Michael Ek

Development of New Department Processes

Case: TTS Työtehoseura, Automotive and Forestry Department

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Thesis

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The purpose of this study was to find ways to improve the processes of the Automotive and Forestry department at TTS Työtehoseura. When the study started, the processes did not support either the department or the customers as well as they should. This also had an impact on the financial side.

Employees of the Department were confused with their work, and the problems with the processes were the main reason for that.

The underlying reason for the business problems was that the Department was lacking descriptions for the jobs, business areas, product portfolios, people's expertise areas and the tools to manage everything.

The main objective of the thesis was to develop and write down new and better processes that should make it easier for everybody to do their own work. The new processes contain for example competence matrix, business model canvas, and a clear plan on how to and when to train the employees.

Although this thesis is made for Automotive and Forestry Department, the outcome can benefit other departments later on.

The outcome of this study is a plan of new processes that will help people to do their work as it should be done.

Keywords	Competence matrix, Business model canvas, VR

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Abstract

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1   Introduction

1.1   Overview

TTS Työtehoseura is one of the biggest vocational schools focusing on adult education in Finland. The Automotive and Forestry Department of TTS Työtehoseura is the largest trainer in terms of qualifications in the automotive sector in Finland. Customer experience and efficiency are very important to TTS Työtehoseura, and improved processes are very critical to stay on the cutting edge in the education business.

1.2   Business Challenge

The purpose of this study was to find different ways to improve the processes of the Automotive and Forestry department. When the study started, the processes did not support either the department or the customers as well as they should. This also had an impact on the financial side.

Employees of the Department were confused with their work, and the problems with the processes were the main reason for that.

The underlying reason for the business problems was that the Department was lacking descriptions for the jobs, business areas, product portfolios, people's expertise areas and the tools to manage everything.

1.3   Case Company

TTS Työtehoseura is a registered non-profit association founded in 1924.

TTS has over 1200 members, membership is open for individual and community members.

Membership benefits:

- TEHO-magazine 6 times per year
- Links to research reports by email
- Seminars on current topics free of charge

TTS Vision:

TTS is the Leading Developer of Finnish Work

TTS Mission:

TTS carries out education, research and development to improve customers´ competence and productivity

TTS improve their customers' competence, productivity and well-being:

- Vocational education and training for adults and youth
- Personnel training for companies
- Research and development for entrepreneurs and companies, industries and consumers

TTS fields of competence:

- Bioeconomy/Natural resources
- Housing
- Gardening
- Automotive sector
- Forestry
- Logistics
- Building construction
- Land construction
- Circular economy and environmental technology (Sykli)

Education and Training and Research & Development:

- About 7,000 students
- Coordinator or partner in more than 80 research and development projects
- Turnover 24.7 M €
- Around 175 employees

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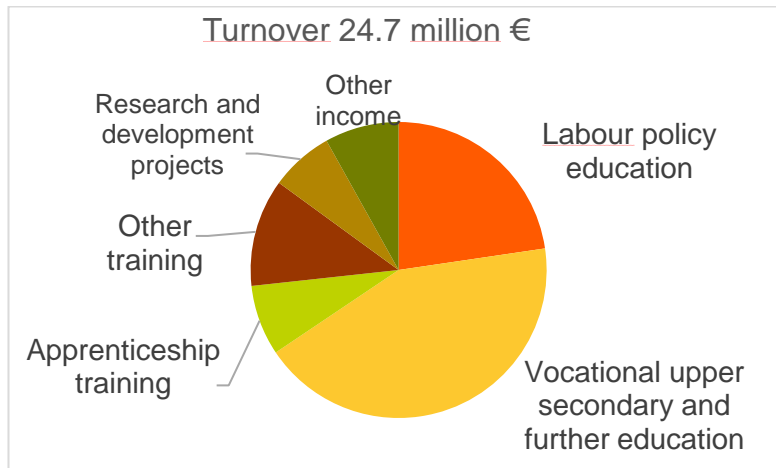
Figure 1. TTS Sources of Income

TTS students:

- The average age is 40

- Male 85% and female 15%

- 6% of students with immigrant background and 60 different native languages

- Qualification leads 70% of students into further studies or work

Research and development on productivity and well-being at work:

- Improvement of work productivity and time management

- Development work in the bioeconomy sector

- Renewable energy and energy efficiency

- Functionality and eco-efficiency of housing

1.4   Objective and Scope

The main objective of the thesis was to develop and write down new and better processes that should make it easier for everybody to do their own work. The new processes contain for example competence matrix, business model canvas, and a clear plan on how to and when to train the employees.

Although this thesis is made for Automotive and Forestry Department, the outcome can benefit other departments later on.

The outcome of this study is a plan of new processes that will help people to do their work as it should be done.

1.5 Key Terms

Competence Matrix displays competences in a table according to core work tasks and the progress of competence development. Competence areas and steps of competence development are described in the table.

Business model canvas is a strategic management and lean startup template for developing new or documenting existing business models. The Business Model Canvas was initially proposed by Alexander Osterwalder based on his earlier work on business model ontology.

VR is a simulated experience that can be similar to or completely different from the real world.

1.6 Thesis Outline

The research was done by using qualitative methods; interviews, internal documentation and workshops. The literature used to support the research are academic journals and papers published by consulting companies and Universities.

The thesis is done as follows. Firstly, the current state of processes is researched by doing interviews among different levels of stakeholders. Secondly, the current processes are studied, and different existing processes are researched. Different aspects and dimensions of processes are selected and researched. Important ways were interviews and studying existing knowledge. Thirdly, the proposal of the framework is built and the targets are set. Finally, a process framework will be finalized.

2   Research Methods & Materials

2.1   Research Approach

This research is an applied empirical research and it is done using the gate model. The research is constructed from seven gates.

Figure 2. Gate model used in Metropolia University of applied sciences in the Business Informatics MBA/MEng programme (2019)

With the first two gates the business problem, objective and the thesis outcome are described, and the research design is built. The third gate focuses on analysing the current state in the case organization and the fourth gate on existing knowledge. In the fifth gate the proposed solution is built,

hence forming the outcome of the thesis. The sixth gate is the validation of the proposal, and the outcome of the final, seventh gate is the finished Processes for the Automotive and Forestry department. The progress between gates is evaluated in gate seminars after gates 1, 2, 3, 4 and 7 by thesis supervisors.

The study itself started with making the current state analysis. This approach was chosen because there had been two different co-operation negotiations in the company during the last three years, and there were clearly many different issues that made people concerned. The making of current state analysis included data collection by doing interviews, questionnaires and workshops, studying existing materials from inside and outside the company. After that the most relevant issues were chosen, and the conceptual framework was built.

The research method used is qualitative through a set of interviews, observations and documentation. Main source of the data is people's thoughts and views rather than statistics or theories. The interviews were one-on-one open discussions, and every discussion took 2-3 hours.

The observations were done during normal work days. Documentations studied were for example employee satisfaction surveys and customer satisfaction surveys.

2.2   Research Design
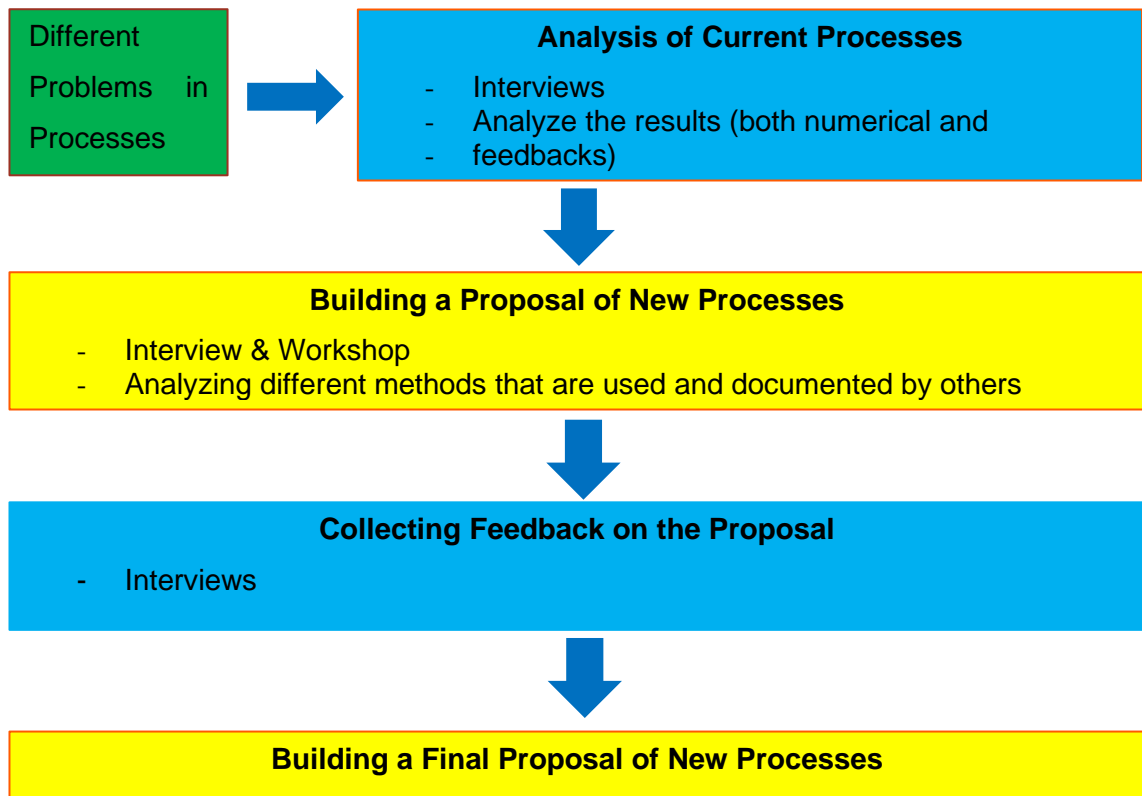
Figure 3. Research design

Research design is based on the gate model and it introduces data collection and outcomes as well (Figure 3).

