is a mistake in the bank account number or it might be missing, the application is submitted late and a clarification of that is needed or the customer needs to be informed about increase for families with multiple children.

Usage of comments

It was mentioned that too often the comments lack sufficient information of the case and the actions that have already been made, because of this it takes a lot of time for the next person to get a hold of the case. The respondents brought up that a good comment should at least consist the basic information about the case and information about why is it under handling and what is it waiting for (if it is) and what are the next steps. This allows the next person to start the case with good base information and save time. Furthermore if additional information from the customer is needed, it should be written to the comment and the comment should lifted into “palvelutiedot -näyttöön (service information display)” so that customer service can more easily spot this in case the customer contacts Kela.

Deficiencies in in language skills

Few respondents suggested that all those cases that require English or Swedish languages would be directed to those employees that have a good skills in that language in order for the case to go as fluently as possible and persons who don’t have good language skills would not need to use the help of other to solve these cases. This would also eliminate the possible misunderstanding that results from insufficient understanding of the language in question.

One respondent also stated that taken into consideration that Kela’s Centre for International affairs is working both nationally and internationally the unit has too few employees that have good skills in English and Swedish and that this should be taken into consideration when doing future recruiting.

Contacts to the customers

Many respondents mentioned that matters would go much fluently if the customer would be called instead of sending a letter in case addition information is needed. Generally it was wished that all information, including the bank account number could be accepted through word of mouth.
Few persons criticized the pressure of calling to customers instead of sending letters and did not see it as a problem at all. Some brought up the challenge of calling to customers as they tend not to answer to the phone, or if they answer in many cases there is difficulties in finding a common language.

**Other issues**

There was a wish that the counselling of difficult cases would be directed to those that have been separately named to give this counselling, so that others could concentrate on their work better. In addition it was emphasized that all should do full investigation of the case and search an answer through instructions before turning to counselling. Resourcefulness and each taking responsibility of their own competencies was highlighted.

One person wished for more training and more counselling and few brought up that the insufficiencies in knowledge of the international child home care allowance bring challenges into the work as they are so closely connected, have on partly common process and often need to be solved simultaneously.

The working methods of others was a discussion of some respondents as there is quite a lot of diversity of how to solve certain cases. Things that were brought up were e.g. the importance of getting to know the customers case throughout before resolving it, waiting for a respond much longer than needed and not making all necessary actions in OIWA (not attaching all documents and contacts to the case). In addition the courage to solve the cases and end a case was brought up, as some respondents felt that more courage is definitely needed.

Few respondents brought up that if the cases are left waiting for too short period of time, it results that they come too quickly without sufficient information back to the work queue and require one person’s labour input in vain, because that person just need to put it back on hold. Some suggested that more cases should be left to wait into own work queue, so that they are then done ASAP when the needed information is at hand. It was also noted that in this case the managers should be prepared that the morning hours go into solving the cases in own work queues.

In addition it was suggested that temporary decisions (according to EU regulations) should be used more already in the beginning of the case, before sending the SED-form. Then we could only inform the other country about our decision with a SED-form. It was
also noted that each time a SED-form is sent, the customer should be informed about this, so that we avoid unnecessary contacts from the customer.

Also these issues were brought up:

- Some respondent felt that too fast working pace and the pressure of doing more and more is leading to negligence mistakes, which then take a lot of time to solve and correct
- It was pointed out that in some situations the process and the guidelines differ from each other quite a lot
- It was suggested that if a customer uses too actively the possibility to send messages (e.g. over 20 messages during a month), the customer would be requested to contact by phone in the future
- There was a suggestion that everyone should get two computer screens in order to work as fluently as possible and to be able to view all/many of the windows needed in the handling simultaneously and much easier

Furthermore, two respondents emphasized that there are major issues and problems also in the international child home care allowance that should be interfered. As an example the respondents described that the information system itself is defective and would need an update, in addition the guidelines are impalpable and especially following the article 59 of European Union act 987/2009 is particularly difficult and substandard.

**Cooperation with other teams or units in Kela**

The respondent also presented some direct feedbacks or cooperation feedback suggestions for other teams or units in Kela. Many of the comments and wishes for improvement of cooperation were directed to customer service. There were wishes and notes about the following issues:

- The ability for the customers to send messages in E-Service should be marketed actively to all customers
- All contacts should be correctly attached into right cases in OIWA
- Hurrying up a case should be done with special notion
- Being observant when customer contacts, in case there is somethings that has been requested from the customer
- Not taking call back requests in cases where the same matter have been explained with several calls, messages or letters and all important issues are written in comments
• More courage to make assignments if there is a slight suggestion that something that the customer has told would have an effect to something
• To be precise when accepting applications; making sure that all necessary information is filled, especially 6 month retrospective application due date and the ability to apply multiple children increase

Furthermore it was wished that those who solve national child benefit cases would be more cautious in recognizing the international cases and then transferring them to the Centre of International Affairs. This would eliminate a lot of useless work from those who handle international child benefit.

It was also mentioned that it would be good if the scanning team would take care that the documents have been indexed correctly and that the country codes for SED-form has been registered, as changing these takes a lot of time once the documents have been transferred into OIWA.

**Benefits that the respondents hoped to gain form Lean -development**

In the last open question of the 1st questionnaire the respondent were asked what kind of benefits they wished to gain from Lean-development into their own work. Below are all answers, a straight translation from Finnish into English as closely as possible.

• I would hope for the process to quicken and to ease up
• That everybody’s working methods would be unified. Better comments. A better functioning information systems.
• Unifying the process between all employees
• I would hope that the employee perspective and suggestions would be considered seriously and that the defects would be fixed in reality
• To eliminate unnecessary work stages. To improve/develop/quicken the process. Unified working methods
• To get tools to view the processes from an different angle that it is used to and through that possibly find unnecessary work stages that could be eliminated, renewed, better ways to work
• That the customers’ case could be handled equally, fairly and relatively fast. We could give decisions that are based on real knowledge instead of something “a bit like that” or “let’s just do this so that we can get this over with”. This is the reason why I believe that not all stages of the process can be eliminated, but the cooperation between other countries should be developed. At the moment it’s not working because the information is not flowing.
- Clarity and simplifying the process
- Clear guidelines for the work
- I would hope that the workshop can identify unnecessary phases from the work, if there are clearly such. I hope that after the workshop a best way to deal customers cases is recognized and implemented. As a quite new employee I hope that the old stagers would bring their knowledge to be shared into the workshop
- Clarity and better interaction with other teams etc.
- To eliminate possible unnecessary stages of the work. In order not have to use a multiple time to handle cases with Swedish or English language compared to the Finnish ones
- To be able to quicken the lead time, less stiff process and customer oriented operations
- Hope to make the work more fluent and to increase own use of OIWA in decision making
- I hope that if there is somethings found that needed fixing or changing and they are significant for the work or they have something to do with efficiency of the work, these changes will be implemented ASAP
- Changes into the application form of child benefit and to decision phrase templates. It would be good to have readymade templates also to be used in OIWA’s message field as currently it is quite time consuming to format them. To improve the process to apply for the short personal identification number
- Good tips to improve the process
- New view and new ideas

5.2 Workshop

The workshop was held on 5th and 6th of November 2015. It was attended with three process owners, five benefits handlers, one benefits manager and the two team managers of the teams that handle the international family benefits (of which the researcher was the other one), in addition a group manager attended in the last day to hear about the development suggestions. Because there were three process owners present there were four of us that were in charge of the execution of the workshop, all of us with slightly different roles and range of responsibility. During the entire workshop one of us who were arranging the workshop wrote down into post-it notes the problems and obstacles for the fluent process based on to the discussions and assignments that were being done. These post-it notes were then went through in the end of the workshop as development suggestions.
During the two days there were some Lean-awareness info-points were the participants were given information about lean principles. For example short history of lean, the definitions of value and non-value-adding activities, eight main types of wastes that Liker (2010, 28-29) described were also represented.

The workshop was only two days which gave some challenges time-wise to its implementation. In the beginning of the workshop all attendants were asked to specify which problem they most looked forward in finding a solution in the workshop, they were asked “what are you waiting for to change?” (See appendix 4). Mostly the attendants looked for solutions to ease up the process with the SED-forms and cooperation with the foreign institutions. In addition some brought up their concerns and hopes that the development ideas would actually progress and be taken seriously. Furthermore cooperation with other units and other employees that handle different benefits were brought up.

Next the attendants were divided into three groups and they were all given one example case (all different ones) that were picked from the sampling of 40 cases that were investigated before the workshop. They were asked to go through the cases and spot things that could have been done better and what went “wrong” if there was such things. The purpose of this exercise was to waken up the members to think about the process critically and to think ways how it could have happened much smoother. After the analysis the teams represented the cases and findings to the others and discussions about the cases and current process happened.

Next the groups were tasked to describe the current process and identify the obstacles and problem points that currently causes delays in the process. The groups were told to think about the most common cases that are about 80 percent of the total amount of all cases and describe all the actions needed in the progressing of the application from the arrival of the application up until to the point where the customer receives a decision (plus the required post-actions) onto post-it notes into flip boards. With discussing about the matter the attendants started to draw the value stream and analysing waste and other non-value adding activities and differentiate them from the value adding activities. After all groups had mapped their current process they represented it to others and discussions about them took place. The discussion was about the differences in the maps drawn by different groups and the effect of variation in working methods into fluentness of process. In addition there was discussion about the strengths and weaknesses of the current process. The current processes that were mapped are in appendix 5.
Based on the discussion of the current processes and the problem points in it, the participants of the workshop started to draft an ideal process into a flip board and post-it notes that would be ideal for both the customer and fluent for the employees and into which all would commit to. The current obstacles for the ideal process were listed into separate post-it notes. The ideal process that was created in the workshop is in appendix 6.

