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Challenges and Opportunities with Digital Transformation in the Public Service

A case study in the Secretary Services in Vaasa

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Abstract

The objective of the thesis was to explore the challenges and opportunities facing the public sector due to the increased pace of digital transformation, with a specific focus on the initial stage of deconstruction of tasks to explore the implementation of Robotic Process Automation.

The research was conducted through a case study and qualitative semi-structured interviews. The first stage of the research involved familiarizing oneself with materials produced by the employees of the commissioner to gain insight into the current state of the process as well as strategic goals to enhance digitalization. The case study was conducted through a workshop with secretaries, with the goal of deconstructing the process into tasks and identifying challenges with the process of preparing contracts for short-term substitutes. The issues expressed in the case study were further explored in semi-structured interviews with key personnel in the group administration, focusing on challenges with digital transformation, actions, and strategic goals of the sector.

The conclusion drawn was that the current process of preparing contracts requires further development, involvement of end-users, and a cross-sectoral and customer-centric approach. The research indicates that management involvement, upskilling, or reskilling of employees, and proactive personnel planning should be the focus as digital transformation changes the way we work.

Language: English
Key Words: Digital transformation, public sector, automation

EXAMENSARBETE

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Abstrakt

Målet med avhandlingen var att utforska utmaningar och möjligheter för den offentliga sektorn på grund av den ökade takten i den digitala omvandlingen, med ett specifikt fokus på den initiala fasen av att avkonstruera uppgifter för att utforska implementeringen av Robotic Process Automation.

Forskningen utfördes genom en fallstudie och kvalitativa semi-strukturerade intervjuer. Den första fasen av forskningen innebar att bekanta sig med material producerade av uppdragsgivarens anställda för att få insikt i den nuvarande situationen för processen samt strategiska mål för att förbättra digitaliseringen. Fallstudien genomfördes genom en workshop med sekreterare, med målet att avkonstera och identifiera utmaningar med processen att förbereda kontrakt för korttidsvikarier. De problem som framkom i fallstudien undersöktes vidare i semi-strukturerade intervjuer med nyckelpersoner inom gruppadministrationen, med fokus på utmaningar med digital transformation, åtgärder och strategiska mål för sektorn.

Slutsatsen var att den nuvarande processen med att förbereda kontrakt kräver ytterligare utveckling, delaktighet från användarna och ett sektoröverskridande och kundcentrerat tillvägagångssätt. Forskningen indikerar att ledningens delaktighet, kompetensutveckling eller omskolning av anställda och proaktiv personalplanering bör vara i fokus när den digitala omvandlingen förändrar vårt arbetssätt.

Språk: Engelska
Nyckelord: Digital transformation, offentlig sektor, automatin

OPINNÄYTETYÖ

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Ohjaaja(t): Outi Ihanainen-Rokio

Nimike: Haasteet ja Mahdollisuudet Digitaalisen Muutoksen Kanssa Julkisessa Palvelussa - tapaustutkimus Vaasan Sihteeripalveluissa.

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Tiivistelmä

Opinnäyteyön tavoitteena oli tutkia julkisen sektorin kohtaamia haasteita ja mahdollisuuksia lisääntyvän digitaalisen muutoksen vuoksi, keskittyen erityisesti tehtävien alustavaan purkuvaiheeseen, jotta voitaisiin tutkia Robottiprosessiautomaation käyttöönottoa.

Tutkimus toteutettiin tapaustutkimuksena ja laadullisina puolistrukturoituina haastatteluina. Tutkimuksen ensimmäinen vaihe sisälsi perehtymisen toimeksiantajan työntekijöiden tuottamiin materiaaleihin, jotta saatiin käsitys prosessin nykytilanteesta ja strategisista tavoitteista digitaalisen muutoksen tehostamiseksi. Tapaustutkimus toteutettiin sihteereiden kanssa toteutetun työpajan avulla. Tavoitteena oli purkaa sekä tunnistaa haasteita prosessissa, jossa valmistellaan sopimuksia lyhytaikaisille sijaisille. Tapaustutkimuksessa esiin tulleet ongelmat tutkittiin edelleen puolistrukturoituina haastatteluina avainhenkilöiden kanssa konsernihallinnossa, keskittyen digitaalisen muutoksen haasteisiin, toimenpiteisiin ja sektorin strategisiin tavoitteisiin.

Johtopäätöksenä oli, että nykyinen sopimusten valmisteluprosessi vaatii lisäkehitystä, käyttäjien osallistumista sekä eri sektorit (toimialat) ylittävää ja asiakaskeskeistä lähestymistapaa. Tutkimus osoittaa, että johdon osallistuminen, työntekijöiden osaamisen kehittäminen tai uudelleenkoulutus, sekä ennakoiva henkilöstösuunnittelu tulisi olla keskiössä, kun digitaalinen muutos muuttaa työtapojamme.

Kieli: Englanti
Avainsanat: Digitaalinen transformaatio, julkinen sektori, automaatio

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1 Introduction

The public service sector is changing, digitalization and automation of processes are explored as a solution for meeting increased demands for efficiency, cuts in budgets, and increased competition for skilled employees. Implementation of digital technologies has traditionally focused on improving efficiency and service quality in public service organizations. Robotic process automation (RPA) can indirectly cut expenses and add value, as the need to hire additional employees to grow or increase efficiency decreases. By automating routine tasks, organizations can use RPA to free up time for employees to focus on tasks that require human input. (Eikebrokk & Olsen, 2020) (Thunes & Kempton, 2023)

Research conducted previously on digital transformation in public service has primarily concentrated on examining the influence of technology on skills, services, quality, challenges, and benefits. Additionally, studies have explored the early stages of implementing digital automation solutions and the methods by which the public sector adopts digital transformation. (Andersson, Hallin, & Ivory, 2022) (Thunes & Kempton, 2023) However, Andersson et al. suggested that more research should be done on the initial stages of digitalization as different technologies, norms, legislation, and types of work could contribute to insight into how adaptation of technology occurs. This thesis will examine the challenges of digital transformation in the public service, particularly in automation and process enhancement, through a case study and interviews to provide valuable insight into the topic. The initial purpose of the thesis was to explore the challenges and opportunities with redesigning work due to digital and automation changes, the scope expanded into exploring challenges and opportunities with digital transformation in the public administration.