The first part of the research was current state analysis. The objective was to study the current state of Processes in the Automotive and Forestry Department. Data is gathered with interviews and from internal documentation. Current state analysis is done for the Automotive and Forestry Department. The focus is on the processes that the Department follows.

The second part of the research was conceptual framework. This part includes the proposal building when the most relevant issues were chosen. These issues were studied more in depth to find the best practises. The

objective was to find better ways to do things in different parts of the processes. Literature in this study was mostly gathered from journals and papers published by consulting companies and Universities.

The third part was to create a proposed framework for the processes that should help the department. Information was collected through interviews and workshops. Proposed framework was made combining the good parts of both the current processes and the data from literature and people's different ideas. The proposal included four different issues to be developed.

The proposal was validated first with the managers in the Automotive and Forestry Department. The second part of the validation was carried out by testing the proposal in practise during spring 2019. Third validation was done by presenting it to the managers in the Automotive and Forestry Department and to other leaders in the company. Based on the feedback and comments, the framework was developed and finalized.

The Literature read for the Thesis work

- Theories and Models of Organizational Change. ASHE-ERIC Higher Education Report of John Wiley & Sons, Inc

- Organizational Change and Employee Concerns in the Finnish Defence Forces. Nordic journal of working life studies Volume 8 Number 3 September 2018

- Employee commitment and support for an organizational change: Test of the three-component model in two cultures. The British Psychological Society

- Adaptability Is Key in the Future of Work. Association for Talent Development

- Business transformation, No pain, no gain. J. Stephen McNally, CMA, CPA

- What Makes a Leader. Daniel Goleman.

- Game-Based teaching and simulation in nursing and healthcare. Eric B.Bauman.

- Teaching in a Digital Age. Anthony William Bates.

- Customer Survey 2018. TTS Työtehoseura.

- Employee Satisfaction Survey 2018. TTS Työtehoseura.

- Strategy 2020. TTS Työtehoseura.

2.3   Data Collection and Analysis

Data Plan - approaches and sources

Data Round	Data Type	Data Source	Date&Approach	Recording	Purpose/Focus
Data 1 Current State Analysis	Interview	Specialist Customer Business Partner CO	2018/10	Written notes	Root level experience Mid level experience High level experience
Data 2 Building the Proposal	Workshop	Specialist CO	2018/12	Written notes	To create the proposal in cooperation with selected individuals
Data 3 Collecting the Feedback and Building the second Proposal	Interview & Workshop	Specialist CO	2019/01-02	Written notes	To create the proposal in cooperation with selected individuals
Data 4 Validation	Interview	Company representative	2019/03	Written notes	To gather feedback for the adjustment of the proposal

Figure 4. Data Plan

Data was collected in this research to do fact-finding for the current state analysis, and then building the proposal and validating it. The data collection plan is presented in Figure 4.

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The first round of data collection was done for current state analysis. Data was gathered with 24 interviews with key stakeholders. 4 with l e a d e r , 7 with manager and 13 with trainer experience. Leader experience includes executives and directors who have more strategic view on the subject. People with manager experience include people who are usually in managerial positions and who manage the processes on a daily basis. People who have a trainer experience are the people that use and are part of the processes on a daily basis. The objective of the interviews was to gather knowledge about current state of the Processes. Interviews were recorded, and questions were asked based on the experience level (Figure 4). Interview sessions lasted from 2 to 3 hours. Customers' and other outside stakeholders' comments and ideas were collected via results from the different surveys carried out in 2018. Internal documentation were studied to get the picture of the current organization, strategies and processes.

The proposal was built based on the best practises from current state of the Automotive and Forestry Department and the existing knowledge. Data collecting was focusing on workshops and interviews with key stakeholders to decide the main issues to focus on.

The third data round, building the second proposal, was done in a very similar way as the first proposal, by interviews with key stakeholders.

The fourth round, the validation, was done via interviews with key stakeholders. Mainly this included managers from the Automotive and Forestry Department, and people in leader position.

2.4   Validity and Reliability

The basis of the conceptual framework was concluded from existing process models and the well known best practises in education business. The framework was further developed by the information collected f r o m people working both inside and outside the Automotive and Forestry

Department. All the interviews were documented, and notes written during workshops. No data used is based on assumptions nor based on only one person's opinions. Every piece of data collected is based on real-life situations. The result of the thesis has gone through a validation process.

3 Current state analysis

3.1 Organization and people

The Automotive and Forestry Department was very unorganized when the project started. There had been two co-operation negotiations during the last couple of years, and the Department director had been changed two times during the same time. All this had resulted in people being confused, and people clearly felt that they really did not know what they were supposed to do.

Also the fact that during the co-operation negotiations there had been people dismissed from the Department, had some impact on the employees. People had very different kinds of attitudes and insights on how the situation in the Department was.

Some of the people felt that they had too much to do, and some felt that they had too little to do. This combined with the situation where people did talk about how they think the work load for different persons were, made the working atmosphere very inflamed.

A big problem was also that the whole department did not know what everyone was doing or should be doing. Sometimes this appeared in the way that same things were done simultaneously by several people, and sometimes in the way that things were not done at all.

The Automotive and Forestry Department organizational chart at the beginning of the thesis project is shown in Appendix 1.

3.2 Strategy and vision

The strategy and vision were very unclear to the people in the Automotive and Forestry department. This was the case even though the strategy and vision were and still are relatively clear. One reason for this is the fact that people feel it is not easy to find information from the Organizations Sharepoint and other data sources.

Most of the people felt that vision and strategy were something that no one wanted the subordinates to be part of. A common feeling was that "I just do my job, no matter what the strategy and vision says". This is of course not very rare in different organizations that has gone through co-operation negotiations.

A big question that came up in several discussions was "what kind of education are we supposed to focus on?". With this people meant that are we going to stop doing some kinds of educations, for example car bodywork education.

Our customers also make us face some further challenges. As an example, some of the customers would like to have the education in Rajamäki, and some of the customers in Vantaa. Then of course there are some demands to arrange education even in other cities around in Finland.

3.3 Technology

The technology evolves in a very rapid way, almost every month there are some new technologies popping up. For example VR, XR, AR and other technologies are getting more and more popular.

Automotive and Forestry Department has started to use new technology; the department has several different simulators, especially the Forestry team. The Forestry team uses

the simulators on a daily basis, and the students have to pass different tests in the simulators before they can go and drive the real forestry machines in real environment.

Some of the Forestry simulators are in the Pictures 1, 2 and 3.

Picture 1. Forestry simulators.

Picture 2. Forestry simulators.
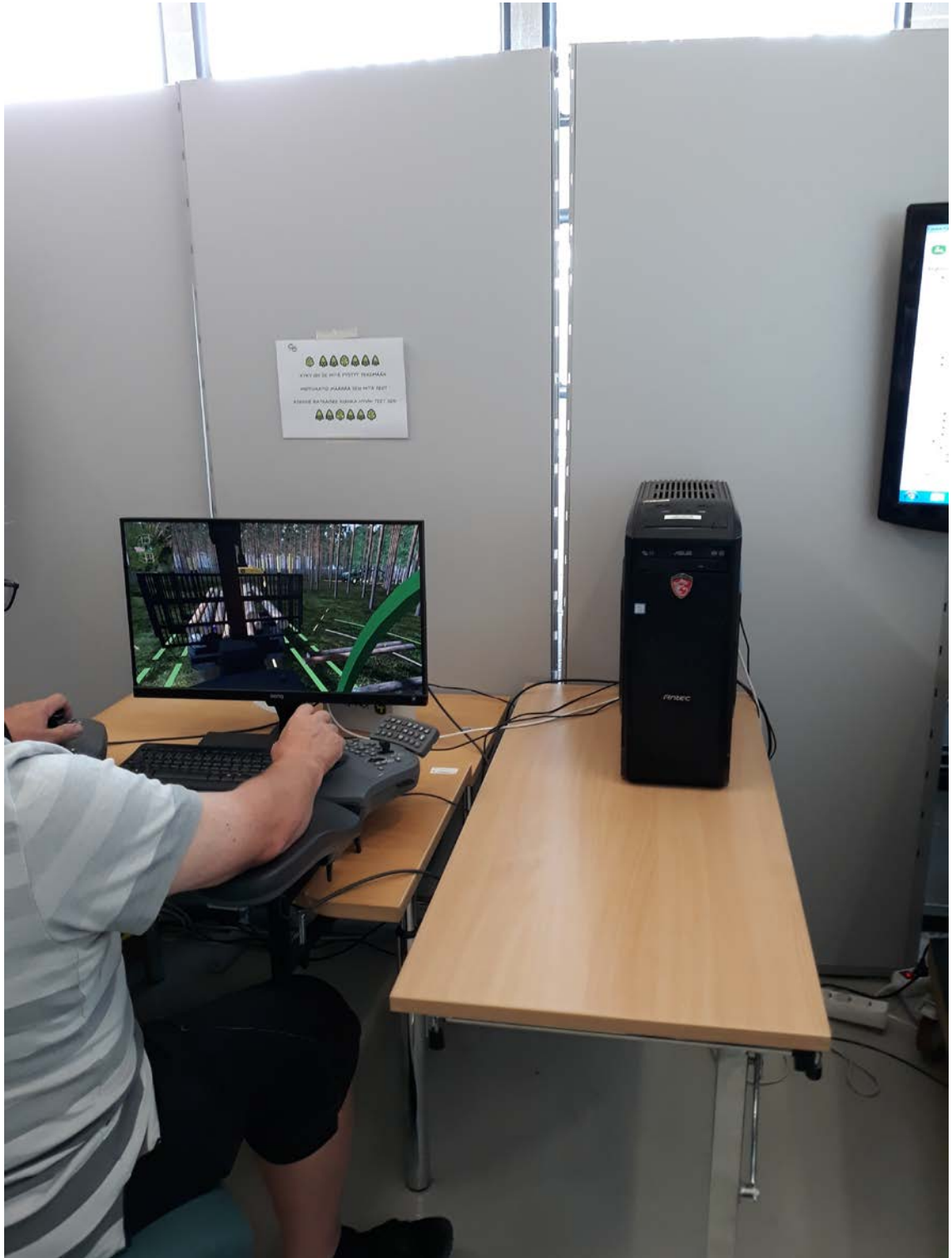
Picture 3. Forestry simulators.