As mentioned, one of us who were part in arranging the workshop, gathered obstacles, problems and development suggestions into post-it notes during the entire workshop. In the last day these post-it notes were gathered into a flip board and all development suggestions/problem points were went through. For all development suggestions an implementation plan was drafted and persons responsible for the changes were assigned. Some development suggestion needed some additional clarification and sorting and were left for further processing, but still listed into the development suggestions. In addition to the development suggestion that came through the workshop, the development suggestions that rose from the answers of the 1st questionnaire were discussed and listed into the flip board. Development suggestions in flip board as an appendix 7.

In the end there was a discussion about the first question in the workshop when the participants were asked to specify which problem they most looked forward in finding a solution in the workshop “what are you waiting for to change?” (Appendix 4). Then the attendants mostly looked for solutions to ease up the process with the SED-forms and cooperation with the foreign institutions. However, in the end of the workshop the participants stated that the SED-process in not such a big problem, but more a necessity for the application processing of international child allowance. It was realized that those situations where a SED-form is now necessary but could be left out in the future were not found. Nevertheless, some tips for doing things faster and easier were shared and the discussion were forwarded to next meetings were all employees that handle international child allowance would be present.

After the workshop the ideal process and the development suggestions (both from the 1st questionnaire and from the workshop) were presented in few meetings to all employees that handle international child allowance.

5.3 Implementing the development suggestions

All the development suggestions were gathered into one file (appendix 8) where it would be possible for everyone to follow the progress of the suggestions and to know who are responsible of them. After the workshop and the first questionnaire few employees sent
some additional development suggestions to the researcher via e-mail. These suggestions were added to the development suggestions table also (appendix 8). The suggestions in the table are divided into three sections; changes that have been implemented, changes still under progress and changes not going to be implemented. In addition the implementation time is mentioned in the table as well as the person responsible for those changes that are still under progress (however, the names are confidential and not shown in this thesis).

Issues that could be changed right away by changing our own behaviour were immediately taken into action. These matters were discussed and instructed in the first meetings with the whole team about the development suggestions in December 2015. Other matters that required more investigating or needed help from other teams or units were instructed and implemented as they were finished, mainly during spring 2016.

**Changes that have been implemented**

As mentioned the changes started with instructing matters that could be made by changing our own behaviour and therefore in the first meetings after the workshop the following matters were implemented.

It was recommended that English language would be used when interacting with other institutions, with the exception of Sweden where the form can also be sent in Swedish. Mainly meaning SED-forms, as some employees used Finnish forms and some English forms, other communication already happened in English.

There was a suggestion that SED-forms that are sent to Poland could be sent to the head office and they could then forward them to the municipal offices. Currently there is a wish from Poland that the SED-forms are being sent directly to the municipal office where the family that is living in Poland resides. The root of this problem was that sometimes it is difficult to know which the correct municipal office is and the employees might need to guess it, which sometimes results as the SED-form being returned to sender. In this matter we came to a conclusion that if there is a certainty of the municipality, then the SED should be sent directly there and if there is uncertainty, the SED can be sent to the Head office in Warsaw which will then forward it to the right office.

The respondents of the first questionnaire as well as the participants of the workshop brought up the long waiting time when in need to wait for the social security decisions of ETK (Finnish Centre for Pensions). Currently whereas Kela issues most of the Finnish so-
cial security decisions, there are still some distinct cases (e.g. posted employees and employees or entrepreneurs working in several EU-countries) where ETK issues the decision of the case and often they tend to take a lot of time. The problem for international family benefits lie in the issue that the Finnish social security coverage needs to be solved before a decision for e.g. child benefit can be given. ETK cannot rush the decisions without a purpose, but we can rush the decision if know that the customer’s income depends of the decision. In addition we can guide the customer to contact ETK and rush the process themselves.

Also both the respondents of the first questionnaire as well as the participants of the workshop brought up a problem of the current method of doing the barriers of payments. The barriers of payments are cases that rise into the work queue each month on a specific day (few days before the payment day) and inform of a barrier of payment into the customers child benefit, set by either automatic impulse or by a benefits handler. There are multiple reasons why there might be a barrier of payment in a case e.g. moving abroad and the benefit needs to be terminated. The barriers of payments always needs to be done/all checked before the payment day, so there are only few days to do them and the amount is around 400-500 cases each month. Before the instructions were such that only the barrier of payment should be done and the possible other matters could be left waiting for a better time. However, as a result of the comments and further thought it was instructed and the guidelines changed so that the whole situation and all cases of the customer should be handled as far as possible instead of just the barrier of payment. The managers make sure that there are enough people to handle the cases so that they are still managed before due date. However it was emphasized that special consideration and common sense should be used if there are especially time consuming cases, since the barriers of payments still have a due date.

In addition in one of the meetings about lean changes one participant of the workshop, a benefits handler who is very fluent technically and uses OIWA and all information there as it is supposed to, showed everyone else how to best proceed in order to understand the customers case wholly and to utilize the information in a best way. The aim was to present the ideal process (appendix 6) that was drafted in the workshop and to go through few cases by using that process. After this meeting, the social security teams and one other benefits team (in Kela’s Centre of International Affairs) heard of the presentation of the ideal process and the managers of these teams requested if this benefits handler could also come to their meeting and represent the same matters and the ideal process to them also. As a result, few weeks later a meeting was held where about 70 employees from
these other teams were present and they were introduced the same matters about how to best utilize the knowledge in OIWA.

Especially in the workshop there was a vivid discussion about whether or not the cases should be left to wait into one’s own work queue or into the general work queue. Formerly there was a lot of variation about this between the employees as some tended to leave the cases to be left in their own queue and some left none. This resulted that some employees requested often “own work queue –days” which messed up the ready-made work shifts. In addition it became a bit tricky if someone got sick. However, there were some good sides also in leaving the cases into own work queue, as often those cases were quite tricky and needed special engagement. In addition they were done much faster if left to one’s own work queue. After consideration it was suggested that if it is a tricky case, it can be left to wait into one's personal work queue, other cases only with malice aforethought should be left waiting in own work queue as "own work queue- days cannot be granted all the time, everyone is responsible of their own work queue by themselves.

The employees were encouraged to make decisions also in cases that seems ongoing forever. Sometimes there are cases that seems to go on and on forever without a conclusion, a stop should be done at some point and decision should be given. These cases should always have sufficient commenting about why the following conclusion was made. For the future it was agreed that all could bring out examples of these tricky cases into meetings so that we could go through them together in order to find a common way of doing things.

In addition the following matters were instructed:

- If the foreign social security numbers is missing from the persons information, it can be registered
- Cases should not be selected from the work queue otherwise that what is instructed in the work shifts
- When a case is left waiting, a sufficient waiting time should be choses so that the case will not drop too soon back to the work queue; A child expected to be born should be left to wait for 3 weeks after the due date, in other cases a little bit longer time that the due date is necessary, so that the case is not available in the work queue prematurely (scanning delay needs to be concerned)
- All need to remember to use “vakuuttaminen ratkaistu (Finnish social security coverage solved)” in OIWA and the use of “*etuus (benefit)” as has been agreed earlier, so that the cases that involve both benefits can be more easier spotted from the other cases
• The customer should be informed about how the matter is proceeding; primary method of contacting is by phone, secondary by message and the last mean is by letter. If customer is not reached with the first phone call (in these cases) one can send a message or a letter. Everyone is responsible of acting as commonly agreed in Kela. Especially in cases where we have sent an information request for a foreign institution, the customer should always be informed of what is happening
• Temporary decisions can be used as agreed and so that they follow the EU-law in cases that are clear. Few example cases were presented to the teams.

The following matters needed some help from the other teams and units in Kela but was implemented during winter 2015 - spring 2016. After the changes were ready the teams were informed and instructed about the matters.

A problem concerning about requesting E104 form the country of origin, when family is moving to Finland (from another EU-country) raised a lot of discussions in the meetings held as well as in the workshop, it was also mentioned in the questionnaire response’s. E104- form is an official communication form of the European Union given to the customer by the competent authority, it is a certificate that provides information about during which period of time the person has been covered by the social security of the country in question. The social security coverage of people moving from one EU country to another is coordinated by Regulation 883/2004 of the European Parliament and the Council, the purpose is to ensure that the person is covered by only one country’s social security at a time. The principal rule is that the person should be covered by the country he/she is working in (or is otherwise economically active that can be equated to working), otherwise the person should be covered in a country he/she permanently resides. (Regulation on the coordination of social security systems 883/2004)

The problem in these cases that were brought up lies in situations where a person is moving to Finland without the purpose of working, e.g. as a family member. In case the person does not inform in an application for the Finnish social security that he/she still is covered by another country’s social security, he/she is covered by Finnish social security (if otherwise eligible) and no E104-form is requested. However, based on the experience of those who handle international family benefits, it often is revealed (as it is usually a must to contact foreign institutions when granting family benefits in these cases) that the person is receiving a benefit from the country of origin that can be equated as working e.g. parental allowances and is therefore covered by that country’s social security as long as the benefit is being paid. This causes problems as the social security decisions needs to be corrected
and the benefits need to wait all this to be solved before any decisions of them can be given.

After negotiations with the lawyers and the teams that handle Finnish social security we came to a conclusion that in the future the social security coverage teams will request a E104-form from Estonia (from which the majority of immigrants come from) with a secure e-mail connection, in the following cases: Person is moving to Finland from Estonia and is pregnant or has children that are under 1 year old and therefore it could be assumed that she receives parental allowance from Estonia. The risk for defects for other cases and countries (that are rarer) was issued and it was decided that with other countries or with other types of cases the issue just need to be handled afterwards when handling the international family benefits.