The Author is an employee of the commissioner, working closely with the secretaries of the Basic education administration team as their service manager. The author's interest in decreasing unnecessary steps in processes, finding more effective ways to work, and using technology to increase efficiency has been the main motivation for this research. Working for many years as a secretary and dealing with the challenges of rigid processes and programs inspired the author to seek new possibilities for change in work processes through the use of automation or RPA. The goal of the digital vision of Vaasa to enhance process development, as well as the strategic action to utilize digitalization, AI, and

robotization skills, steered the research toward exploring the challenges and opportunities facing the public service sector. (City of Vaasa, 2023a) (City of Vaasa, digitalisaatio ja innovaatio palvelualue, 2019)

The first Chapter provides an overview of the research's background and setting, which includes an introduction to the organization, previous development initiatives within the secretary services that served as inspiration for this thesis, and a review of Vaasa's strategy, emphasizing themes relevant to the study. Further, the research aim and questions are addressed, and the research methods are described. The literature review in Chapter Two, or theoretical framework, outlines the main concepts of the thesis. Chapter Three focuses on describing the research process and in Chapter Four the results are analyzed. Finally, in Chapters Five and Six conclusions, suggestions, and further research are discussed.

1.1 Background of the Study

The future challenge for the public sector is how to meet the change in customer (citizens) expectations for personal, user-friendly, and swift services while facing the reality of finite resources. As the pandemic pushed the public sector into the digital era, the idea emerged that increased use of digital solutions and digital transformation of the organization might just be the solution to many of the problems facing the public sector.

The City of Vaasa´s strategic goal of *skilled staff and excellent employee experience* along with the action of *development and utilization of digitalisation, artificial intelligence and robotisation skills* indicates the urgency for the development of new technological solutions to increase efficiency, enhance customer experience and ultimately meet budget restraints. (City of Vaasa, 2023a)

The project initiated by Mari Yli-Kivistö, service manager in the secretary services, and Johanna Voima to write down the different tasks in the secretary services, makes a great starting point for the deconstruction of work, the first step of automation. (Yli-Kivistö, 2022) (Voima, 2023)

In the background section of the thesis, the structure of the Group Administration is explained, as well as the strategy of Vaasa with a focus on the enablers theme, and the project of documentation of tasks in the secretary services.

The Structure of the Group Administration

The City of Vaasa is a middle-sized municipality in Ostrobothnia, Finland with a population of approximately 68.000. At the end of 2022, the organization had 3381 employees, of which 2312 were in a permanent position. (City of Vaasa, 2022)

The City of Vaasa is organized into four sectors, of which one is the Group Steering sector (Konserniohjaus) that includes the Group Administration with eight subdepartments, e.g., Secretary Services, Communication, Digitalization and Innovation, Personnel Services (City of Vaasa, 2024b). At the beginning of 2022, the organization went through a major change as employees of the social and healthcare services were transferred to the Wellbeing Services County of Ostrobothnia (City of Vaasa, 2023).

The supportive service employees are either located close to their substance sector, the sector for which they provide services like accounting, and secretary services, or located in other departments and provide their service remotely, like human resources, recruiting, or communication services. The employees located close to their substance service have their manager and team members dispersed into multiple locations. The reorganization of services into supportive services and substance services was initiated in 2010 with the reform of the administrative and sectoral structure and finalized in 2019 with the reorganization of the central administration. The goal of the new administration is to unite employees from different departments into a single sector and increase adaptability and flexibility to better meet the challenges of the future. (the City of Vaasa, 2019)

The Secretary Service is divided into several teams, one team being the Basic Education Secretary Team, a team consisting of 16 secretaries working closely with their substance departments. The writer of this thesis works as a service manager for the Basic Education Secretary Team and functions as a link between the Basic Education sector and the Group Administration. The case study took place in the Basic Education Secretary team, and further research into the topic was conducted through interviews with managers and experts from selected subdepartments within the Group Administration. The organization chart for the Group Administration is presented in Figure 1.

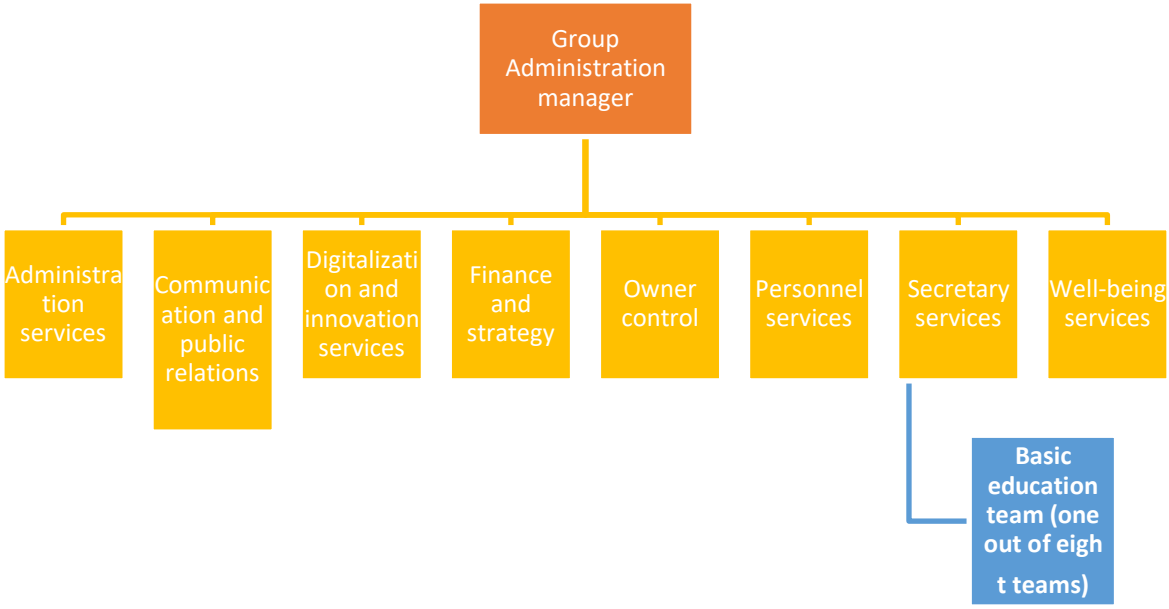


Figure 1 The central administration organizational chart.