Picture 4. Log Truck simulator

In the Picture 4 there is a Log Truck simulator. It is a sophisticated simulator, where you can do everything done by a log truck, both loading the logs on the truck and drive the truck. You can choose from several different simulation modes, summer/winter, night/day, different types of log handling training, different driving situations and so on. The same simulator can also be used for other purposes, such as Forklift simulator. It is normal that before any student can go and train with real machines and cars, they have to execute with approval different tests with simulators.

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Picture 5. Truck simulator.

In the Picture 5. there is a Truck simulator, it's a light version of truck simulators so it can easily be taken to different places, for example different fairs. But even if it is a simplified version of large simulators, it still handles a lot of different simulations. You can choose if you want to drive with a truck, bus, full trailer combination, semitrailer or van. It is also possible to choose the weather conditions, different surroundings, night or day and so on.

The automotive team has only one simulator, one painting simulator. There are not that many simulators just now for the mechanics. Today the main part of simulators are some kind of driving simulators, but during the last year there have been several different projects worldwide to develop simulators even to mechanics. One technical simulator that is commonly used is a start-off inspection simulator, where the different start-off inspections are simulated. You can check the oils, other liquids, lamps, tires and so on.

Very common technologies used in education today, especially in adult education, are the different internet platforms for studying. In the Automotive and Forestry Department the internet platform for studying is commonly used. There are both normal material, and also some interactive materials.

3.4   Leadership and management

The leadership has perhaps not been that good during the past a couple of years. People have felt that they have been led dictatorially, even though the organization should be led in a totally different way. In the TTS Työtehoseura Employee Satisfaction Survey there are results of the employee satisfaction survey from autumn 2018 for the Automotive and Forestry Department. In the document there are the results of the surveys done in spring 2017, autumn 2017 and autumn 2018, in other words the last three surveys. The survey clearly indicates that people have really not been that satisfied with the leadership, neither in the department nor in the whole organization.

4   Conceptual Framework

4.1   New demands on organization layout

Too hierarchical and rigid organization makes it very hard to get the necessary information to the people in the department. The change method that would work well in the change needed is Teleological (John Wiley & Sons, Inc, 2003:p.32). This category has several different common names, including planned change, scientific management, and rational models. Strategic planning, organizational development, and adaptive learning approaches come under the teleological umbrella. These theories emerged simultaneously with the evolutionary models. Some of the roles have to be deleted, in some cases the role has to be extended and in some cases the role has to be reduced.

Equalizing the load. The load has to be equalized by rearranging some of the roles. The team borders that clearly were there, almost visible ones, have to be removed to get the employees of the Automotive and Forestry Department work beyond team limits. Of course people have some specific specialty areas that they are mainly working with, but in case of emergency situation people have to be ready to help each other.

Make the different roles clear to whole organization. The different roles have to be written down, not only in the Automotive and Forestry Department, but also in the whole TTS Työtehoseura Organization.

4.2   The changes in strategy and vision

As in the Adaptability Is Key in the Future of Work, written by Paula Ketter (Association for Talent Development, 2018). "The future of work is coming at a fast pace, and the skills needed to stay up to speed are changing even faster", the changes in strategy and vision for TTS Työtehoseura Automotive and Forestry Department, and specially for the automotive team, the changes are coming very rapidly. And also as in Business Transformation, No pain, No Gain written by J. Stephen McNally (J. Stephen McNally

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CMA, CPA, 2018), "Management may embark on a business transformation for many reasons. First, the organization may simply need it. On a macro level, the company is faced with globalization of markets and operations, new regulations and standards, greater business complexity , evolving technologies, and more disruptions. On a micro level, it may be struggling because of a shift in customer demands, strong competition, weak leadership, or other challenges. Business transformation may be the answer", TTS Työtehoseura Automotive and Forestry Department has also this kind of challenges.

Making the customers' needs clear to the whole Automotive and Forestry Department. The customers' needs vary from customer to customer, sometimes very clearly. Some of the customers do the training for themselves and need only the completion of the qualifications from Automotive and Forestry Department. Some other customers on the other hand need the Automotive and Forestry Department to do everything. Also a big difference between different customers' needs are in the location where the education is held. Some of the customers like to have the education in Rajamäki, some in Vantaa, and some in different locations around Finland. To help with this the Business Model Canvas has to be created.

More and more there are needs to arrange education virtually. The main reason is to save time and other resources. Everything that can be done either virtually or otherwise remotely, will make it possible to study without travelling far away. Of course the fact that almost every year there tends to be less money for education does add some pressure to increase remote education. A clear plan of implementing new learning technologies has to be created.

Making the whole organization feel that they are needed, and that they understand the goals, strategy and vision is very important. The hierarchy should be more shallow. This would make it easier for people to communicate and therefore feel that they are needed. This would also help make sure that people understand the goals, strategy and vision.

In Business Model Generation Alexander Osterwalder (Alexander Osterwalder, 2010), describes Business Model Canvas The Business Model Canvas is a shared language for describing, visulizing, assesing; and changing business models. A business model

describes the rationale of how an organization creates, delivers, and captures value. The starting point for any good discussion, meeting, or workshop on business model innovation should be a shared understanding of what a business model actually is. We need a business model concept that everybody understands: one that facilitates description and discussion. We need to start from the same point and talk about the same thing. The challenge is that the concept must be simple, relevant, and intuitively understandable, while not oversimplifying the complexities of how enterprises function.

The Business Model Canvas is a good tool also in educational business, to clearly describe the business models.

4.3   Technology changes the education

Take advantage of new technology in training. The technology evolves in a very rapid way, almost every month there are some new technologies popping up. For example VR, XR, AR and other technologies do make themselves more and more popular. A clear plan of implementing new learning technologies has to be created.

In the Game-Based teaching and simulation in nursing and healthcare, written by Eric B.Bauman (Eric B.Bauman, 2012), "Clinical simulations, virtual worlds, and interactive gaming are types of pedagogies that transform the way we educate and prepare learners for clinical challenges. Simulations are a powerful strategy to engage and provide active learning with students; educators become facilitators of learning by creating interactive events and activities that reflect reality, where students can practice, acquire knowledge, and attain skills in a safe, nonthreatening environment". In the fields of Automotive and Forestry, exactly the same problems exist, and new and faster ways of teaching and learning have to be developed.

In Teaching in a Digital Age Anthony William Bates (Anthony William Bates, 2015:p.128) wrote Online learning is increasingly influencing both classroom/campus-based teaching but more importantly it is leading to new models or designs for teaching

and learning. When commercial movies were first produced, they were basically a transfer of previous music hall and vaudeville acts to the movie screen. Then along came D.W. Griffith's 'Birth of a Nation', which transformed the design of movies, by introducing techniques that were unique to cinema at the time, such as panoramic long shots, panning shots, realistic battle scenes, and what are now known as special effects. A similar development has taken place with online learning. Initially, there were two separate influences: designs from classroom teaching; and designs inherited from print-based or multimedia distance education. Over time, though, new designs that fully exploit the unique characteristics of online learning are beginning to emerge. What we do when we move teaching online is to change the learning environment.

This kind of change has been ongoing in Finland for a long time, but the changes have been going on faster and faster the last 3 years. And also in TTS Työtehoseura Automotive and Forestry Department the changes have been noticed, and in many ways also implemented. But there are still lot to do.

Very common technologies used today in education, especially in adult education, are the different internet platforms for studying. The internet platform for studying needs to be commonly used also in the future.