In addition there were few issues concerning inner processes and forms that were only used to Kela’s own purposes and not bring any additional value to the customer into which we tried to find a better solution. These issues were about the payment orders (maksusoitos in Finnish) and the process to apply for the short personal identification number. In both situations before the changes, the teams needed to fill out a form (only for Kela’s own purposes) that needed to be added to OIWA and then transferred to another team that then handled either the payment order or applied the short personal number and after that returned the case back to the team that could then resolve the actual benefit case. The same process took place also in other benefits in Kela, not only in international child benefit.

After some negotiations, it was agreed that the teams can implement the whole payment order process by themselves, without the form and the other team. In addition the process of applying the short personal identification number has been changed so that the international family benefit teams (and also other teams that need this process both in Centre for International affairs and else) can apply it for themselves without the help of the team that previously did them centred and without the form. Trainings were arranged on February 2016 for those that needed to apply for short personal identification number. As a result of only these changes the processing time has decreased several days and the work has few less unnecessary phases.

There were wishes in the first questionnaire that the bureaucracy for additional questions from another country could be lightened by e.g. requesting the additional information after SED-forms via secured e-mail connection. After institution negotiations with Estonia was held (our biggest cooperation partner in child benefit) Estonia has agreed to share some
information via secured e-mail. In case there are problems, further negotiations with Estonia can be held. In addition we had good discussions in the meetings about the necessity to not send SED-forms at all in some cases. No conclusions were yet reached, but it was agreed that examples of cases are being gathered and then can be went through in future meetings.

In addition the issue of the use of English language, or the lack of it, by the other institutions in other EU-countries were brought up in the institution negotiations in spring 2016. Institution negotiations are held at regular intervals between the EU-countries/the institutions that handle social security matters. A wish was presented in the Institution negotiations about the preferred use of English in information exchange, however it cannot be requested as all countries have the right to use their own languages. It was agreed that we continue to use translation services and the linguistic capabilities that our own personnel has and a wish of an English response in order to rush the process can be added to letters and SED cover letters.

In the customer service it has been possible for some time to apply for some benefits by word of mouth, so that Kela’s representative would fill out the application straight to the system by enquiring needed questions from the customer verbally. However, no such possibility has been utilized in Kela’s Centre of International Affairs. As a result of the development suggestion that came in the workshop the possibility of utilizing this it was investigated and taken into practice. The trainings for the international family benefit teams about applying child benefit via phone verbally were held in April 2016.

In addition there was a wish that the customer service guidelines would be better so that they can request the needed information and attachments also in international cases. As a result of this the process owners made more specified guidelines to customer service teams into Kela’s intranet. In addition the process owners held some training sessions for the teams that handle national child benefit in order for them to better recognize the international cases and therefore avoid defects in the work. This was also based on the wishes that were presented in the first questionnaire but have been an issue for a longer time.

In the first questionnaire many brought up the problem about the letter templates. After further enquiry to the teams via email, we received more specific information about which letters should be changed and how. It is not possible for the teams to change the letter templates themselves and therefore some help from another unit was required in implementing the changes. It was brought up that a letter template about the deduction of excess payment that has been formed in another country needed a lot of formatting and was
felt as quite problematic. It appeared that the letter was misunderstood and it was clarified to everyone that the purpose of the template is to use it through recovery-progress in CICS so that all the variables are available and the template doesn’t need so much formatting. In addition there was a wish that a question about the 6 month retrospective application deadline would added as a variable into the common additional information request template. As a result of the wish the variable was added to the letter and therefore it no longer was necessary to write it by hand each time.

We requested some changes into the child benefit application form based on the development suggestions. The same application form is used in both national and international child benefit and there is certain limits for the length of it which causes obstacle for adding a lot of new issues to it. However, the following changes were made to the application form on the basis of our comments, the changes were implemented to the form on May 2016:

- A request to fill out a BIC-code of the bank account number if the bank account is abroad
- Question of foreign social security numbers of the whole family
- The address of the family in the other country
- A clear question whether or not the person has a spouse in another country and the reason for living separately.
- A question of who is the child living with and in which country
- A question whether the applicant or the spouse is working in another country

In addition a list of feedback were gathered to customer service teams and to teams that handle Finnish social security coverage and it was forwarded and discussed with the managers of the teams who then took the feedback to their own teams. Lists of matters presented below.

Feedback to customer service teams

- The ability to send messages in E-Service should be marketed actively to all customers
- All contacts should be correctly attached into right cases in OIWA
- Hurrying up a case should be done with special notion
- Being observant when customer contacts, in case there is somethings that has been requested from the customer
- Not taking call back requests in cases where the same matter have been explained with several call, messages or letter and all important issues are written in comments
• More courage to make assignments if there is a slight suggestion that something that the customer has told would have an effect to something
• To be precise when accepting applications; making sure that all necessary information is filled, especially 6 month retrospective application due date and the ability to apply multiple children increase

Feedback to Finnish social security teams:
• A wish to remind about commenting also about those cases that seem obvious to those who handle Finnish social security coverage
• There is a need to remind the teams of what cases bring out automatic impulses in OIWA to international family benefits, so that they are more aware of the situation and do not trust the system in vain
• Assignment orders to international family benefit should be created when a family from another EU-country moves follows a family member to Finland. This would help to avoid excess payment from the other EU-country and eliminate a lot of unnecessary work from us, the foreign institution and the customer if it is notified in time
• A suggestion that Finnish social security coverage teams would register spouse information in cases where the spouse is insured in family reasons, so that the information is the already available in family benefits
• Managers of family benefits and social security coverage teams should find a way to make the work shifts in a way that eliminates excessive waiting times and both go hand-in-hand as fluently as possible

Changes that are still under progress
As mentioned above, some changes in the letter templates were done already, however some changes for the templates are still under progress. There were wishes that more variables would be added to the template about the possible right to apply family benefits in two countries so that the letter is more easily formatted, the letter at its current state is not very usable as it assumes that it is not known what the person in question is doing whereas usually it is known. In addition there is a need for a similar template for a situation where the child is not living in Finland. In addition there was a general wish about the letter templates that they would be more customizable, e.g. so that behind additional screen you could choose variables that apply for the specific situation. These changes are still under progress as we are trying to find the best way to implement these changes, examples of possible changes are also gathered.
In addition still under progress is the investigation of the possibility to send SED-forms to other institutions via secured e-mail. We currently do this with Estonia, and have very good experiences of it as due to the change of sending form via email instead of post we save several days and in some occasions several weeks from the application processing. There has been contacts to other institutions and the negotiations with Sweden are still ongoing. Other institutions (e.g. Norway, Great Britain) have not been interested about this or it is not possible for the technically (not possible to use secured e-mail connection).

There were also suggested that the sent SED-forms could be saved somewhere for future needs (e.g. annual checks) like we do currently with those that have been sent to Estonia. As mentioned earlier if the possibility e-mail SED-exchange comes to reality with Sweden we can do similarly as we currently do with those sent to Estonia. However, otherwise it is not possible; e.g. the form cannot be stored into network disc because there is an issue of the law of registering personal data (henkilörekisterilaki).

Many respondents of the first questionnaire hoped that the English and Swedish cases would be centred to those that have good linguistic skills. This is something that we are going to implement and the managers will survey for the willingness to participate into doing English or Swedish cases through work shifting in development conversations during spring 2016. After this implementation and guidance are made, probably during fall 2016.

In addition we are still figuring out which is the best way of doing things: to close a case and create a new one or to change the specification of the case and continue with the same. The problem was here that if doing the closing option, that person receives more closed cases than that person that uses the latter option (these are matters that are followed by the management), it also distorts the statistic as there is variation. Investigation about this is ongoing, and after knowing which is better, guidelines for all are given.

Moreover there was the issue of the overlapping work done in the teams that handle the international family benefits and those that handle Finnish social security coverage as both do annual follow-up in certain cases to make sure the applicant still works in Finland. As a result of this, discussions have been held and there has been some changes in the process of the follow-up in Finnish social security about those that reside abroad so that the processes of international child benefit and Finnish social security would be more uniform. Other issues concerning this development suggestion are still under investigation; the follow-up of those foreign children that have been born in Finland but insured only for the first year and the follow-up of those that work in Finland and are not covered by Finnish social security for good.
One major issue that was repeated both in the first questionnaire as well as in the workshop was that all international family benefits handlers should be able to solve Finnish social security coverage cases so that we can eliminate waiting time from some cases and handle the customer’s case as a whole. As a result of this, some trainings has been done and the aim is that all international family benefits handlers will be able to solve Finnish social security coverage cases in the future. At the moment 2/3 have been trained by April 2016, the last 1/3 will be trained in fall 2016.

Another major issue that was brought up was the issue of defects in guidelines/instructions or the fact that they are too scattered. The plan is that the managers and the experts will go through the guidelines in network disc and try to sort it into better: everybody’s help is needed and all should report suggestions and about defects in guidelines.