The Secretary Services development project

In 2021 the Secretary Services department initiated a project to develop a plan for documenting task instructions and visualization of tasks in the secretary services. The project was led by Mari Yli-Kivistö and Johanna Voima. The first project focused on one team within the Secretary Services and was later expanded to include all teams within the Secretary Services. (Yli-Kivistö, 2021) (Voima, 2023).

The project goal was to expand the systematic approach to the documentation of tasks into all teams within the Secretary Services and hence make sure that critical tasks would be secured if the employee was absent or when the employee left for another job or retired (Voima, 2023). As a part of the project, the Basic Education Secretary Team documented the different steps dealing with the preparation of contracts for substitute teachers. The first step in developing a process is mapping the current situation, it is therefore important to consider work already done by the secretaries in previous projects and how the material produced could be utilized in the pursuit of process automation.

The process description will form the basis for further research in this study. The original description of the process documented during the secretary service development project is described in Figure 2.

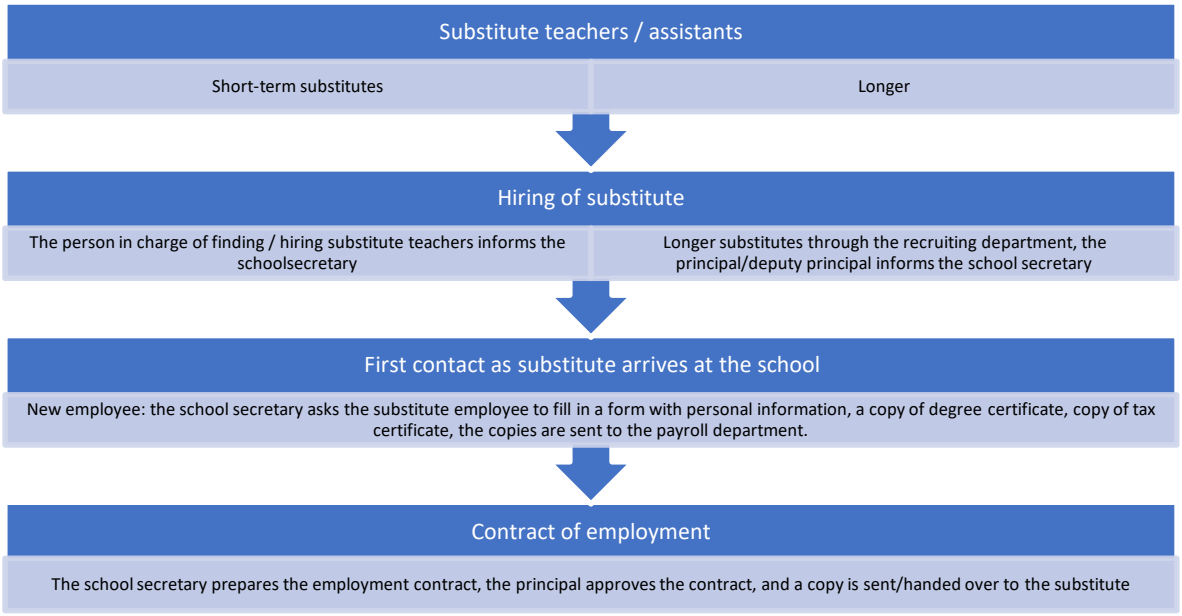


Figure 2 Description of substitute teacher employment process.

The secretary team also prepares contracts for permanent employees, but the focus will be on part-time employment contracts as they are more numerous and tend to be more complex than permanent contracts. The process for permanent contracts is slightly different but might benefit from solutions found for the process's development. Altogether, the team prepared over 5000 contracts last year, which in itself is such a large number that it demonstrates the need for investigating the possibilities of automation.

Strategy and Digital Vision

The key strategic goals for the city of Vaasa are 100,000 inhabitants, to be the happiest and safest city in Finland, to increase the number of available jobs, and carbon neutrality 202X. According to the strategy of Vaasa for the years 2022-2025, this will be accomplished through four main themes: "A Happy and Competent Vaasa," "Attractive Vaasa," "Climate-Neutral Vaasa," and "Enablers." (City of Vaasa, 2023a)

The four themes are the basis for the City's theme programs, explaining the implementation of the strategy involving different departments. While the first three

themes are strategic, the last theme *Enablers*, is what makes them happen (City of Vaasa, 2023c).

Figure 3 Opportunity makers theme (enablers) (City of Vaasa, 2023a)

Enablers are personnel, resources, and leadership and the strategy sets out three main goals for this group to focus on, in short finance, staff and competence, and leadership (City of Vaasa, 2022). When it comes to the automation and digital transformation of an organization, many authors consider the development of digital skills to be the main element of a successful digital transformation. Nyruadin, Sobandi, and Santoso (2023) argued that based on their review of literature on current research of digital transformation in the public service, the first step a leader in the public service needs to take is to develop their digital skills, that is, increase digital literacy among employees and themselves.