Be part of different projects and development groups. Automotive and Forestry Department is involved in some projects, both international and domestic, where new technologies are going to be implemented. The department should be also in the future involved in different development projects.

4.4   New demands on organization leadership and management

As described in Journal of Occupational and Organizational Psychology (The British Psychological Society, 2007: 80, 185–211), although commitment is commonly identified

as an essential element for the effective implementation of organizational change, little empirical evidence exists to support this claim. In both studies they found considerable support for the relations between commitment and support predicted by the model. However, they also found evidence for potential culture differences.

In the Organizational Change and Employee Concerns in the Finnish Defence Forces (Nordic journal of working life studies Volume 8 Number 3, 2018) are written that The Finnish working life has suffered from the intensification of work and rising insecurity. These trends have affected white- and blue-collar employees. This is something that is ongoing exactly the same way in educational business.

In the What Makes a Leader written by Daniel Goleman (Harvard Business Review Vol. 76 Issue 6, Nov/Dec 1998), The components of emotional intelligence- self-awareness, self-regulation, motivation, empathy, and social skill-can sound un-businesslike. But exhibiting emotional intelligence at the workplace does not mean simply controlling your anger or getting along with people. Rather, it means understanding your own and other people's emotional makeup well enough to move people in the direction of accomplishing your company's goals.

Change the way of organization leadership to more inclusive. Because the leadership has maybe not been that good during the past a couple of years, people have felt that they have been led dictatorially, even if the organization should be led in a totally different way. In the TTS Työtehoseura Employee Satisfaction Survey 2018 there are results of the employee satisfaction survey from autumn 2018. In the document there are results of the surveys carried out in spring 2017, autumn 2017 and autumn 2018, in other words the last three surveys.

The Automotive and Forestry Department structure, the management style and the way the communication is handled has to be changed. It is clear that these changes take time before they are getting visible in practice.

Reorganization of the Automotive and Forestry Department. The Automotive and Forestry Department has to be reorganized to meet the demands of both employees and customers. Some of the roles have to be deleted, in some cases the role has to be extended and in some cases the role has to be reduced. This has also an impact on leadership and management. The leadership and management should be more straightforward and human-centered.

5   Building the framework

The framework is mainly a plan for new processes and structures. Some of the ideas has been tested in practice during the autumn 2018 and spring 2019.

5.1   Organization and people

Reorganization of the Automotive and Forestry Department. The Automotive and Forestry Department had to be reorganized to meet the demands of both employees and customers. In the Appendix 2 is the new organizational chart of Automotive and Forestry Department. Some of the roles have been deleted, in some cases the role has been extended and in some cases the role has been reduced.

The structure of the department in the beginning of the project was very much such that department members worked as individuals rather than team members.

During the autumn 2018 and spring 2019, we have already reached a point where department members work more or less as team members.

The aim is definitely to try and get the department to work as a synergistic team. It will take a lot of time and effort to get there, but step by step the department should achieve it.

The department consists mainly of specialists, and that is of course a totally different situation compared to, for example, a department of manufacturing line in a factory.

In the type of department that this department represents, it is very difficult to find new personnel if someone decides to leave the company. It has required a lot of work for me to find new and skilled employees to fill certain positions where the previous employees left just before I started to work as a department director. The department works in Automotive and Forestry fields, and they are such fields that there are not that many people in Finland that have the needed skills.

One thing with working as a leader to a department consisting of specialists is that it is not easy to get the trust of the department members. Especially when people have been experiencing tough times and bad leader work, they are really suspicious to a new leader and will not trust immediately when a new leader assumes the director position. To start immediately to have bilateral discussions with department members was a good thing to do.

Plan for the new and for the changed roles.

The Automotive and Forestry Department director is the administrative manager for all employees in the Automotive and Forestry Department. The director is the person who approves vacations and travel bills. He also keeps the development discussions under control. The director takes part in different meetings with customers, and the director also attends internal meetings when it comes to making decisions on matters in a larger scale.

The managers in the Automotive and Forestry Department have responsibility of the management on a daily basis and they take part in the trainings. The managers are also in contact with customers. The administrative managerial role is reduced from the manager's role.

The training specialists in the Automotive and Forestry Department are in contact with customers, take care of planning of the education, and in main part of the cases also take part in the trainings.

The trainers of the Automotive and Forestry Department do the trainings and take part in the planning of the educations. Trainers also assess the completion of the qualifications.

Development manager and the researcher of the Automotive and Forestry Department have responsibility over different research projects and they also take care of the customers and everything else according to the projects.

Secretary of the Automotive and Forestry Department is a back-office person who is involved in students' other matters that are not related to training day program. In other words, secretary takes care of a variety of matters from the very beginning of the process to the day when the student gets the qualification. Secretary makes sure that the relevant information of the student goes to the authorities.

Coordinator of the Automotive and Forestry Department is involved in the personalizing of the studies, and coordinator is also cooperating with the sales and marketing team.

The Account Manager role of the Automotive and Forestry Department is deleted. The customer relations management are done in cooperation with the sales and marketing team. The Automotive and Forestry Department is so small that the department cannot have a full-time account manager. In cooperation with the sales and marketing team we have access to an account manager who works also for the Logistics department.

Equalizing the load. The load has been equalized by arranging some of the roles. The team borders that clearly were there, almost visible ones, have been removed, and now employees of the Automotive and Forestry Department work beyond team limits. Of course people have some specific specialty areas that they are mainly working with, but in case of emergency situation people are ready and capable to help each other. In the organization chart in Appendix 2 there are three roles that are very clearly such roles that the person can work in two different teams. The persons Sami Silventoinen, Otso Tavaila and Kimmo Ylitalo have capabilities to work both in Car Mechanic and Utility Vehicle teams.

Make the different roles clear to whole organization. The different roles have been written down, not only in the Automotive and Forestry Department, but even in the whole TTS Työtehoseura Organization. The different roles are:

Training Manager
- Responsible for the implementation of service responsibilities within his / her area of responsibility in accordance with the TTS common processes and industry regulations
- be responsible for a coherent and statutory training process within his unit
- be responsible for planning, implementing and reporting on education, research and development services
- carry out sales and customer relationship management for their unit in collaboration with the account managers in accordance with the sales process
- Responsible for budgeting and budget monitoring of his team

Head trainer
- Responsible for the qualifications and training assigned to him / her, in accordance with the joint processes of the TTS and the regulations of the industry, in cooperation with other trainers
- Leads the team
- Acts as a sales assistant and is responsible for managing customer relationships

The responsible trainer
- be responsible for the initiation and delivery of training
- be responsible for planning, directing and monitoring the education of students under their responsibility
- be responsible for planning, supervising and supervising on-the-job training of students under their responsibility
- operates in accordance with the joint processes and official regulations of the TTS

Professional trainer
- be responsible for teaching and coaching, both in class and on-the-job and distance and distance learning, for the whole of the subject taught.
- Document Wilma's teaching events, student absences and inform the team responsible trainer.
- is responsible for organizing competence demonstration events in accordance with the plan
- operates in accordance with the joint processes and official regulations of the TTS

Trainer for Common Qualifications
- be responsible for teaching and coaching, both in class and on-the-job and distance and distance learning, for the whole of the subject taught.
- Document Wilma's teaching events, student absences and inform the team responsible trainer.
- is responsible for organizing competence demonstration events in accordance with the plan
- ensure the recognition of prior knowledge of the common elements of the qualification under their responsibility, upon presentation by the responsible trainer
- cooperates with the unit's trainers and training managers

Advisor
- is responsible for activities related to the supervision of studies
- be responsible for matters relating to joint application and selection interviews with young people
- take students learning abilities and other relevant tests and instruct trainers to take into account students learning difficulties
- collaborates with responsible trainers and trainers on an early intervention model
- be responsible for both community-based student support work and individual student support work in accordance with the student support plan

Resource Planning

- be responsible for the planning of the training so that the resources (persons, premises, machines, equipment) used in the house are used efficiently
- Collaborates with other in-house resource planners
- contribute to resource development

Study Secretary

- be responsible for general office work within his / her area of responsibility
- be responsible for advising on study social interests and liaising with the appropriate authorities
- issue transcripts and certificates of interruption or resignation
- be responsible for writing the diplomas and certificates and submitting them for signature and filing
- be responsible for forwarding billing information related to certificates of competence
- be responsible for customer service in its role

Research / Development manager

- be responsible for the coherent implementation of research, development and training activities in their area of expertise
- coordinates the portfolio of knowledge projects and brainstorming of research topics
- coordinate and develop training and coaching in their area of expertise
- responsible for the design and development of the content of the research and training activities, in cooperation with the Unit Management Team
- be responsible for the planning of working time resources in their area of responsibility in cooperation with the unit management team

Researcher / Expert / Senior Scientist / Specialist

- be responsible for the agreed progress of the study or project or part of its own project and for achieving its objectives

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- as project manager, responsible for monitoring the project's financial and working time resources, executing as planned and reporting, collecting customer feedback and self-assessment
- informs the selected working partner of the project about the progress of the project
- be responsible for communicating the project within the TTS in accordance with the operational system
- participates in research / education and development tasks in their area of expertise
- actively and proactively participates in the design of new projects, tendering and financing
- participates in the acquisition and management of customer relationships within the unit
- participates in know-how stakeholder engagement, actively monitors changes in the operating environment and takes care of the maintenance and development of his / her own competence
- actively and proactively communicate their own research and, where appropriate, their own area of expertise, both through their own information channels and through other channels (articles, presentations, visits)

Account Manager
- be responsible for named customer accounts
- acquires new customers

These are the main contents of the roles, and each of the departments can do some minor fine adjustments to them.