In addition the following development suggestions are still under progress:

- **OIWA deleting reasons why cases have been waiting instead of just releasing them.** We are trying to figure out why this is happening, it is necessary to contact IT (which is currently very busy and this is not a priority)
- **We have requested some changes into the indexing handbook as the following matter were missing from it and they cause us some problems; the documents should be divided correctly and the country codes of SED form registered in indexing. These issues will be instructed in the handbook the next time it will be updated, probably fall 2016.**
- **Several suggestions about changes in the phrases and decision templates were also forwarded to the unit responsible of them and all of these are currently still under processing as they need to be checked with a lawyer before the implementation of them.**
- **Some respondent of the first questionnaire felt that there are unclear, misleading and contradictory guidelines about single parent supplement and the comments of lawyers are confusing and better guidelines about it is needed. Examples of cases is required from the employees in order for this suggest to progress, however at this point not enough is received yet**
- **The issue of OIWA’s buttons not being activated when clicked is under investigation, a message has been forwarded to IT-person in charge**
- **In addition the technical issues of “check the spouse information from an earlier stage” and doesn’t allow to continue and the issue that the system lets you do only one decision per day, are still under investigation and a solution is aimed to be found**
Changes that will not or cannot be implemented

There were some development suggestions that we were not able to implement for a certain reason, these are presented next.

In the responses of the first questionnaire there were several wishes to have the possibility to change information electronically between all EU-countries or to have a common information system. Currently the EU-commission is testing the exchange of SED-forms electronically, however it is only going to be exchange of SED-forms and will not be the type of information exchange that we would need, so it will not serve us much. The necessity for us would an information database where certain information could be seen instantly and without sending the SED-forms. However, some of our wishes has been delivered to this project (EESSI-project) so that these wishes could be added to the oncoming RINA-system, which will be the system where the SED-form will be exchanged. The RINA-system will be adopted at the earliest in 2019. Testing of family benefits have been happening in 2015, into which we also took part.

A problem of barriers to payments being left waiting for 6 months in a situation where customer has been covered by Finnish social security while abroad and doesn’t notice Kela about return to Finland was also brought up in the questionnaire responses. However, it was realized that it is not a problem anymore, because the barriers are not repeated every month if left waiting as there was a change in the system in fall 2015. In addition a change in handling the Finnish social security might eliminate the problem wholly; automatic return is now registered when the return is already noticed beforehand.

In the questionnaire responses there was some questioning of the necessity of asking for the municipal statement when underage child applies for the child benefit for themselves. This was checked and clarified to all that the necessity is based on law and needs to be asked.

In addition on respondent wished that we would get two computer screens for everyone in order to make working much more fluent. There has been a Kela intranet article about it, however it is still under discussion regarding the organization as a whole and it is not possible for us to get them individually due to budget reasons.

There was a question in the questionnaire responses about if it is absolutely necessary to ask a customer if he/she wishes to apply 6 months retrospectively (if there is a right) and why can't we just grant it? This has been discussed with the lawyers and the conclusion is
that it needs to be asked because the customer might have a reason (e.g. possible overpayment in another country) why he/she has not applied from a date that he/she is eligible of.

In addition in the questionnaire responses there was a wish that in some occasions the SED-form could be sent to another country before a decision of Finnish social security is made. The conclusion here is that the decision of social security needs to be done first, so that we don’t send a wrong message to another country, which might cause problems for them and for the customer.

5.4 Halfway checkpoint

In about halfway of the process, on 17.2.2016, there was a meeting held where the teams were told the current state of the process, what has been done and which development issues are still in the progress, who were responsible of the continued progress and what are the future steps. In addition there was a small assignment where the employees were asked to think of three question in small groups and share their thoughts to everybody.

The questions and a summary of the responses based on the discussion during the meeting below.

1. What have you changed in your own ways of working as a result of LEAN-project?
   - The usage of OIWA has increased and the usage of CICS has decreased → there is less bouncing around and pointless usage of two systems → more getting to know the customer and the full picture before just heading straight to solve the case (More doing as Kela’s model for solving the applications and the ideal process)
   - Additional clarifications from the customer are being requested through phone calls rather than with letters
   - Better comments are being written and more focus on the phrasing
   - The trusting towards the customer has increased and there is more courage to put an end to the cases when necessary
   - The possibility for the employees to apply for the short personal identification number themselves has made a big difference as the work is now more fluent and easier

2. Are there still some phases in the process that could be classified as waste and do not bring value to the customer?
   - More using the phone instead of letters when additional clarifications from the customer is required; still too many letters are being sent whereas a phone call would have been a much faster way
- Even though there is a lot of improvement, usage of OIWA instead of CICS should be still improved
- Sending the SED-forms, asking clarifications from another country, waiting for the decision of Finnish Centre for Pensions are all waste for the customer as the customer wants the decision as fast as possible
- There was a discussion about “cleaning-up” some possibly useless work from the customer’s information in OIWA
- The fact that the customers fill out the applications forms incompletely or do not respond to additional inquiry requests causes delays and other problems in the application processing
- The possibility to apply six month retrospectively should be added to the child benefit application form (as was represented in the development suggestions)
- The technical problems within Kela’s information systems as well as the phrases and letter templates should be fixed as was represented in the development suggestions

3. Would you still change some things in your way of working?
- More phone could be used to request additional information from the customer
- There was pondering of using own work queue when sending a message to a customer where an answer is requested

5.5 Follow-up, 2nd questionnaire

The follow-up questionnaire (appendix 10) with the cover letter (appendix 9) was sent approximately six months after the first questionnaire in the end of April 2016 with the aim to inquire the effectiveness and adequacy of the changes made, but also to inquiry the feelings of the employees. The questionnaire was a quantitative research, which was created technically with Webpropol, it contained total of five questions and it was sent as an email link to total of 26 employees that process the international child benefit applications. In between the first questionnaire and second questionnaire few employees had started a parental leave or had quitted their job and no new employees were hired. Total of 13 persons answered to the follow-up questionnaire making the response rate 50 percent.

5.5.1 Results of the follow-up, 2nd questionnaire

In the first question the employees were questioned whether they felt that the Lean development of international child benefit was beneficial. All respondents (100%, n=13) felt that the development with lean was beneficial. There was an opportunity to justify shortly one’s
answers and in the open answers the reasoning was for example that Lean development has improved the process in surprisingly many ways and as a result the process is now quicker, clearer and both customer and employee friendlier. In addition the respondents brought up that methods of work has been more unified since the development. Especially the change in the apply process for the short personal identification number was highlighted as three respondents mentioned it separately in the open answers. Furthermore, many mentioned that all employees that handle international child benefit could participate into the development of the processes, even though all could not participate to the workshop. All open answers of question 1 are in appendix 11.

In the second question the employees were asked whether they felt that Lean development had enhanced opportunities to influence one's own work. 77 percent (n=10) of the respondents felt that the opportunities to influence into own work had improved by means of the Lean development-project. On the other hand 33 percent (3=n) felt that no improvement in such matter had happened. In this question, the respondent were also given the opportunity to justify shortly their answers. In the one argument for a no-answer, it was explained that Lean might have affected on the ability to be more courageous in ending cases and making decisions but in general the feeling was that there is no ability to affect to one’s work. In the open yes-answers many of the respondents thanked the possibility for all to participate into the development and the opportunity to bring out problem points and to give suggestions for improvement. The ability for all to affect has given the feeling that the employees are really listened instead of the orders and instructions just coming from the management, who might not have the common hand knowledge of the issues. It was also emphasized that the idea of continuous improvement has changed the atmosphere so that it is now easier to bring out the development suggestions and there is trust that something is done to them instead of just them to fall into oblivion. All open answers of question 2 are in appendix 11.

In the third question it was asked if the respondents felt that their work had become more fluent through Lean-improvements. 92 percent (n=12) of the respondents felt that their work had become more fluent and 8 percent (n=1) felt that the Lean-improvements haven’t had any affect into the fluentness of the work. In addition to yes and no-answers there was also an option of “I don’t know any improvements that came through Lean” which was not chosen by any respondent and so we can conclude that all are familiar with the Lean improvements.

As for the fourth question the employees were asked whether they would recommend Lean- development to other units or teams. 92 percent (n=12) of the respondents would
recommend and 8 percent (n=1) would not recommend Lean development to other units or teams. In the open no-answer it was argued that fluent working can be achieved without Lean and therefore it was not recommended. Those who would recommend it explained their answers with the following arguments (translated from Finnish to English as closely as possible):

- Good tool to make the processes more fluent
- It is useful to go through the processes with the Lean-method. A lot of hidden defects can be found and all development suggestions are taken seriously. In addition you learn to critically evaluate own working
- Lean has been useful and many substantial changes has been achieved
- You can find out if there are waste in practices or if people do resolve the cases very differently
- The whole team takes part into the developments
- It’s a chance to be heard and have an effect to the processes and practices of your benefit that you process
- It is definitely useful for those benefits that have longish lead-time and have processes that consists of multiple phases
- With Lean the useless work phases can be recognized and eliminated which reduces the lead-time and enhances practices also otherwise. This ultimately leads to better customer satisfaction.
- New ways of working can be found that speeds up the conclusion making process
- Critical evaluation of processes from time to time and the development of new practices is important
- Also the other benefits may have processes that that take too much time and could be sped up

The final question was optional where the respondents were asked if there would have been something more that they would have wished from the Lean-development or whether they have any other messages related to the matter. Three respondents answered to the question with the following answers:

- More courage is needed to make decisions e.g. making temporary decisions with MISSOC-information when primary and secondary payer countries are clear and the information of the family is at hand
MISSOC is The EU's Mutual Information System on Social Protection that provides information about the national social protection systems of all the 28 EU Member States plus Iceland, Liechtenstein, Norway and Switzerland (European commission 2016b)

- There are always matters that come forward, however there is a feeling that the development is continuous. Great experience overall and it has been helpful in everyday work. Possibly wasn’t as ground-breaking as I first thought but as we went through the process, it was noticed that not all can be changed or done differently.

- I want to request from the process owners, that more active contacting to foreign institutions is required and it would be good to have a list of all contact persons of each country.