The *Enabler theme* of the strategy of Vaasa emphasizes skilled staff and employee experience, as it is one of the goals of the theme (City of Vaasa, 2022). Many of the actions stated in the strategy for achieving the goals of both leadership and skilled staff are familiar from digital transformation literature, like cross-administrative cooperation, coaching leadership, and flexible working methods. The most relevant action for this study would, however, be "Development and utilisation of digitalisation, artificial intelligence and robotisation skills". The strategy of the city of Vaasa does not clearly outline how it plans

to incorporate indicators or metrics to assess the implementation of automation. (City of Vaasa, 2022)

In the Digitalization Vision 2019-2025 the Digitalization and Innovation services, together with other sectors, line up more detailed goals, measures, and actions for the digitalization of services in Vaasa. The focus is not just on technology, but to use technology to increase the use of technology in work and leisure, making it easier for citizens to participate in society, erasing obstacles to involvement and obtaining information, freeing up time for employees to get involved in other activities at work and finally reinvent processes and jobs. (City of Vaasa, digitalisaatio ja innovaatio palvelualue, 2019)

The Digitalization Vision 2019-2025 describes measurements and actions for four main goals. One goal is focused on the personnel and ensuring a skilled and digitally prepared workforce, some measurements mentioned are the number of training places and pathways, digital workforce skills on a 1-5 scale, and the number of experiments. Another goal listed is efficient internal processes, focusing on improving ways of working, data-driven leadership, and digitally prepared leadership. The goals, measurements, and actions of the digital vision are included in Appendix 1 (in Finnish). (City of Vaasa, digitalisaatio ja innovaatio palvelualue, 2019)

1.2 The Research Objectives and Questions

The research aim was to explore the challenges with digitalization and automation within the public service in the organization of Vaasa, and the strategic goal of “Development and utilisation of digitalisation, artificial intelligence and robotisation skills” (City of Vaasa, 2022). Through interviews with managers and employees from different departments, the research explores suggestions for how the team can utilize automation, address challenges that might arise during the development of new work methods, and reflect on actions that would support the implementation of the strategic goal within the Secretary Services.

The initial objective of the thesis was to investigate the challenges facing the public sector in regard to digitalization. In the preliminary research, during the workshop with the secretary team, the aim was to break down the various steps involved in the process of hiring part-time/substitute teachers and other personnel and pinpoint areas of challenges

to the process as well as identify repetitive tasks within this process that could be suitable for automation or Robotic Process Automation (RPA).

The objectives:

- Document the current situation of the process of preparing contracts of employment for part-time employees,
- Identify the main challenges with the process of preparing contracts of employment for part-time employees,
- Explore and identify challenges and views on digital transformation and strategy,
- Suggestions for improvement of process development.

The research aims to address the following research questions:

What are the public sector's main challenges in implementing digitalization, specifically within the City of Vaasa?

How can public sector organizations support their employees to adapt to new work methods and embrace digital transformation?

1.3 Research Methods and the Structure of the Thesis

The primary methods for this thesis are literature review, case study, and interviews. The literature review focuses on academic articles and literature primarily related to digital transformation in the public service, as well as reports conducted by the City of Vaasa and documents produced by its employees.

To document the current situation, existing materials and documents related to the process were used, specifically those produced by the secretary team during previous projects and team meetings. Further analysis was made from documented real case scenarios through self-documentation collected through a form (Appendix 2).

The case study was conducted through co-creation in a lead workshop. Together with the service designer of the digital and innovation sector the ideas and concerns of the team

were collected, hence involving the team in the process. The case study was documented through observation and instant feedback in a short qualitative questionnaire during the process. The tool used was Mentimeter, an application where respondents anonymously can reply via their cell phone. PowerPoint from the workshop is included in Appendix 3.

Finally, based on themes that emerged from the preliminary research, a semi-structured interview was conducted. (Appendix 4)

2 Digital Transformation and Automation

The theoretical framework of the research covers the concepts of digitalization, digital transformation, and Robotic Process Automation (RPA), with a specific focus on their application in the public service sector and the redesign of work tasks.

2.1 Digital Transformation vs Digitalization

The explanation of the meaning of and difference between digital transformation, digitalization, and digitization is defined in literature but can be used differently depending on circumstances. It is agreed that digitization refers to the transformation of analog material into digital form. Digitalization usually refers to a more profound change due to technology to business models, how we work, communicate, and organize work. (Gartner, n.d.; Iveroth, Lindvall, & Magnusson, 2018)

Digital transformation or digital business transformation arguably takes on a more active role in digitalization, in that businesses actively focus on changing the company business model and find solutions to better use digital technology, or as Jonas Magnusson (Magnusson, 2018, p. 134) concludes, that in order for digital transformation to succeed a governance of the underlying technology is needed, so-called IT governance. Digital transformation requires the company to redefine how work is organized, what skills and work roles are needed, and how it is managed (Larjovuori, Bordi, & Heikkilä-Tammi, 2018). Digital transformation is more than just implementation of technology, it is actively driving organizational change, improving performance, and attaining business benefits by using technology (Kohnke, 2017).

2.2 Automation and RPA

According to the Cambridge dictionary (2023) the word automation is “the use of machines or computers instead of people to do a job, especially in a factory or office”. Houy, Hamberg and Fettke (2019) support this view when describing automation as an execution of a process by a technological device that doesn´t require any human involvement or intervention.