5.2 Strategy and vision

Making the customers' needs clear to the whole Automotive and Forestry Department. The customer needs vary from customer to customer, sometimes very clearly. Some of the customers do the training for themselves and need only the completion of the qualifications from Automotive and Forestry Department. Some other customers, on the other hand, need the Automotive and Forestry Department to do everything. A big difference between different customer needs is also in the location where the education is held. Some of the customers like to have the education in Rajamäki, some in Vantaa, and some in different locations around Finland.

More and more there are needs to arrange education virtually. The main reason is to save time and other resources. Everything that can be done either virtually, or otherwise remotely, will make it possible to study without travelling far away. Of course the fact that almost every year there tends to be less money for education adds some pressure to increase remote education.

Making the whole organization feel that they are needed and that they understand the goals, strategy and vision. One aim with the change in the organization chart of the Automotive and Forestry Department is that the hierarchy would be more shallow. This makes it easier for people to communicate and therefore feel that they are needed. This would also help make sure that people understand the goals, strategy and vision.

The most important transformative business models in near future in our business are:

- Implementing the computer-based technologies (VR/XR/AR) to education business.
- Implementing an even more closer cooperation between companies and schools.

The computer-based technologies will bring new business models to us. We are already able to provide time-saving training methods. We have different study programs that include the VR technologies. Before students can go to real environment they have to complete different tasks in the VR environment. This is a very good way to teach: for

example the safety issues can be learned in the VR environment. If something goes wrong in real environment, it can be very dangerous and expensive compared to VR environment where the failures are neither dangerous nor expensive.

The cooperation both with companies and other schools is a must in the future. When the funding from government to education is decreasing all the time, it will make it a must to move more and more of the education to the business world. This is a thing that really needs a lot of developing and training because not all the companies are ready to move to educating systems like this. For knowledgeable students it is quite easy to find an eligible company for on-the-job learning. The students that are little less knowledgeable have sometimes severe difficulties in finding a place for on-the-job learning.

When the budgets are decreasing, the schools have to rethink what different education they are offering. It is not possible that every school is offering everything. Instead, they have to choose what is the core thing that they should offer and what is not. The cooperation with other schools means that the students can take courses from other schools and even take part of a degree in another school than the one they are mainly studying in.

When a large part of the financing will come in the future from completed degrees and employment rates, it will also influence on what different schools will offer. It will not be that attractive to offer education that will not result in employment.

The most important transformative market drivers in near future are:
- To get degrees in more effective ways.
- To use less taxpayer money to get the degree.

Both transformative market drivers have to do with money and how to use less money in education. The common way of thinking is that the time spent for a degree should decrease and also the time spent in the school buildings should decrease. In adult education this has been a normal way of studying already the last 20 years, but now the

youth education, especially the vocational education, is implementing a same way of studying.

Combining new educational technologies with increased amount of studying time in companies is something that will be happen everywhere in Finland. This affects of course the teachers' jobs very much. So far the teachers have been working mainly in the school premises, but in the future they have to be more and more out in the companies where the students are studying.

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The business environment based on the Five Forces Model Analysis. =>CSA

Threat of New Entry
High equipment costs
Hard to find skilled personnel
Hard to get rights to give degrees

Threat of New Entry

Competetive Rivalry
Many competitors
Some differencies in quality
Otherwise not big differencies

Suppllier Power

Competetive Rivalry

Buyer Power

Supplier Power
Number of suppliers small
Cost of change depends on what it's about
Suppliers are big

Buyer Power
Many customers
It's easy for customers to change to competitor
Size of each order varies

Threat of Substitution
The manufacturers can start to do the education without us and official degrees
Some of the suppliers can start to do the education without us and official degrees
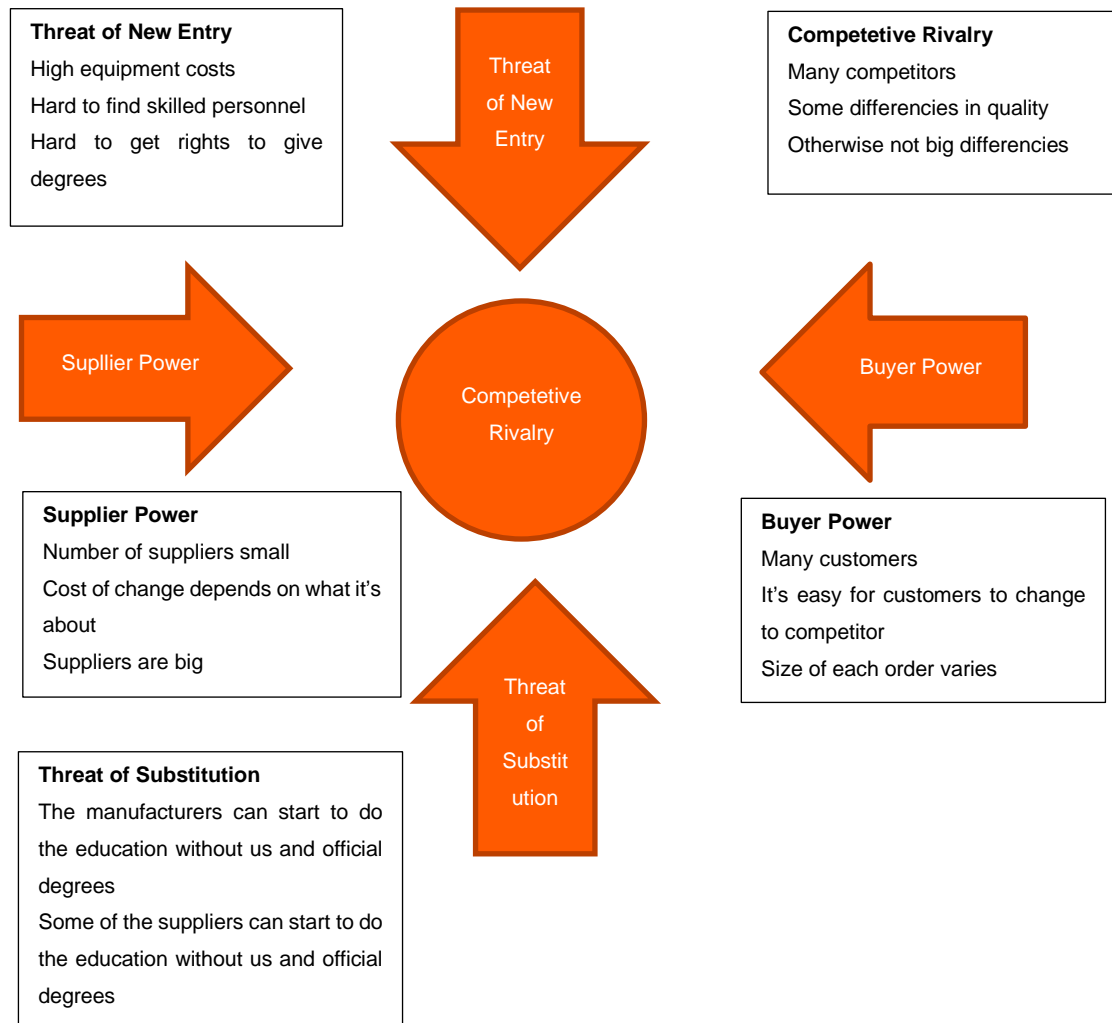
Threat of Substitution

Figure 5. Five Forces Model Analysis of the Automotive and Forestry Department.

In the figure 5 is the Five Forces Model Analysis of the Automotive and Forestry Department. In the analysis the business environment has been studied, and there is list of important points of views to take into consideration when doing plans for the future.

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Threat of New Entry

High equipment costs.
The equipment needed to start education to mechanics and drivers of different vehicles and machinery are very expensive. One new vehicle or machine can cost from 10 k€ to 1000 k€. Of course it is not necessary to buy all the equipment, it is also possible to rent. Nevertheless, even if you rent the needed equipment, it will cost a lot of money.

Hard to find skilled personnel.
Finland is a very small country when it comes to the amount of population. The number of skilled persons in different areas of knowledge is also very small. It is very hard to find skilled personnel, and especially to find skilled persons that are on free market.

Hard to get rights to give degrees.
The Ministry of Education and Culture does not easily give degree rights to schools that are new to the specific education, in other words have not earlier organized the specific education. If a school or other educational institute would like to get some funding from ministry or other state organization for the education, they must of course have official degree rights.

Competetive Rivalry

Many competitors.
There are already many competitors in our business. However, during the last few years the trend has been that the number of competitors is reducing. The main reason for this is that the government is reducing the funding to different schools. Schools have to reorganize their operation, and many of our competitors have made the decision to stop doing expensive educations.
One result of this is also that cooperation between different schools has increased. I think that is a good thing. It is not very smart in a small country like Finland that several schools handle exactly the same educations. There is simply not enough potential students to do that.