Out of 26 employees that the questionnaire was sent to, only 13 answered, making the response rate to 50 percent. For the rest who did not answer to the questionnaire, we don’t know their feelings about the results of the development project. However, from the results of the second questionnaire we can draw a harsh conclusion that the employees felt that the development process was successful because all respondents felt that it was useful and vast majority felt that their work had become more fluent as a result of the developments. In addition the fact that almost all would recommend Lean development also for other teams and units gives us a push and bravery to continue with the same format into other teams as well.
6 Discussion and Conclusions

This chapter aims to assess the goals and results of the study and to propose future recommendations and possible suggestions for future research based on the results that were introduced in the previous chapter. In addition reflections of own learning are being presented at the end.

6.1 Conclusions of results

The purpose of this study was to find out ways to improve processes in international child benefit application processing, which was also the main research question. In addition the goal was to solve what are the major problems and obstacles in the processes resulting that the lead time in the international child benefit was so long and how & with what kinds of solutions and development suggestions the lead time could be reduced. Also about whether the law, other institutions or the information systems would be obstacles for the development of the processes and will the employees accept the improvement suggestions into their working methods easily was an issue of pondering in the research sub-questions.

In addition to the previously mentioned research questions and aims, the organization itself also set goals in the beginning of the study for the reduction of lead time in international child benefit. The short term goal for the lead time, which aimed to be evaluated six months after the beginning of the project, was set to be 70 days and a long term goal, to be reached in the next few years, of 50 days was also defined. The starting situation of the lead time of international child benefit applications was approximately 82 days (cumulative average during April – September 2015). Because this thesis is published before the possibility to assess either of the goals set for the lead time, these results are not presented here. However, the development of the lead time through the statistics (lead time analysis) have been followed during this entire process and the results by far are promising. It is clear that the lead time has been taken a direction downwards as well as the time that the application spends waiting for documents or additional clarification and the time that the application spends in a state (possibly) ready for a decision (Kela 2016d).

The chosen research methods supported the study well. By choosing both qualitative and quantitative methods gave the research depth that would have not been otherwise reached. The quantitative questionnaires allowed all employees that handle international child benefit to take part into the process and to bring out their opinions on the matter anonymously, whereas the qualitative workshop gave a more in-depth aspect as it was possible to have discussions and debates about the matters.
As a result of the study, we were able to change and eliminate many obstacles for fluent application processing from the international child benefit process as well as we managed to start the unification of the working methods with e.g. the ideal process. So definitely the study managed to find out ways to improve processes in international child benefit application processing, to solve what are the major problems and obstacles in the and find solutions and development suggestions so that the lead time can be reduced.

Accordingly it was realized that there were many administrative activities done during the process that did not bring additional value to the customer; such as the process of applying the short personal identification number. Luckily we were able to change the process of applying the short personal identification number so that several days was decreased from the lead time. The employees have been thanking this change especially, and as mentioned earlier in this thesis this change made a difference for other teams too as it was used by other teams in Kela similarly.

In addition to the process of applying the short personal identification number, there were some other matters too that benefitted also the other teams in Kela. As mentioned earlier, after the presentation of the ideal process that was drafted in the workshop to our own teams, the managers of social security teams and of one other benefits team (in Kela's Centre of International Affairs) asked if the same matters could be gone through also with these teams. As a result, a meeting was held where all employees from these other teams were present and they were introduced the same matters about how to best proceed in order to understand the customers' case wholly and to utilize the information in OIWA in a best way. Good feedback of this was received by word-of-mouth.

One major issue that did come across from the study was the cooperation with the teams that handle the applications of the Finnish social security coverage applications. There were many issues that concerned the cooperation with these teams or otherwise the close connection of Finnish social security coverage and international child benefit. As a result, we managed to make quite a lot of changes and there were some process changes in the process of Finnish social security coverage as well. See the changes in appendix 8 and chapter 5.1.1. Also, as mentioned the aim is that all international family benefits handlers will be able to solve Finnish social security coverage cases in the future, at the moment 2/3 have been trained by April 2016, the last 1/3 will be trained in fall 2016. This is a big change and will probably bring good results in the future.

In addition many other changes took place that will probably payoff in the future, for example changes in the application form, changes in the letter templates and phrase templates.
(some still under progress) and the change in the way the barriers of payments are handled. Furthermore there are many changes that are still under progress but will be soon implemented (appendix 8).

I believe that developing the processes through lean ideology instead just traditional process development has created a positive base for the employees. This because for a long time the trend has been just to “do more and more” with the current processes. Now they were given the ability to affect, they were listened and the development started with emphasizing that the aim is not to make them work harder with the existing process but to make the work easier by removing unnecessary activities (waste) and thus the productivity and quality would rise as a result by itself. As mentioned earlier in this thesis, employee engagement and involvement is important, as engaged employees are more committed to the organization, confident with their own working effort and prepared to deal with change in future. (Wheatley & Kellner-Rogers 1998; Aguirre & Alpern 2014)

In addition I have confidence that we managed to create an atmosphere of trust and start of a culture of continuous improvement amongst the employees based on lean principles (Liker & Convis, 2012, 9-15), where all employees are not only willing to report problems but also actively taking part in solving them. This was also seen form the answers of the second questionnaire as many respondents answered feeling more courageous about bringing out development suggestions and informed to have more trust about that the issues were taken seriously.

All in all I consider that the study was successful, because as mentioned many issues were eliminated and a lot of changes for the better was made. Additionally the employee satisfaction for the results was excellent (results of the 2nd questionnaire). Also the fact that all the employees were very active during the process, the first questionnaire response rate was an excellent 83 percent and the responses were really thought trough and a lot of issues were presented.

In addition, despite of my own preconception also the changes were accepted really well without almost any change resistance. Only few comments and a bit resistance about certain issues were said but they were individually discussed with these employees and handled in that manner. Also the fact that all respondents in the second questionnaire felt that lean development was useful and vast majority felt that their work had become more fluent as a result of the developments proves that the implementation went as planned. In addition the fact that almost all would recommend Lean- development also for other teams...
and units gives us a push and bravery to continue with the same format into other teams as well.

6.2 Challenges of the study

When discussing about the results of the study one need to also consider issues that might have affected to the end result. These challenges are presented in this chapter.

During December 2015 – January 2016 when the development suggestions were fully started and ongoing there was a big organizational change in Kela (in January 2016) which caused some problems in implementing the development suggestions. The challenges resulted mainly because those people that were needed to help implementing some of the issues were either transferred to another positions or were otherwise quite employed because of the change. This is why some of the changes and some additional clarifications that was needed to implement some changes took a little bit longer than expected and some changes are still in the progress.

In addition we received additional work by thousands of cases, because of a change in the amount of Estonian child benefit, which took a lot of resources from December 2015 up to spring 2016. Even thought we were fully aware and prepared for this change, there were still some surprises that took us off-guard and gave us much additional work that needed immediate attention at the time.

Furthermore, there has been some changes in the personnel and in the team’s part of this study. During this process few have left the company or taken some family or study leaves and no new employees were hired so this has resulted that the remaining employees needed to handle the same workload with less people. As a result we were a bit short-handed as there was definitely lack of resources present. Because of the situation we have been forced to focus on to the core issues and therefore some lean issues may have been left a bit back especially during spring 2016. These issues might have had something to do with the implementation of the changes and the lead time.

In addition Kela is such a large organization and in a ways quite bureaucratic as it is a strong line organization. The implementation of the changes was at some parts quite difficult and slow as the changes required interference and work of other people outside our own team. In addition some of the development suggestions were matters that were out of our hand, such as the suggestions about ETK-cases and the issues with the foreign institutions. However, we did also try to implement those but eventually the ultimate responsi-
bility/ability to change these things lays with the foreign institutions, so we more thoroughly focused onto the development suggestions within our organization, the things we ourselves have the power to make a difference.

In addition, the fact that Lean was implemented only into a certain team in a certain department makes it wonder if it will be enough/possible to sustain the made changes, as Lean has not been implemented throughout the whole organization and through all the support functions and the management as well. However, there has been previous Lean projects also as mentioned earlier and there have been discussions about continuing project development through lean methods to other processes also.

6.3 Recommendations and Suggestions for Further Research

Based on the results of the research the process development in international child benefit needs to continue as many matters were still left under progress. Especially the issues that were mentioned by many respondents as a challenge or problem for fluent application processing needs to be carried out as good as possible. For example the issue of the scattered guidelines, issue of technical difficulties and the improvements for letter and phrase templates (see chapter 5.1.1 about the results of the first questionnaire).

While the development of international child benefit processes has helped also the other international family benefits as their processes are quite similar and contain/contained similar kinds of activities, these processes might also benefit from process development. The need for process improvement in international homecare allowance was also mentioned by two respondents in the first questionnaire. Therefore implementing similar-type of process improvement also for international homecare allowance or for international parental benefits should be considered.

However, even though most of the employees would recommend lean development to others and there have been initial discussions about continuing the development process also to other benefits and processes, an issue of resources needs to be considered. As mentioned earlier by choosing both qualitative and quantitative methods gave the research depth that would have not been otherwise reached. However, even though it was beneficial without a doubt, the process of going through the responses from the first questionnaire was quite time consuming and the resources are scarce. Therefore the benefit of using both quantitative questionnaires and qualitative workshop when planning next process development projects needs to be evaluated thoroughly and possibly the results of this study needs to be compared to other lean project results in Kela where only one method, e.g. workshop was used. In addition the fact that many employees emphasized
(2nd questionnaire) that it was a good thing that all were given the ability to affect to the
development of the processes and they felt that their ability to affect to their own work had
increased through lean development (chapter 5.5.1). This will have a direct effect on job
satisfaction and needs also be considered when planning the possible next process devel-
opment projects.