Automation is the process of using technology to transform work and reduce often time-consuming repetitive tasks to free up time for the worker or even reinvent job descriptions, thus keeping the human in focus when implementing new technology. Automation is often falsely seen to reduce jobs, when more often the result has been that workers find time for more important tasks or even new ones. Hence, when implementing a new automation tool, the organization needs to consider the human and find the best division of labor between human and machine. (Heinokoski, Asp, & Hyppönen, 2008) (Jesuthasan & Boudreau, 2018)

In knowledge work, Robotic Process Automation (RPA), has increasingly been implemented to do what robots have done for decades in manufacturing, which is perform repetitive and routine tasks in office and administrative processes. Robotic Process Automation (RPA) is a technology that replicates human actions through software robots, aiming to handle structured tasks swiftly and cost-effectively. These software robots mimic human workers in digital processes, using software and algorithms to automate or replicate the actions typically performed by employees. RPA serves as an alternative to human resources for specific digital tasks, employing a variety of approaches and technical concepts to automate repetitive activities and routine workflows within organizations. In essence, RPA involves using software robots to imitate tasks a human would normally do in digital processes, thereby streamlining and automating tasks that are rule-based and repetitive. (Gartner, n.d.) (Houy, Hamberg, & Fettke, 2019) (Ratia, Myllärniemi, & Helander, 2018) (Asatiani & Penttinen, 2016)

2.3 Digitalization in the Public Sector

The public sector is facing increased pressure to decrease the costs of public spending while facing the challenge of producing efficient and high-quality services for its citizens. Technology has entered every field of work, and the public sector is no exception. Citizens increasingly expect public services to be easily accessible when they need them where they need them. Mattfolk and Emfeldt (2020) argue that public service will have to adapt new technologies as well as focus on customer-centric services to be competitive in a world where citizens demand faster, more reliable, and affordable welfare services, regardless if they are produced by public or private companies. (Mattfolk & Emfeldt, 2020) (Thunes & Kempton, 2023)

It could be argued that so far, the public sector has mainly been using technology to digitize written material into digital material and implement technology to support processes. That is documents, analog material has been transformed into digital documents through scanning and rewriting in Word, Excel, or other programs, and that instead of transforming processes due to new technology, programs have been used to digitalize processes. The Gartner IT glossary states that public sector organizations have extensively been using digital transformation when referring to simple technology implementations like online services, thus the terms digital transformation could be interpreted more as digitalization (Gartner, n.d.).

Conventionally digitalization in public service has focused on gaining efficiency and effectiveness by integrating digital solutions into existing processes. As a more customer-centric approach has emerged, digital solutions are now viewed as the driving force for reshaping businesses. Hence, digital transformation requires organizations to evaluate the current organizational structure and operational processes to better align with customer expectations. (Mergel, Kattel, Lember, & McBride, 2018) (Thunes & Kempton, 2023) (Andersson, Hallin, & Ivory, 2022)

RPA presents itself as an attractive solution or a quick fix to overcome challenges with rigid and outdated IT systems in the public service. Since RPA can be used to automate repetitive tasks performed by humans using existing software that is already in use, organizations can avoid having to invest in new software or costly alterations to existing systems—changes that public service organizations usually do not have the resources or expertise to make. (Baran, Berkowicz, Marzec, Sasak, & Szczudlińska-Kanoś, 2020) (Houy, Hamberg, & Fettke, 2019) (Asatiani & Penttinen, 2016) However, Asatiani and Penttinen (2016) argue that RPA should represent a temporary solution, as the organization moves from manual processing of information in old IT systems to newer fully automated redesigned IT systems. Some even argue that RPA stands in the way of real progress, as it works around the problem without fixing the real issue (Kirchmer, 2017).

Houy et al. (2019) differentiate classical RPA from cognitive RPA in that it uses machine learning, for example, to learn from human behavior to perform tasks in a similar way. In their paper “Robotic Process Automation in Public Administration,” they list 4 scenarios in public administration where the utilization of (classical) RPA could be beneficial. The first

one is using optical character recognition (OCR) technology to obtain data from paper forms to enter automatically into databases, preferably the text should be written by a typewriter to minimize errors. The second is “automated integration of data”, that is data in different databases can with the use of RPA be integrated into one centralized database. The third, automated transformation of data, could be for example when a customer fills in an electronic form, and the data entered is changed so that it can be transferred into another system. The fourth, which also could help move forward work in a process is the automated integration of processes. To facilitate this process, workflow management systems are often utilized. Once a step or task is completed, the system automatically forwards it to the next person, thereby minimizing the time required to complete the task. (Houy, Hamberg, & Fettke, 2019)

2.4 Digitalization in Finland

In Finland, the municipalities are supported in their digital transition by, among others, the Ministry of Finance, the Digital and Population Data Services Agency (DVV), and the Association of Finnish Local and Regional Authorities (Kuntaliitto). The development of IT solutions in municipalities is dependent on the municipality’s available resources. To level out differences and aid municipalities, different channels for financial support are available. For example, The Ministry of Finance offers discretionary grants, such as the digital incentive grant, for the development of municipal digitalization. Other channels to apply for financial support are via different programs offered by the EU and Business Finland. The DVV on the other hand offers digital support to citizens. (Kuntaliitto, n.d.)

The KUNit report produced by Tihinen (ed.), Federley, Hyvärinen, Karttaavi, Keskitalo, Korhonen, Kääriäinen, Naumanen, Seisto, and Veijola (2019) uncovers the current digital situation and need for development in municipalities and provides a model for testing the maturity of digitalization. The report states that the utilization of digital solutions is vastly diversified in municipalities. Most municipalities struggle with a lack of resources, monetary or/and competence, additionally, the level of basic information technology infrastructure can inhibit the utilization of more advanced technological solutions. Tihinen (ed.) et al. (2019) conclude that the time for adaptation of digital technologies in municipalities has arrived. Most municipalities have digitalization goals in their strategies and are currently facing multiple changes due to national initiatives and legislative changes

that will affect their information systems and operations. New technological solutions such as software robotics automation and artificial intelligence offer solutions to enhance the workflow of processes and a proactive organizational culture. (Tihinen (ed.), et al., 2019)

In all, the state offers a wide variety of funding and support for municipalities and public service organizations. What is lacking, is a good model for spreading information, knowledge, experiences, best practices, and new, more efficient operating models. (Tihinen (ed.), et al., 2019)