Some differencies in quality

In the studies that have been done by government, it is quite clear that there are differencies in the quality of education given in different schools. This is a problem, not a huge one, but problem anyway. The government of course tries to solve this problem. It is not easy to monitor every school to ensure that they all manage to get to the quality that they are expected to do.

Otherwise not big differencies

The educations and degrees that are under the Ministry of Education and Culture are very clearly specified In other words it is not possible to execute the educations in many different ways. Of course some differencies come for example via the location of education. If the school is located in a place where it is very hard to get, then it most likely is not very attractive for students, especially for students who do not own a car.

Supplier Power

Number of suppliers small

In our business the number of suppliers is small. The reason for this is again the fact that Finland is a small country, and there is not room for many suppliers. The volume of customers is so small that the interest to try to come on the market as a supplier is small. We have mainly two kinds of suppliers; suppliers that supply equipment and vehicles, and suppliers that supply specific parts of the education.

Cost of change depends on what it is about

The cost of change depends on what kind of change it is about. If we change the supplier that supplies equipment or vehicles, it might have a big effect on costs. If we on the other hand change the supplier of a specific part of the education, the effect on costs is smaller.

Suppliers are big

Most of the suppliers of equipment and vehicles are big, or at least big when compared in the Finnish market. The suppliers of specific parts of education are often small.

Buyer Power

Many customers.

We have many different customers. Our customers are both from the public sector and the private sector. The size of the customers also differs a lot. We have customers from single citizens to big companies.

It is easy for the customers to change to competitor.

Because the difference between different schools doing the same kind of business than we do is very small, it is easy for the customers to change to competitor. We have done many things to make the customers to stay with us, mostly by making the quality of the education better than the competitors. I think we have managed to find specific things that give our customers some extra value for the money. For example we can very easily hold the educations on several different locations, and we also have done clear plans and instructions how to build up the education days the way that customer wants.

Size of each order varies.

Depending on the size of the customer the size of each order varies quite a lot.

The orders can be everything between an order of education for one person to education of several hundred persons. Normally each order is about educating approximately 15 persons.

What comes to the size of the orders, there are also differencies depending on what kind of education it is about. If the case is to educate mechanics, it is not practically possible to have more than 15 persons on the course. If the case is to educate foremen, buyers or sellers, then it is easily possible to have more than 15 persons on the course.

Threat of Substitution

The manufacturers can start to do the education without us and official degrees.

Some of the car and other vehicle manufacturers have started to do the education without us or any other official school, and of course without an official degree. But so far most of the manufacturers have not done that. The main reason for them not to start is of course the volume. In big countries like Germany, France and Italy, the volumes are

much bigger, and that make the manufacturers more interested in doing the education business by themselves. In countries like Finland and Sweden the volume is mostly too small for manufacturers to start doing the education business.

Some of the suppliers can start to do the education without us and official degrees.
As for the manufacturers, the same thing applies with the suppliers. Some of the suppliers have started doing education, but the volumes are still so small that the interest among the suppliers to start doing education is small.

Business Model Canvas.

In figure 6 is the Business Model Canvas for the whole TTS Työtehoseura company. This is very important for all the department members to understand.

Business Model Canvas

Partner Network	Key Activities	Value Proposition	Customer Relationship	Customer Segments
We are in education business, therefore the Key Partners are mostly even our customers, for example device representatives. Other Key Partners are different specialists from other organizations.	Our Key Activities are doing education, arranging fairs, keeping customers informed of different activities. **Key Resources** - Intellectual - Human - Financial - Computer programs - Premises	We solve the problems our customers have in skills and competencies by educating their personnel. We bring the latest knowledge to our customers' personnel, both regarding technical things, and things related to sales or management.	We have several long-term customer relationships. We have succeeded in helping customers with their skill and competence problems. **Channels** Our customers want to be served both through face to face contact and internet.	- Bioeconomy/Natural resources - Housing - Gardening - Automotive sector - Logistics - Building construction - Land construction - Circular economy and environmental technology (Sykli) The most important customers are Logistics and Building construction.

COST Structure	Revenue Streams
- The most expensive thing in our cost structure is the premises. To execute education, especially in automotive sector, demands large premises. Another expensive thing is needed equipment. The least costly resource to us is computer software.	Customers are willing to pay for high quality education. Education is high quality when customers feel that they will manage to do their business more effectively after our education. Another great value to our customers just now is when we help them to find new personnel.

Figure 6. The Business Model Canvas for the for the whole TTS Työtehoseura company.

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The key problem areas.

Skilled personnel.

To find skilled personnel, especially in certain areas such as car body repair specialists, is very challenging. Currently there are big challenges to find personnel nearly in every field, and to find specialists is very challenging. Unfortunately it often leads to companies buying specialists from other companies, and that is absolutely not a good thing. One of our key activities is to educate different companies' personnel, both existing and new. When it comes to new personnel, our job is also to help find new personnel. In some cases it is not difficult, for example to the companies that are in the logistics field. For automotive companies on the other hand it is not that easy to find new personnel. For some reason there are still very persistent views in people's minds that working with cars, especially as a mechanic, is heavy, dirty and so on. This is a problem that we in automotive field have tried to get rid of since nowadays even working as a mechanic is definitely much more convenient than still some years ago.

Business financing.

The government has reduced their funding to education and the companies are not enthusiastic to increase their share of costs. The trend has unfortunately been that the government of Finland has been reducing the financing to education, especially to the vocational education. The government pursue that more of the education is implemented in companies, but the reality often does not look like that. The companies are willing to educate the skillful students, but the less skillful students are not that wanted. The biggest problem in this is the fact that the companies do not get any or very small financial support to educate people.

Premises.

Some of our customers are experiencing our premises in Rajamäki difficult to reach. Fortunately we have also premises in Vantaa, and many educations can be arranged also in Vantaa. Nowadays there are people that do not own a car, and even people that do not have a driver's license. This makes it very hard to start studying in schools that have their premises in such locations that are very hard to reach without an own car.

Many schools have started activities close to train stations, bus stations and so on. Even we at TTS have plenty of activities in Vantaa, in locations easily reached by bus.

Work Processes.

We have several different work processes in the department depending on what kind of education it is.

Formal qualification training:

- secure funding
- make sure that the content of the training corresponds to the degree you are seeking
- resource trainers and other resources for the training
- take care of contact and personalization of enrollees
- make sure that all student information is in the systems and that the student is shown a timetable
- ensure that the training is of high quality
- ensure that the student receives sufficient guidance, including in the workplace
- organize a degree for the student at the workplace
- secure that all needed information for the degree will be in the systems
- write a certificate
- make sure the student gives feedback

Non-degree education paid by companies:

- design a training program with a company representative
- resource trainers and other resources for the training
- make sure that all student information is in the systems and that the student is shown a timetable
- ensure that the training is of high quality
- make sure the student gives feedback

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General instructions for managing processes
- make sure that everyone involved is aware of it
- be active towards your customers
- when communicating, think carefully about how you communicate
- make sure your work environment is clean and safe
- make sure the tools are in good order and in order
- behave properly
- avoid traveling unnecessarily
- take care of the environment

5.3   Technology

Take advantage of new technology in training. The most transformative technologies in our business are definitely VR (Virtual Reality), XR (Extended Reality) and AR (Alternative Reality) technologies. Those technologies mean many new things to our business.

The Finnish government wants the efficiency of the education to be better in the future.

Automotive and Forestry Department will be implementing new technologies every time it is financially possible and when there are clear benefits visible.

Automotive and Forestry Department has started to use new technology; the department has several different simulators, especially the Forestry team. The Forestry team uses the simulators on a daily basis, and the students have to pass different tests in the simulators before they can go and drive the real forestry machines in real environment.

The automotive team has only one simulator, one painting simulator. There are not that many simulators available for the mechanics. Today the main part of simulators are some kind of driving simulators, but during the last year there have been several different projects worldwide to develop simulators even for mechanics. In the new big VR simulation project we should get new VR simulation possibilities even to the mechanics.

Very common technologies used in education today, especially in adult education, are the different internet platforms for studying. In the Automotive and Forestry Department the internet platform for studying is commonly used. There are both normal materials and also some interactive materials. We should do more interactive materials to our internet platform, materials that support also VR learning.

Be part of different projects and development groups. Automotive and Forestry Department is involved in some projects, both international and domestic, where new technologies are going to be implemented. One of the projects is a project where a VR world with most of TTS Työtehoseura organizations' educations presented will be developed.

The department represents Finland in a Erasmus+ project where we will design and develop new learning materials and methods to electric and hybrid vehicles. The project started in November 2018 and should end in December 2020.

Those new technologies affect education business in many ways. More and more of the education, even very practical education, can be studied wherever the necessary equipment is available. In the future it might be possible that people will be able to study from home if they only have the right kind of equipment there.

5.4   Leadership and management

Change the organization leadership methods to be more inclusive. Because the leadership has maybe not been that good during the past a couple years, people have felt that they have been led dictatorially even though the organization should be led in a totally different way. In Employee Satisfaction Survey 2018 there are results of the employee satisfaction survey from autumn 2018 for the Automotive and Forestry Department. In the document results of the surveys carried out in spring 2017, autumn 2017 and autumn 2018 - in other words the last three surveys – can be found.