There was also verbal feedback from some of the employees that they valued the fact that
the development process was so transparent, in a way that all were kept up-to-date of the
development suggestions, the progression of them and there were persons named who
were responsible of each matter. This most certainly needs to continue as it will also have
an effect to employee’s overall satisfaction to their work.

There is an aim to carry on the continuous improvement and this is certainly something
that needs to maintained and checked at regular intervals in the future. Some plans for fol-
low-up monitoring about this lean development project has been set for spring 2017 and
simultaneously an assessment of the continuous improvement could take place.

6.4 Reflection of own learning

When starting to choose a topic for the thesis I wanted to find a subject that was interest-
ing to me and that would preferably benefit my own work or be otherwise useful. Fortu-
nately I was given the opportunity to implement this process development project of inter-
national child benefit with lean tools to my own employer, Kela. Because I strongly be-
lieved that this would not only benefit my own work but also improve work as well as the
working conditions of the team that I manage, helped me to pull this project through and
also kept me motivated throughout the entire process.

As the topic and the aim of the study was determined it was quite obvious of what would
be the theoretical framework of the study. When starting to get to know the relevant litera-
ture I was fascinated by especially the issues related to Lean and I was really impressed
by the lean methodology which made the reading process much easier. I didn’t have
much knowledge of lean beforehand but I believe that I gained a good knowledge of it,
with the other theory as well, during the thesis process.

Through the process of writing this thesis I definitely learned about prioritising and time
management by not only trying to fit my personal life with the process of writing the thesis
but also time management at work as this project brought a lot of additional work for me
on top of the normal matters. I guess in some aspect the amount of the development sug-
gestions surprised us and at first it was a bit overwhelming and in a sense felt insurmountable. However, as the issues were delegated for appropriate persons and the developing really got off the ground the matters started to unravel.

At points I found difficulties with the language of this thesis as the researches were conducted in Finnish whereas this thesis is written in English and the language used in the answers of the questionnaires was quite a puzzle to translate. In addition I slightly struggled to explain the issues related to international child benefit in the thesis so that they would be understandable by an outsider who has no knowledge about these matters.

During the process of the thesis I was surprised how well the employees took part in the development process. This in addition to that we managed to improve a lot issues and that I have received such a good feedback from the employees has been unquestionably the most rewarding part of the process.
References


van den Berg, G & Pietersma, P. 2015. Key Management Models- The 75+ models every manager needs to know. Pearson Education Limited, Edinburgh


Appendices

Appendix 1. Cover letter of the 1st Questionnaire

Hello!
For the improvement of international child benefit processes and for the lean workshop, the opinions, experiences and development suggestions of all of those that handle the benefit are needed. The responses will be used when planning the Lean workshop.

The results gained from the survey will be also used in my thesis that I am going to do related to my studies in Haaga-Helia University of Applied Sciences (DP in International Business Management, YAMK). The title of the thesis is improving international child benefit processes with Lean method.
I hope that all of you would answer to the following questionnaire with thought and to think about our processes and practices, so that it is possible to obtain the most benefit from the workshop and from the development of the processes.
Your expertise in needed!

All responses from the questionnaire will be treated fully anonymously and no individual respondent information cannot be identified.

The questions of the survey can also be found from the attachments of this e-mail, so that you can view and think about the issues before answering to the actual questionnaire. Think about the processes from customer’s perspective; how different measures appear to the customer and do they bring value to the customer?

You can enter to the questionnaire by clicking the following link:
(LINK)

I kindly request to answer to the survey at the latest on Thursday 22.10.2015.

In case there are any questions or problems related to the questionnaire, you can contact me.

Thank you all in advance!

Best regards,

Anniina Kuokka
Service manager
Kela’s Centre of International Affairs
PB 78
00381 Helsinki
Appendix 2. 1st Questionnaire

Improving the processes of international child benefit

1. I have been processing international child benefit applications for:
   - Less than 2 years
   - 3-5 years
   - More than 6 years

2. I handle appeals and corrective decisions
   - Yes
   - No

3. Describe the biggest problem points and/or time consumers in the processes or handling points of international child benefit. How much time does these problems consume and how often does the problem occur? What could be the solution?

4. Does the processes or the practices contain clearly unnecessary phases or phases that could be done much easier? Describe

5. Could the cooperation between different teams and units be improved in ways that would ease and/or quicken the handling of International child benefit? What about the cooperation of Kela and other partners? Give an example
6. Choose choice that best describes your opinion about the statement on a scale from 1 to 5.

Note! If your answer is 1 or 2, please justify, describe and/or present a developments suggestion into the box in front of the choice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1= Totally agree</th>
<th>2= Somewhat agree</th>
<th>3= Neither agree nor disagree</th>
<th>4= Somewhat disagree</th>
<th>5= Totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process as a whole in its current mode isn't working</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process contains useless operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations in different processes are overlapping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The processes of other units make our work harder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It takes a lot of time to correct mistakes in the process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The procedures of the process are not clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ways of working are not unified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. What are the biggest obstacles/challenges for fluent, legitimate and fast application processing? (The customer receives a correct decision as fast as possible)

Evaluate the issues that cause problems and that effects to the fluency of the process on a scale from 1 to 5 depending on how big of a problem the statement is in your opinion.

Note! If your answer is 1 or 2, please justify, describe and/or present a developments suggestion into the box in front of the choice.

<table>
<thead>
<tr>
<th>Issue</th>
<th>1= Very big problem</th>
<th>2= Big problem</th>
<th>3= Neither agree nor disagree</th>
<th>4= Somewhat disagree</th>
<th>5= Totally disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall not well functioning process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambiguities within the process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambiguities about the division of work in the process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deficiency or ambiguity of Guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulties in finding the instructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
86

8. What kind of benefits you would wish to gain from Lean-development into your own work?

[Additional text or empty space]

9. What kind of benefits you would wish to gain from Lean-development into your own work?

Once you have responded to all questions, please push send-button

[Additional text or empty space]
Appendix 3. Open answers of 1st questionnaire

Confidential
Appendix 4. Workshop: What will change?

MIKA MUUTTUU:
- ONKO DAKKO "KYSYÄ?"
- SEDEN TÄYTTÖ "ONKO PAKKO?"
- OIKEANLAINEN TÄYTTÖ
  -> MIHIN LÄHETETään, YRINEIN x
- KYSYMS -> VASTAUS
- KEHITTäMISEHDOTUKSET ETEENEE
- YHTEISTÄMÖ -> ETUUKSIEN VAikutus
- YHTEYSHEN KILÖ -> KILAUTA KAURIIUS
Appendix 5. Workshop: Current Processes

Confidential
### Appendix 6. Workshop: Ideal Process

<table>
<thead>
<tr>
<th>Picking up the case</th>
<th>Preparation</th>
<th>Decision</th>
<th>After the decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>Start with the service information display</td>
<td>Register necessary matters to CICS</td>
<td>Make necessary comments</td>
</tr>
<tr>
<td>- Oral</td>
<td>Summary-display</td>
<td>Do we have all the necessary information available at KELA</td>
<td>Follow-up (if necessary)</td>
</tr>
<tr>
<td>- Written</td>
<td>- Summary and the tabs</td>
<td>- Bank account number and BIC-code (register)</td>
<td></td>
</tr>
<tr>
<td>The know-how is in point</td>
<td>- Getting to know the customer</td>
<td>- Contact via phone if possible</td>
<td></td>
</tr>
<tr>
<td>- Finnish social security + international family benefits</td>
<td>- Previous decisions</td>
<td>The eligibility for the benefit, Finnish social security coverage</td>
<td></td>
</tr>
<tr>
<td>Planning of the work shifts</td>
<td>- Contacts, comments, messages</td>
<td>- Order the short personal ID number</td>
<td></td>
</tr>
<tr>
<td>- The way things are done is on point and planned together with the social security teams</td>
<td>- If necessary; previous decisions</td>
<td>- Send SED-form</td>
<td></td>
</tr>
<tr>
<td>Picking the case</td>
<td>Make the required attachments</td>
<td>Put the case waiting into the common work queue</td>
<td></td>
</tr>
<tr>
<td>- As resources, one at a time</td>
<td>Investigate possible effects to other benefits and if there is a possible right to apply something else</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The correct variables</td>
<td>Open the actual application</td>
<td>Inform the customer about the sending of the SED-form (call)</td>
<td></td>
</tr>
<tr>
<td>- no other picking should be done</td>
<td>Look through the application and attachments</td>
<td>Comment the reasons why the case is left waiting and lift it to the service information display also</td>
<td></td>
</tr>
<tr>
<td>Lock the cases (all cases of the same customer that can be done simultaneously) to own work queue</td>
<td>Make necessary comments</td>
<td>The case is released from waiting, the necessary information gained</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Check the summary lightly</td>
<td>- Check the information in the display</td>
<td></td>
</tr>
</tbody>
</table>
of the application before opening the actual form
- Are there attachments elsewhere?