2.5 Digital Transformation Management

Digitalization has been putting pressure on organizations to change for decades, in recent years the pace has increased and will continue to increase as modern technologies, Artificial Intelligence, machine learning, and generative AI become mainstream. Oliver Kohnke (2017) argues that leaders need to understand that digital transformation is as much about people as about technology. As technology is changing the way we work at an increasingly rapid speed, Kohne concludes that leaders must address three issues to be successful; how to cultivate new skills and competencies among employees, encourage new forms of leadership, and introduce new organizational capabilities. (Kohnke, 2017)

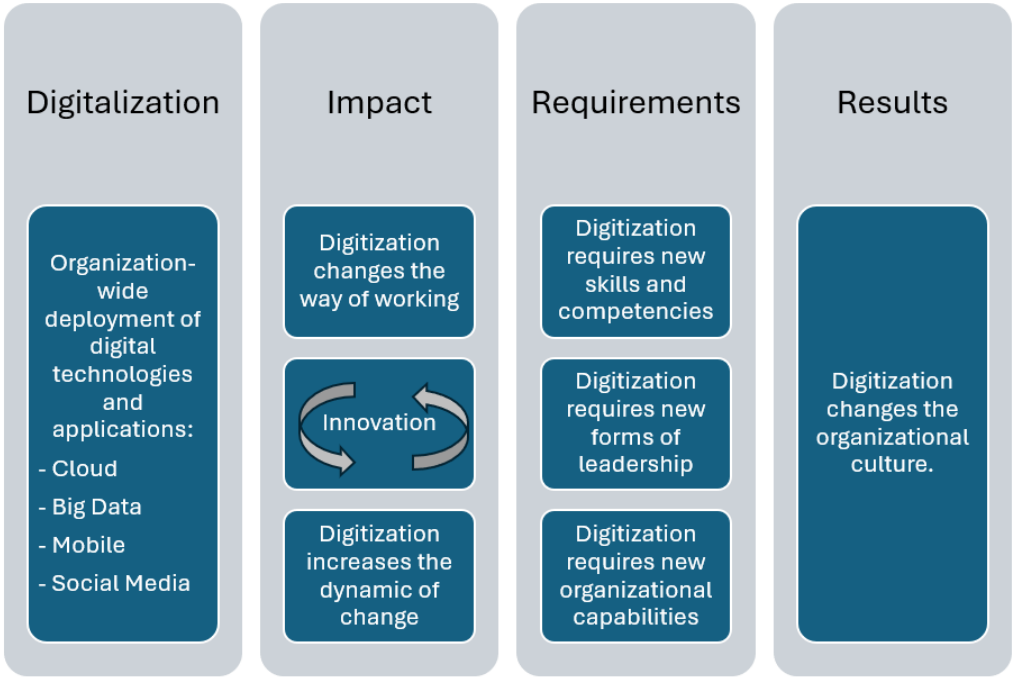


Figure 4 Organizational implications of digitization. (Kohnke, 2017, p. 74)

To meet the demand or shift in skills needed in the future, organizations must consider how they can support employees to transition into new roles. The World Economic Forum *Future of Jobs 2023* report, as well as previous reports from 2016, 2018, and 2020, predict an increase in demand for Data analysts, AI and Machine learning specialists, and Digital transformation specialists. The roles most predicted to decrease were Data Entry Clerks, Administrative secretaries, Accounting, Bookkeeping, and Payroll clerks. The report states that most businesses consider skills gaps to be a barrier to transformation, which is why training programs to upskill or reskill workers are considered important. Figure 5 shows survey results from organizations in Finland regarding which skills they will focus on reskilling in the next five years. (World Economic Forum, 2023)

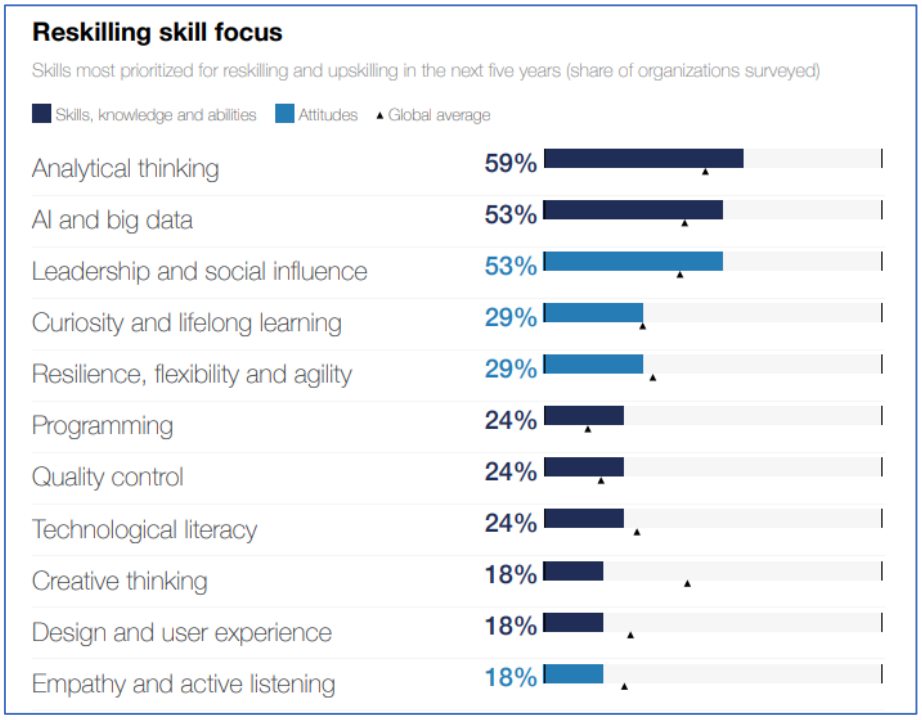


Figure 5 Reskilling focus in organizations in Finland, (World Economic Forum, 2023, p. 116)

Oliver Kohnke (2017) argues that building digital skills and competencies is the core for successful digital transformation, employees need to be able to develop their digital skills in a variety of different methods. Training programs targeted to meet the specific skill needs of the company should be developed. In addition to traditional methods such as courses, eLearning, peer learning, offering employees test and learning opportunities, and involving employees in the process are powerful tools to change and boost competencies.