The Automotive and Forestry Department structure, the management style and the way the communication is handled has been changed. It is clear that these changes take time before they are getting visible in practice. Some minor effects are visible already in the survey in autumn 2018, and during spring 2019 there has been indications that the changes in management have been to the right direction. The changes so far have been; more shallow hierarchy, more open communication, information to the employees in a faster and clearer manner, and director has also been involved in the daily work, for example in assessing the completion of the qualifications and personalizing the studies for new students.

Reorganization of the Automotive and Forestry Department. The Automotive and Forestry Department had to be reorganized to meet the demands of both employees and customers. In Appendix 2 the new organization chart of Automotive and Forestry Department can be seen. Some of the roles have been deleted, in some cases the role has been extended and in some cases the role has been reduced. This has also an impact on leadership and management. The leadership and management are meant to be more straightforward and human-centered.

The way to work and interact in the department, as well as management and leadership, have also been developed. Already some changes have been introduced; the department has started to have meetings for the whole department once per month, and the manager meetings are more structured than previously.

Some rules for the communication have been set, and essential information is more visible to the department. There have been severe problems in getting the information to the people who need the information. The department is dependent on different electronic communication channels because the department is placed in four different buildings, three of them in Rajamäki and one in Turku.

The leader must be very consistent in leadership matters. It is very common that people try to move the decision-making to the leader even though it is their own area of responsibility. This is perhaps something that has developed during the time when the

leader work was not that good in the department. Changes have been consistently made to ensure that people make the decisions themselves when the matter in question is related to their own area.

The department's code of conduct

Team role, targets and performance measures vs corporate strategy:

- Team role is to produce as good service as possible to the team's customers, and it should be done profitably.

Team members' individual roles, responsibilities and competence structure:
- Team manager ensures that the team has resources they need to do their job. Team manager is the primary person to communicate with department director. Team managers also take part in meetings with the customers.
- The trainers train the customers.

Structural meeting practices (frequency, timing, absence, mobile phones, laptops etc.):
- Team manager meetings two times/month
- Department meeting once/month
- Team meetings once/week
- Participating in the meetings can also be done via Skype
- Mobile phones and laptops should be kept available in the meetings in case seeking information would be necessary

Decision-making principles:
- The decisions will be made by the persons who are set to be the decision-makers
- The decision-makers are mainly determined by department director, HR director and managing director

Leadership approach:
- When there is a need to make any kind of change, the people that the change affect should be heard

- The decision-making should be done by the responsible person and not delegated for example to the superior

Rules of interaction, communication and cooperation (including problematic behavior)
- Everyone should behave in a polite way.
- All kind of discrimination is forbidden.

When communicating, everyone that the subject matter affects, should be incorporated in the communication.

Departments action planning scorecard

	TARGET for 1 year	ACTIONS	KEY PERFORMANCE INDICATOR	Responsible Person
LINKED TO COMPANY STRATEGIC TARGETS	**CUSTOMER RM** Strengthen customer commitment	- Listen more customers - Ensure customer gets what he/she wants	- Customer satisfactory inquiry results - Comments from customers	Team managers and department director
	OPERATIVE PROCESSES More cooperation inside our department	- Helping the other teams and team members - Better communication	- The effectiveness of work hours - Amount of messages that did not reach target	Team managers and department director
	PRODUCT/SERVICE QUALITY Producing more "just in time"	- Ensure that customers get the service just in time - Ensure that the service is as expected	- Customer satisfactory inquiry results - Comments from customers	Team managers
	FINANCIAL Increase money flow from companies, and not only from government	- Develop more services that companies pay without help from government	- Amount of income from companies	Department director

Figure 7. Department's action planning scorecard.

In figure 7 is the Department's action planning scorecard. In the scorecard the different actions are matched with the responsible person.

As written in What Makes a Leader? (GOLEMAN, DANIEL, Harvard Business Review, Nov/Dec98, Vol. 76, Issue 6), nowadays when working life is increasingly hectic, people are more and more stressed, and companies are competing of skilled staff, the value that comes with people with high emotional IQ is very valuable.

In tough situations, or even in less tough situations, a leader with high emotional IQ will probably succeed to keep the good subordinates in his or her team, whereas a leader with low emotional IQ will probably lose good subordinates.

In a small country like Finland, in most of the different job branches people tend to know each other, and especially if there is a leader or leaders with low emotional IQ, they usually are known among people working in the same branch.

All the components of emotional intelligence; self-awareness, self-regulation, motivation, empathy and social skills are important, and it is very desirable that each leader tries to develop these skills.

5.5   Summary

I have experience of several change projects, both successful and unsuccessful ones. It is very true that it is a big mistake to jump straight from defining target status of change to institutionalizing the practices, without going through the other very important phases, such as communicating of the target. Communication from the beginning to the end is very important. People should be involved, and they should be given a chance to express their opinion.

When people have the feeling that they truly have been heard, the resistance will be much less than if they have the feeling that decisions have been made without listening to them at all.

People also tend to like clear targets and clear roles. If the target and/or role is unclear, people will start to get confused, and commitment to the change will decrease very fast, perhaps even dramatically.

If the change is driven poorly, it can also result in a situation where people resign from work, and too often first ones to leave are the ones that are most valuable to the company.

This change project that is going on in my department is relatively big. The changes are really needed, and a large part of the initiatives have come from my subordinates. In spite of that the resistance to the changes has been surprisingly high.

Although time has been and will be very limited, I have fairly well managed to have one to one discussions, team discussions and even department discussions.

I have done my best to take into account the different opinions, and I have tried to make decisions that should serve the whole department and of course whole company as well as possible.

To make matters worse, my predecessor managed to confuse the situation in the department so much that some of the subordinates resigned. This had also some influence on our customer relationships.

A big problem that Automotive and Forestry Department has faced during this thesis work, which has also made the everyday work more difficult, is the fact that it has been even harder than usual to find new students. Automotive business, and especially mechanic jobs, have been for a long time in the end of the list what comes to popularity. Now when it is tough to find new students everywhere, it is really tough in Automotive field.

	ANALYSIS STAGE	TARGET SETTING STAGE	CAPABILITY PREPARATION STAGE	IMPLEMENTATION STAGE
TECHNOLOGY BASED	Make result analysis.	Informing deadlines etc.	Informing people on what is done and should be done. Even informing of pretest results.	Follow up the changes, results of them etc.
FACE-TO-FACE	Discuss the situations with people.	Discussing both team and individual needs.	Discussing with people about what will be done.	Find out feelings and experiences of both team and individuals.
PRINTED	Informative.	Making the targets clear and visible.	Making upcoming phases clear.	Making process flow clear.
OTHER (e.g. positive rumour)	Make positive attitudes.			Strengthen positive attitudes.

Figure 8. Communication in change management.

In figure 8 the different ways to communicate during different phases in change management are described.

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6 Validation of the proposal

This section introduces the validation process and the final outcome of the thesis. It addresses the issues of what has been done and what should be done next.

6.1 Validation overview

The purpose of clear and understandable processes is that everyone in the department knows what they are supposed to do, when and why. It is also important to understand the big picture, in other words what the others are doing. When the processes and instructions are clear, they help building a road map for the department's future, and they also help in prioritizing decisions and actions. The framework has been validated by all the stakeholders.

First validation was done by the Department manager group.

Second validation was done via some practical tests in the Department.

Third validation was done in the Executive level.

6.2 Final proposal

The final proposal follows very closely to the built framework. The only thing that for the moment has to be done another way than in the framework is the definition of some of the roles in the department. In the framework the plan is that there are different persons planning resources to Car mechanic education and Utility vehicle education. The plan was, however, built for a situation where the Department has more students. Now when we have a lack of students, and therefore not as many trainers as planned, we need to have the same person planning the resources both to Car mechanic and Utility vehicle educations.

All other plans for the processes are proposed to be implemented as they are in the built framework.

6.3   Implementation

The process framework has been presented throughout the organization and planned to be implemented for action planning during autumn 2019 and spring 2020. The process framework will be used in future action planning, prioritization and measuring the success of the department actions. When the number of students is back to normal, hopefully in the very near future, then the roles will be like planned in the process framework.

7   Discussions and conclusions

This section will summarize the thesis from objective to outcome and evaluate the success of the work from research and personal point of view.

7.1   Summary

TTS Työtehoseura is in a very challenging field of business. The fundings are decreasing all the time, and still the demands on education and the education processes are increasing all the time. It makes it very tough to do the education, especially in the fields of education where the costs are very high.

All this makes it utmost necessary to get all the processes to be as efficient as possible. The new education technologies have to be implemented, and also new ways of arranging the short training courses require implementation.

VR technologies will be one thing that will be used in an increasing number, and also moving more of the studies out to the customer companies will increase.

More flexible use of the personnel, better communication, faster response to the changes in the customer's needs, and educational needs are a must to survive in the future.

If the future developments in the field of education business continue like in the past few years, we will probably see more co-operation between different educating companies. Even mergers are in sight.

7.2   Practical Implications

The process framework is done to help all the persons in the Automotive and Forestry Department. It might surely help even other people in the organization.

The process framework should help people understand what they should do, when and why. It also gives explanations to the big picture of the field of business that the department and the whole organization are in.

The practical implementation will be conducted in autumn 2019. Some of the things planned in this thesis have already been tested in autumn 2018 and spring 2019. Some things have already been implemented.