**Open the Application**
- Do we have the necessary information?
- Take the information to the system
- Send notification SED
- Read the decision and make it
Appendix 7. Workshop: development suggestions in a flip board

Confidential
### Appendix 8. Development suggestions table

<table>
<thead>
<tr>
<th>Development suggestion</th>
<th>What has been changed</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English language should be used by us in all cases when there is information exchange with other institutions (SED), in order to avoid misconceptions</td>
<td>Recommendation that English SED-forms should be used when interacting with other institutions (exception: Sweden)</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>SED-forms that are sent to Poland could be sent to the head office and they could then forward them to the municipal offices (currently there is a wish from Poland that the SED-form are being sent directly to the municipal office where the family resides)</td>
<td>If there is a certainty of the municipality, then the SED should be sent to municipal office. If there is uncertainty, the SED can be sent to the Head office.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>Ways to quicken up the process when waiting the social security decision of ETK (Finnish Centre for Pensions)?</td>
<td>If customers’ income depends on the decision, ETK can be contacted and the decision making hurried. If this is not the case: no means available as ETK cannot rush the process otherwise. In addition we can guide the customer to contact ETK and rush the process by themselves.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
</tbody>
</table>
| Letter templates:  
  • a letter template about the deduction of excess payment that has been formed in another country needs to formatted a lot  
  • a wish that a question about the 6 month retrospective application deadline would added as a variable into | • it was clarified to everyone that the purpose of the template is to use it through recovery-progress in CICS so that all the variable are available and the template doesn’t need so much formatting  
  • A variable about the 6 month retrospective application period was added | implemented December 2015 |
<table>
<thead>
<tr>
<th>The common additional information request template</th>
<th>In the future the social security coverage-teams will request a E104-form from Estonia (from which the majority of immigrant come from) with secure e-mail connection, in the following cases: Person is moving to Finland from Estonia and is pregnant of has children that are under 1 year old</th>
<th>implemented December 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>When a family moves to Finland, team that handle social security coverage doesn't request for an E104-form from the country of origin which is needed in family benefits. This results as time consuming cases when the decisions need to corrected afterwards. Could this be changed?</td>
<td>The issue that payment orders (maksusuositus in Finnish ) need to be done with assignment orders in OIWA to payment services-unit, everyone should be able to do them by themselves can the form be deleted and done only with assignment order and a comment in OIWA?</td>
<td>implemented December 2015 - January 2016</td>
</tr>
<tr>
<td>The issue that payment orders (maksusuositus in Finnish ) need to be done with assignment orders in OIWA to payment services-unit, everyone should be able to do them by themselves can the form be deleted and done only with assignment order and a comment in OIWA?</td>
<td>Can be used as agreed in cases that are clear</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>The usage of temporary decisions (according EU-législations) in cases that are clear?</td>
<td>Can be registered if noted that is missing</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>Registration of foreign social security numbers to CICS</td>
<td>If it is a tricky case, it can be left to wait into one's personal work queue, other cases only with malice aforethought. &quot;Own work queue- days cannot be granted all the time. Everyone</td>
<td>Was discussed and instructed in a meeting with the whole</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
<td>Date/ Source</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Informing the customer about his/her case's progression in Kela?</td>
<td>The customer should be informed; primary method of contacting is by phone, secondary by message and the last mean is by letter. If customer is not reached with the first phone call (in these cases) one can send a message or a letter. Everyone is responsible of acting as commonly agreed in Kela.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>Selecting cases instead of picking in the way agreed</td>
<td>Examples were brought up in a meeting why this is not appropriate. In addition this will be followed in future as the managers do observing.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>The service information display</td>
<td>Examples were brought up in a meeting and one person who uses OIWA and the service information display fluently demonstrated to others the fluent use of them.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>Understanding the customer's entire situation; Can we utilize all the information that is available? Registering the bank account number first hand, requesting all information at once etc.</td>
<td>Examples were brought up in a meeting and one person who uses OIWA and the service information box fluently demonstrated to the others the fluent use of them. It was emphasized that it is crucial to get to know fully the customer's issue so that the matter is proceeded as fluently as possible and so that we avoid the defects.</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015</td>
</tr>
<tr>
<td>The waiting time a case is left to wait, what is sufficient?</td>
<td>A child expected to be born should be left to wait 3 weeks after the due date, in other cases a little bit longer time</td>
<td>Implemented December</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Implementation Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>That the due date is necessary, so that the case is not available in</td>
<td>The process of applying the short personal identification number has been changed so that the international family benefit teams (and also some other teams that need this process both in Centre for International Affairs and else) can apply it for themselves without the help of the team that previously did them centred and without the form. The training to do this has been arranged in February 2016.</td>
<td>November 2015</td>
</tr>
<tr>
<td>the work queue prematurely (scanning delay needs to be concerned)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of “vakuuttaminen ratkaistu (Finnish social security coverage</td>
<td>Both international family benefits teams and the social security coverage teams were reminded about the importance of using these specifiers.</td>
<td>December 2015 - January 2016</td>
</tr>
<tr>
<td>solved)” in OIWA and the use of “*etuus (benefit)” so that the cases that involve both benefits can be more easier spotted from the other cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A wish that the customer service guidelines would be better so that they can request the needed information and attachments also in international cases</td>
<td>The instructions/guidelines have been changed into more specific.</td>
<td>November 2015</td>
</tr>
<tr>
<td>The process to apply for the short personal identification number, can it be done without the form?</td>
<td></td>
<td>December 2015 - February 2016</td>
</tr>
<tr>
<td>Barriers to payments; can the customers whole situation be handled and not just the barrier to payment?</td>
<td>The guideline has been changed so that the whole situation and all cases of the customer are being handled as far as possible instead of just the barrier of payment. The managers make sure that there are enough people to handle the cases so that they are still managed before due date. However, special consideration and common</td>
<td>November 2015</td>
</tr>
<tr>
<td>If you can justify a decision, the case should be concluded and a decision given</td>
<td>An objective is to find a common way. Examples are gathered and are being presented to all in meetings. The goal is to rush the process and to eliminate the unnecessary delays</td>
<td>Was discussed and instructed in a meeting with the whole team/ December 2015, continued to spring 2016</td>
</tr>
</tbody>
</table>
| Feedback to customer service teams | • The ability to send messages in E-Service should be marketed actively to all customers  
• All contacts should be correctly attached into right cases in OIWA  
• Hurrying up a case should be done with special notion  
• Being observant when customer contacts, in case there is somethings that has been requested from the customer  
• Not taking call back requests in cases where the same matter have been explained with several call, messages or letter and all important issues are written in comments  
• More courage to make assignments if there is a slight suggestion that something that the customer has told would have an effect to something  
• To be precise when accepting applications; making sure that all necessary information is filled, especially 6 month retrospective application due | Spring 2016 |
| Feedback to social security coverage teams | • A wish to remind about commenting also about those cases that seem obvious to those who handle Finnish social security coverage  
• There is a need to remind the teams of what cases bring out automatic impulses in OIWA to international family benefits, so that they are more aware of the situation and do not trust the system in vain  
• Assignment orders to international family benefit should be created when a family from another EU-country moves follows a family member to Finland. This would help to avoid excess payment from the other EU-country and eliminate a lot of unnecessary work from us, the foreign institution and the customer if it is notified in time  
• A suggestion that Finnish social security coverage teams would register spouse information in cases where the spouse is insured in family reasons, so that the information is the already available in family benefits  
• Managers of family benefits and social security coverage teams should find a way to make the work shifts in a way that eliminates excessive waiting times and both go hand-in-hand as fluently as possible | was discussed with managers of the teams in Social security coverage in January 2016 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of info-SED’s, can some information be sent without a SED form by e.g. requesting information with secured e-mail?</td>
<td>A discussion of the necessity of SED-form in certain cases was held, examples are being gathered. Estonia has agreed to share some information</td>
<td>Spring 2016</td>
</tr>
</tbody>
</table>
(e.g. additional to previous SED-forms) via e-mail. In case there are problems, further negotiations with Estonia can be held.

| Can we ask the other countries to use English when contacting us? (e.g. Germany, Greece, Poland) | • A wish was presented in Institution negotiations, however cannot be requested as all countries are able to use their own languages  
• We continue to use translation services and the linguistic capabilities that our own personnel has  
• A wish of an English response in order to rush the process can be added to letters and SED cover letters | Was brought up in institution negotiations in March 2016 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying child benefit via phone</td>
<td>The teams have been trained to fill an application on behalf of the customer during a phone call.</td>
<td>Training implemented 13.4.2016</td>
</tr>
</tbody>
</table>
| Problems in the application form | Requested changes:  
• BIC-code for a bank account number  
• Foreign social security numbers of the whole family  
• The address of the family in the other country  
• Family relationships: a clear question whether or not the person has a spouse in another country and the reason for living separately. A question of who is the child living with (we need to know if the child belongs to the same household with the applicant) | Under implementation progress, going to be ready in Spring 2016 |
## Changes still under progress

<table>
<thead>
<tr>
<th>Development suggestion</th>
<th>What kind of change is wished</th>
<th>Implementation (plan)</th>
<th>person responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it possible for the sent SED-forms be saved somewhere for future needs (annual checks) like we do currently with those that have been sent to Estonia?</td>
<td>• Institution negotiations with Sweden ongoing about the secured e-mail exchange of SED-forms. Otherwise it is not possible; e.g. the form cannot be stored into network disc because there is an issue of the law of registering personal data (henkilörekisterilaki)</td>
<td>Fall 2016?</td>
<td>Confidential</td>
</tr>
<tr>
<td>Possibility to send SED-forms via secured e-mail and a list of contact persons in other institutions would be formed so that you could call or email these persons in case additional clarification is needed. (e.g. Sweden, Norway, Poland, Great Britain)</td>
<td>• Institution negotiations with Sweden ongoing. Others not interested or is not possible technically (Norway &amp; United Kingdom) • EESSI-directory is used, under investigation if it is possible to get other kind of list for addition</td>
<td>Institution negotiations in March 2016, under progress still</td>
<td>Confidential</td>
</tr>
<tr>
<td>Letter templates</td>
<td>• More variable to the template about the possible right to apply family benefits in two countries so that the letter is more easily formatted, the letter at its current state is not very usable as it assumes that we don’t know what the person in question is doing whereas usually we do know. In addition there is a need for a similar template for a situation where the child is not living in Finland would be formed. • General wish was about the letter templates that they would be more customisable, e.g. so that behind additional screen you Under development, suggestions for better form are given and received, implemented fall 2016?</td>
<td>Under development, suggestions for better form are given and received, implemented fall 2016?</td>
<td>Confidential</td>
</tr>
</tbody>
</table>
could choose things that apply for the specific situation.