The organization also needs to consider to whom these opportunities are available. Dickinson and Sullivan (2014, pp. 44-45) found in their research on public servants in Australia that even though numerous opportunities for training were available, they might not be available for all employees. Ensuring that availability is not dependent solely on the manager or limited to leaders and experts was expressed by the authors in the study. They suggested a strategic approach to the education of employees, that is, organizations need to plan what training should be offered to which level or department of the organization.

Good leadership is by most scholars considered as another important aspect of digital transformation. In a fast-changing environment, leaders will have to make decisions in uncertain and complex situations. Bonnet and Nandan (2011, as cited in Kohnke, 2017) argue that the traditional hierarchical structure of an organization, and the fact that most managers have grown accustomed to the current situation, hinder swift decision-making needed to manage cross-sector technological innovation. Additionally, increased access to information at all levels of the organization might lead to a feeling of loss of control, especially among middle managers, as information is freely exchanged between employees without the assistance of the manager (McAfee and Welch, 2013 as cited in Kohnke, 2017).

Often it is the middle-managers' responsibility to implement strategy and digital vision into the day-to-day operations and to get employees excited about changing how they perform tasks. (Kohnke, 2017) Imran, Shahzad, Butt, and Kantola (2020) explore the competency requirements of functional leader or middle-managers in their study *Leadership Competencies for Digital Transformation: Evidence from Multiple Cases*. Functional leaders are in charge of implementing digital transformation in practice, and based on their findings should possess these five competencies; digital vision, digital knowledge, failing fast, empowerment, and an ability to manage diverse teams.

In short, leaders should be able to turn the digital vision into actions that are understandable for the team. Even though the leader might not have to be an expert on digital solutions, some knowledge is required in order to understand how digital tools could be used. The idea of failing fast is that leaders should not be afraid of experimenting, but also need to evaluate the project or task and stop if deemed necessary to avoid failure. An important ability to have as a leader is the ability to delegate responsibility and include employees in the decision-making process. Empowering team members will make them

feel included in the transformation and more inclined to work together. Finally, fostering collaboration between team members from different sectors and through different channels enhances collaboration and networking, hence building trust between members in diverse teams. (Imran, Shahzad, Butt, & Kantola, 2020)

Network and cooperation across sector boundaries are essential to digital transformation. Kohnke (2017) explains this as the need for organizations to become more agile, and collaborative while simultaneously keeping the core business running smoothly. Cross-functional teams that operate with the management mandate, and applying agile development methods to establish new ways of working might have a significant impact on driving the digital transformation forward. (Kohnke, 2017)

According to Kohnke (2017) digitalization requires a change in the organizational culture. Changing an organizational culture takes time and management commitment. The support of top management, involvement, and setting an example is some of the most important factors for successful digital transformation. Taking an active role in advocating for change via social channels, internal or external, shows employees the direction to follow. (Kohnke, 2017)

2.6 Reinventing Tasks

The introduction of RPA may cause employees to feel threatened for their jobs, even when most research indicates that RPA has not significantly reduced the number of jobs (Lacity and Willcocks, 2015, as cited in Asatiani & Penttinen, 2016). Instead, RPA and other digital innovations will shift the workforce into other jobs, jobs we can only imagine in some cases. Eikebrokk and Olsen (2020) found in their research *Robotic Process Automation and Consequences for Knowledge Workers; a Mixed-Method Study* that RPA is used to lay off workers, but also to enable growth, without the need for hiring new employees to manage the increased process volume. RPA was also seen to shift personnel to more value-adding tasks, and it was noted that the public service primarily utilized RPA for innovation, increased efficiency, and quality improvements.

According to Asatiani and Penttinen (2016), automation requires that the process to a certain degree is standardized and rule-based, and does not significantly involve human interaction. In their book “Reinventing Jobs: A 4-step Approach for Applying Automation to

Work" Ravin Jesuthasan and John Boudreau (2018) explain the framework they have developed and have been using when working with organizations and company leaders to reinvent jobs. The first step is to deconstruct the job task to better be able to identify parts of the process that are suitable for automation. The second step is to evaluate the strategic payoff, that is, if there is a Return on Improved Performance (ROIP). The third step would be to make the decision on which type of automation to use and feasibility. Finally, automation is a combination of human work and technology, so deciding on the right combination for the task is important. (Jesuthasan & Boudreau, 2018)

Jesunthasan and Boudreau (2018) suggest that instead of looking at a job and how to replace it with automation, organizations need to figure out the optimal human-machine combination. The first step would be to break the job description down into tasks or work elements, and then determine which tasks could be automated and how. Finally, assemble the tasks into a new job where some are automated while others remain manual. An important part of the deconstruction stage is to evaluate how suitable for automating the different tasks are. Jesunthasan and Boudreau argue that there are three dimensions to consider: repetitive vs. variable, interdependent vs. interactive, and physical vs. mental. (Jesuthasan & Boudreau, 2018)

Andersson et al. (2022) use the term *configuring work* for how new technology restructures work. The main idea here is that when introducing new digital automation technology to the organization it isn't just added onto the current ways of conducting tasks. Instead, an entirely new process is developed that defines the labor division between humans and technology. (Andersson, Hallin, & Ivory, 2022)

In their study on the in-house adaptation of a digital automation tool in a local Swedish government, Anderson et al. (2022) researched the initial stages of implementing RPA in public service. Anderson et al. (2022) argue that work can be transformed by breaking it down into individual tasks and redesigned to be codified, contrary to some research that suggests that not all work is suitable for digitalization. That is, the task and the service provided are adjusted to accommodate the perceived limitations of the technology being used, rather than the technology being adapted to fit the existing work structure.