7.3   Evaluation of the thesis

The thesis is evaluated by comparing if the outcome meets the objective. A personal reflection on the thesis is the final part including learnings, successes and challenges.

7.3.1   Outcome vs objective

The objective was to create a framework for a plan of better processes. The outcome of the thesis met the objective almost completely. With the framework the Automotive and Forestry Department will have it easier to manage their work the way it is meant to be done. Managers and leaders

have a tool to make accurate decisions and take action to fulfil the strategy of Department and of the TTS Työtehoseura Organization. The Department will have it easier to plan the needed competencies and resources to fulfill the expectations of the organization, customers and other stakeholders. The framework can be used as a guideline in the daily work, no matter which role the person is in.

7.3.2 Reflection

The last part of the thesis is my own reflection on the study and the process. Main problem with everything regarding the processes is the lack of communication. Everyone had some kind of idea of the processes and how things should be done, but there was no consensus of it. The organization chart for the Department was a little bit out of date, there was neither a clear understanding of the Department's customers nor of what everyone was doing, or should be doing.

The gate model as a research method worked well to the case company's and case Department's schedule. In fact the company and Department would have liked to have an even tighter schedule, but some changes in personnel during winter made it hard to get the work done any faster. The implementing phase will start in its full extent autumn 2019 – spring 2020.

It was very clear to me that I will do my thesis of the processes because already when I started to work as Department director in TTS Työtehoseura Automotive and Forestry Department, I had noticed that there are severe issues with the processes.

Organizational changes and Process management are topics with a lot of subject matter literature and plenty of other materials around the world, both good and not that good materials. It therefore was not hard to find relevant material to study.

I have also been in working life for 22 years, and I have been in different managerial positions almost half of that time. I hence have some insight into different processes and process management and leadership for myself also.

During the interviews done in the case company and case department, I learned a lot of the situation in the department and the company. They gave me a wide perspective on the issues, the different problems and of course also on the things that work well.

Through all the information collected from the interviews, existing data from the company and the literature read, I started to work on the framework and finally on the plans for the processes. It has definitely not been easy path to go, there have been several times when different topics have clearly been questioned. But slowly, as I have gone through the topics and plans with different stakeholders over and over again, the opinion that the plans might be feasible is finally winning over in people's minds.

The plans for the processes have already given some positive effects to the Department, and I believe when we start to implement it to full extent, we will have clear benefits of the processes. People tend to resist the changes, especially if they feel that they have not had a possibility to say their opinion on the issues. During the framework building I have involved all people from the department. Especially the people in managerial positions have been involved a lot. Most of the people understand that something has to be done if we truly want to be on the top of the edge in educating business in the future.

References

John Wiley & Sons, Inc (2003) Theories and Models of Organizational Change. ASHE-ERIC Higher Education Report

Nordic journal of working life studies Volume 8 Number 3 (2018) Organizational Change and Employee Concerns in the Finnish Defence Forces.

The British Psychological Society (2007) Employee commitment and support for an organizational change: Test of the three-component model in two cultures.

Association for Talent Development (2018) Adaptability Is Key in the Future of Work.

J. Stephen McNally, CMA, CPA (2018) Business transformation, No pain, no gain.

Daniel Goleman. (1998) What Makes a Leader.

Eric B.Bauman. (2012) Game-Based teaching and simulation in nursing and healthcare.

Anthony William Bates. (2015) Teaching in a Digital Age.
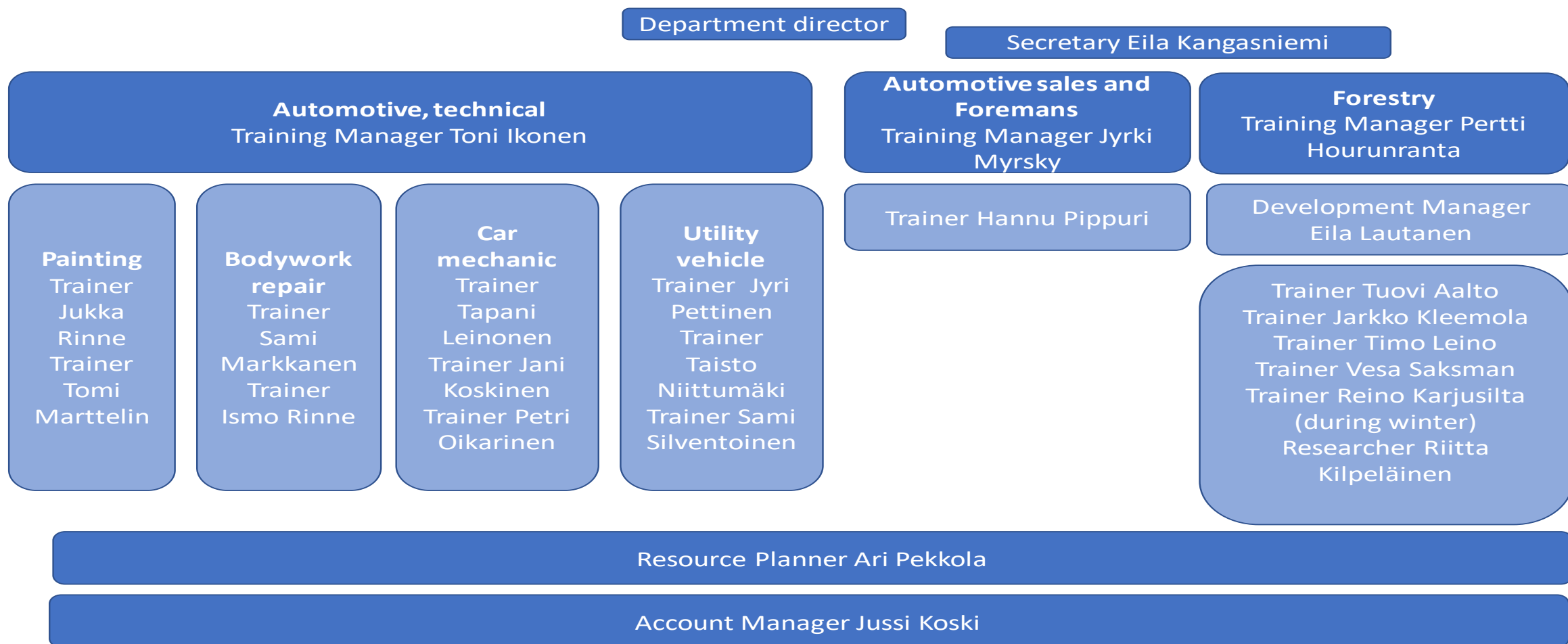
Alexander Osterwalder (2010) Business Model Generation.

TTS Työtehoseura. (2018) Customer Survey.

TTS Työtehoseura. (2018) Employee Satisfaction Survey 2018, Automotive and Forestry Department.

TTS Työtehoseura. (2017) Strategy 2020.

Appendix 1.

Automotive and Forestry Department 3.10.2017

Department director

Secretary Eila Kangasniemi

Automotive, technical
Training Manager Toni Ikonen

Automotive sales and Foremans
Training Manager Jyrki Myrsky

Forestry
Training Manager Pertti Hourunranta

Painting
Trainer Jukka Rinne
Trainer Tomi Marttelin

Bodywork repair
Trainer Sami Markkanen
Trainer Ismo Rinne

Car mechanic
Trainer Tapani Leinonen
Trainer Jani Koskinen
Trainer Petri Oikarinen

Utility vehicle
Trainer Jyri Pettinen
Trainer Taisto Niittumäki
Trainer Sami Silventoinen

Trainer Hannu Pippuri

Development Manager Eila Lautanen

Trainer Tuovi Aalto
Trainer Jarkko Kleemola
Trainer Timo Leino
Trainer Vesa Saksman
Trainer Reino Karjusilta (during winter)
Researcher Riitta Kilpeläinen

Resource Planner Ari Pekkola

Account Manager Jussi Koski

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Osaaminen on työtämme

Appendix 2.

Automotive and Forestry Department Autumn 2019

Department Director Michael Ek

Secretary Eila Kangasniemi

Coordinator Janni Alasentie

Automotive
Training Manager Jouni Myller (also as Trainer)

Forestry
Training Manager
Pertti Hourunranta

Trainers:

Painting:	**Bodywork repair:**	**Car mechanic:**	**Utility vehicle:**
Jukka Rinne	Sami Markkanen	Tapani Leinonen	Jyri Pettinen
Tomi Marttelin	Ismo Rinne	Jani Koskinen	Taisto Niittumäki
		Otso Tavaila	
		Sami Silventoinen	
		Kimmo Ylitalo (Turku)	

Automotive sales and Foremans
Training Specialist/Planner/Trainer
Jyrki Myrsky and Hannu Pippuri

Development Manager
Eila Lautanen

Trainers:
Tuovi Aalto, Jarkko Kleemola, Timo Leino, Vesa Saksman, Hemmo Teerimäki, Jouni Viitanen, Researcher Riitta Kilpeläinen

Training Specialist/Planner/Trainer Petri Oikarinen	Training Specialist/Planner Ari Pekkola

Customer relationship management: Training Managers, Coordinator and Specialists in cooperation with Michael Ek and Sales and Marketing Team

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Osaaminen on työtämme