| Phrase and decision templates | • A new phrase to a situation where a child moves abroad and the benefit is terminated  
|                              | • A new phrase about economic activity  
|                              | • Update of phrase where the child benefit has been terminated because the child does not have residence permit, e.g.: “you cannot receive child benefit from child______, because the child is not covered by Finnish social security from __.__.____. The child does not have a valid residence permit. The child’s belonging to Finnish social security has been solved with a decision given on __.__.____.” | Under implementation, Spring 2016 | Confidential |

| OIWA deleting reasons why cases have been waiting instead of just releasing them | Trying to figure out why this is happening, necessary to contact IT (which is currently very busy and this is not a priority) | Still under progress & investigation | Confidential |

| Centring English and Swedish cases to those that have good linguistic skills | The managers will survey for the willingness to participate into doing English or Swedish cases through work shifting in development conversations spring 2016. After this implementation and guidance are made. | Fall 2016 | Confidential |

| Which is the better way to do things: to close a case and create a new one or to change the specification of the case and continue with the same | The problem was here that if doing the closing option, that person receives more closed cases than that person that uses the latter option, it also distorts the statistic as there is variation. Investigation about this is ongoing, and after knowing which is better, guidelines for all are given. | Spring-Fall 2016 | Confidential |

<p>| The guidelines of single parent supplement are misleading and contradictory | There are unclear, misleading and contradictory guidelines about single parent supplement and the comments of lawyers are confusing. A better guidelines about it is needed. Examples of cases is required from | Needs more examples from cases in | Confidential |</p>
<table>
<thead>
<tr>
<th>Issue</th>
<th>Details</th>
<th>Status</th>
<th>Confidentiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>The documents should be divided correctly and the country codes of</td>
<td>There is no guidelines about this in the indexing handbook: a wish of adding these matters have been delivered forward.</td>
<td>Will be added next time the indexing handbook is updated, possibly Fall 2016</td>
<td>Confidential</td>
</tr>
<tr>
<td>SED form registered in indexing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overlapping work done in the teams that handle the international</td>
<td>There has been some changes in the process of the follow-up in Finnish social security about those that reside abroad. Other issues concerning this development suggestion are still under investigation; the follow-up of those foreign children that have been born in Finland but insured only for the first year and the follow-up of those that work in Finland and are not covered by Finnish social security for good.</td>
<td>under progress, partly finished</td>
<td>Confidential</td>
</tr>
<tr>
<td>family benefits and those that handle Finnish social security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coverage as both do annual follow-up in certain cases to make sure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the applicant still works in Finland.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All international family benefits handlers should be able to solve</td>
<td>The aim is that all international family benefits handlers will be able to solve Finnish social security coverage cases. 2/3 have been trained by April 2016, the last 1/3 will be trained in Fall 2016.</td>
<td>Last training will be implemented in Fall 2016</td>
<td>Confidential</td>
</tr>
<tr>
<td>Finnish social security coverage cases</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Technical issues                                                    | • “check the spouse information from an earlier stage” and doesn’t let to continue  
• The issue that the system lets you do only one decision per day  
Both issues are under investigation                                                                                     | Fall 2016                                   | Confidential    |
| OIWA’s buttons are not activated when clicked                        | Under investigation, A message has been forwarded to IT-person in charge                                                                                                                            | Under investigation                          | Confidential    |
| Defects in guidelines/instructions or the fact that they are too    | The managers and the experts will go through the guidelines in network disc and try to sort it into better: everybody’s help is ongoing                                                             | ongoing                                      | Confidential    |
| scattered                                                            |                                                                                                                                          |                                             |                 |
needed and all should report suggestions and about defects in guidelines.

<table>
<thead>
<tr>
<th>Changes not going to be implemented</th>
<th>Development suggestion</th>
<th>Reason why is not implemented</th>
<th>Not possible to implement in a way wanted, however partly going to be implemented through an EU-project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development suggestion</strong></td>
<td><strong>Reason why is not implemented</strong></td>
<td><strong>Not going to be implemented</strong></td>
<td><strong>Not going to be implemented</strong></td>
</tr>
<tr>
<td>To have the possibility to change information electronically between all EU-countries or to have a common information system</td>
<td>Currently the EU-commission is testing to change SED-form electronically, however it is only going to be exchange or SED-forms and will not be the type of information exchange that we would need, so it will not serve us much. Some of our wishes has been delivered to this project (EESSI-project) so that these wishes could be added to the oncoming RINA-system. The RINA-system will be adopted at the earliest in 2019. Testing of family benefits have been happening in 2015, into which we also took part.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barriers to payments left waiting for 6 months in a situation where customer has been covered by Finnish social security while abroad and doesn’t notice Kela about return to Finland</td>
<td>Not a big problem anymore, because the barriers does not repeat every month if left waiting (change in the system in fall 2015). In addition a change in handling Finnish social security might eliminate the problem wholly; automatic return registered when already noticed beforehand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The necessity of municipal statement when an underage child applies for the child benefit for themselves</td>
<td>It is based on law and therefore must be done</td>
<td></td>
<td>Not going to be implemented</td>
</tr>
<tr>
<td>Two computer screens for everyone to make working much more fluent</td>
<td>There has been an intranet article about it, however it is still under discussion regarding the organization as a whole. Not possible for us to do individually due to budget reasons.</td>
<td></td>
<td>Not implemented, however still under investigation in Kela as a whole</td>
</tr>
<tr>
<td>Is it necessary to ask a customer if he/she wishes to apply 6 months retrospectively (if there is a right), can't we just grant it?</td>
<td>Needs to be asked; the customer might have a reason (e.g. possible overpayment in another country) why he/she has not applied from a date that he/she is eligible of.</td>
<td>Not going to be implemented</td>
<td></td>
</tr>
<tr>
<td>Sending SED -forms before a decision of Finnish social security is made</td>
<td>The decision of social security needs to be done first so that we do not send a wrong message to another country</td>
<td>Not going to be implemented</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 9. Cover letter of 2nd questionnaire

Hello!

It has been nearly six months since the beginning of the process development for international child benefit and the lean workshop and it is now time to review the results.

In order to gain a better understanding about your experiences concerning the process development and the successfulness of the implementation of development suggestions, I kindly ask all of you to fill out a short end survey about the successfulness of the process development. The questionnaire is short and will take your time for maximum of few minutes.

All responses are anonymous, and no individual respondent information cannot be identified.

You can enter to the questionnaire by clicking the following link:
(LINK)

I kindly request to answer to the survey at the latest on Friday 6.5.2016.

In case you have any questions or problems related to the questionnaire you can contact me.

Thank you all in advance!

Best regards,
Anniina Kuokka
Appendix 10. 2nd questionnaire

The follow-up survey of improving the processes of international child benefit

1. Do you think that the Lean development of international child benefit was beneficial?
   - Yes, why? Explain in brief
     - Yes
     - No

2. Do you think that Lean development has enhanced your opportunities to influence into your own work?
   - Yes, why? Explain in brief
     - Yes
     - No

3. Do you feel that your work has become more fluent through Lean-improvements?
   - Yes
   - No
   - I don’t know any improvements that came through Lean

4. Would you recommend Lean-development to other units or teams?
   - Yes, why? Explain in brief
     - Yes
     - No

5. Is there something more that you would have wished from the Lean-development or any other messages related to the matter?

106
Appendix 11. Open answers of 2nd Questionnaire

1. Do you think that the Lean development of international child benefit was beneficial? Briefly explain.
   - Clarifies and quickens the processes
   - The process has been improved with surprisingly many ways
   - Applying the short personal identification number for family members abroad is new, doing customers case as a whole whenever possible. The consideration of economic activity/working has been unified in Finnish social security coverage and family benefits teams, contacting customers faster
   - Way of working have been unified slightly. There has been clarifications to the instructions. Discussions about working practices has been raised.
   - Unification of the ways of working has happened. A decision can be reached much faster now that you ca e.g. apply for the short personal ID number yourself
   - For example we can apply for the short personal identification number ourselves, which quickens the application process
   - The process of child benefit and the ways of working have been made more customer and employee friendly
   - The problem points of the process have been made visible. All team members have been able to take part even though they didn't participate into the workshop
   - Many good changes has been made
   - Small changes into the practices (e.g. trusting the customer more)
   - The processes have been quickened
   - There has been a thorough pondering of the process of child benefit and some issues where found that could be quickened

2. Do you think that Lean development has enhanced your opportunities to influence into your own work?
   Yes, how? Briefly explain.
   - Through the culture of constant development it is possible for all to present development suggestions and the suggestions are being dealt with instead of just them to be forgotten into somebody’s desk drawer
   - Now it’s much easier to bring out own opinions and questions
   - We were able to influence by ourselves, tell our opinions, how our work would be more fluent
   - There is a feeling that also we employees are listened. Instead for the guidelines and commands just being instructed by the management, where the might not be such a good experience of the cases in a common level
   - All has been given the opportunity to give development suggestions and to bring out problem points
   - We were allowed to participate into giving the development suggestions of which many have been implemented
   - The development suggestions of the employees were asked
   - You have been allowed to tell your own thoughts for improvement and development
   - We have been thinking about the development of the process and the problem point both individually and as a group. You were given the opportunity to bring out your own opinions during this.
   No. Briefly explain.
   - It might have affected on the ability to be more courageous in ending cases and making decisions but in general no ability to affect into one’s work.