In their study on the automation of knowledge work in the private healthcare sector and resulting value creation through enhanced business performance, Ratia, Myllärniemi, and

Helander (2018) found two distinctive perspectives concerning RPA among interviewed RPA consultants. The technological perspective focuses on software and the process perspective emphasizes the workflow process as more relevant than the technology. The conclusion was that efficiency, reduced errors, and scalability are all benefits of automation through RPA. RPA and automation of repetitive and time-consuming tasks were considered to free up time for the employees and hence they could use their time for other tasks. In this case, Ratia et al. (2018) concluded that value was created through RPA since staff could concentrate more on servicing customers due to the automation of mundane tasks. Eikebrokk and Olsen (2020) reported the same result from interviews with public sector employees, the focus of RPA implementation was not to reduce cost, instead, the goal was freeing up personnel from administrative tasks, hence freeing up time to for example taking care of patients.

Finding the right balance should be supported by the organization's strategic goals. Investments in automation should add value, the value added depends on the organization's strategic goal. That is, changing work with automation is not enough, we need to consider if the new way of working adds value to the strategic goals. (Jesuthasan & Boudreau, 2018)

2.7 Summary of the Theoretical Framework

The theoretical framework starts with explaining the concepts of digitalization, digital transformation, and Robotic Process Automation (RPA). Digital transformation in the public service has traditionally focused on gaining efficiency and improved services through the implementation of new technologies. As demand for electronic services has increased the customer-centric approach has emerged, the public service needs to focus on building a clear digital vision, upskilling employees, and efficient process development through networking with internal and external stakeholders. Redesign of jobs not only helps organizations identify tasks to automate but also builds a better understanding of how the process could be enhanced. Furthermore, if tasks are seen as *work entities* instead of a part of a job description, the work can be transferred between employees more freely, making up a more interesting and challenging job.

3 Research Process

The research adopts an inductive research approach, to get an insight into the research problem based on available and collected data. Inductive research focuses on understanding the aspects of the situation studied, is more flexible as it allows for changes in the focus of the research during the research process, and is less focused on generalization (Saunders, Lewis, & Thornhill, 2000). In public administration research, research is usually aimed at understanding distinctive cases or current concerns, hence forming a theory might not be the goal for the research but rather finding suggestions to solving an issue. (van Thiel, 2014).

The research strategy chosen was grounded theory, as well as pre-collection of data via a case study. In grounded theory, the aim would be to develop an explanation or a theory. The reasons Saunders et al. list for using grounded theory may include: the research being exploratory, aiming to uncover new avenues for investigation; a desire for the research not to be constrained by pre-existing theories, allowing it to reflect the reality experienced by participants, thus ensuring the emerging theory is grounded in reality; and the intention for the findings to inform recommendations for future research or actions tailored to the specific case under study. Grounded theory is mostly an inductive approach, a theory emerging from data collected and analyzed. Grounded theory is however considered to be a difficult strategy and researchers need to evaluate data collected during the process to recognize themes to be successful. (Saunders, Lewis, & Thornhill, 2000)

Case studies are popular methods of gathering data in public administration research, as research and results from research in public administration rarely can be applied to other organizations or even municipalities as laws and regulations, used technology, and processes may vary greatly even within a country (van Thiel, 2014). Using a case study would be useful when the objective is to attain a comprehensive understanding of a process or situation (Saunders, Lewis, & Thornhill, 2000).

Data gathered using an inductive approach is usually qualitative, which is true for this study, where data was collected through a case study and interviews. Qualitative data is based on meaning derived from words. Data need to be classified and analyzed using conceptualization. Categorization is conducted by assigning labels or by classification of data into categories. These categories could be formed by using terms from existing theory,

actual terms used by participants, or terms from research data. The qualitative data gathered through interviews was analyzed by labeling the data into categories and sub-categories using terms used by participants and terms from existing theory to identify key themes and patterns. (Saunders, Lewis, & Thornhill, 2000)

3.1 Reliability and Validity of the Research

Sandra van Thiel (2014, p. 48) explains that "the reliability of a study is a function of: 1 the accuracy, and 2 the consistency with which the variables are measured". That is, would the same research yield the same result if performed again in a comparable situation (van Thiel, 2014). Validity according to Saunders et al. (Saunders, Lewis, & Thornhill, 2000) is "whether the findings are really what they appear to be about". Generalizability is closely tied to validity because the research design can impact the generalizability of the findings. In other words, would the research produce similar results in a different organization or research setting? (Saunders, Lewis, & Thornhill, 2000)

In the case study, the focus is on one single process and team, which is why if this had been the only method for collecting data would have compromised the reliability and validity. The method of triangulation is recommended when conducting a case study, which involves gathering additional information through other methods such as interviews or studying documents (van Thiel, 2014). Generalizability might be difficult to achieve in research focused on a single case or organization, hence the goal would be to explore or explain the situation rather than form a theory (Saunders, Lewis, & Thornhill, 2000).

The main concern when conducting interviews is interviewer bias. Interviewer bias might occur due to preconceived ideas or opinions of the interviewer that might have influenced the direction of the interviews or how the results are interpreted. Reliability might also be compromised if there is an absence of standardization. Interviewee bias might occur if the respondent is unwilling to disclose some issues, or feels the need to portray themselves or the organization in a particular way. (Saunders, Lewis, & Thornhill, 2000)

The interviews followed the same structure, themes were discussed in the same order, and all interviewees were given the opportunity to respond to the main questions. The semi-structured interview allows room for elaboration on subjects and asking different questions across various interviews. The interviewer refrained from expressing personal beliefs,

however, did continue with some subjects of interest, mainly due to personal interest and to get insight into areas of interest.

In this case, the interviews were conducted via Teams, which might have influenced the responses as it is more difficult to get a personal connection online. However, Teams proved to be valuable for recording the interviews, as it was easy to obtain accurate transcriptions by using Word to transcribe the responses afterward, and then easily transfer them to Excel for analysis. Overall, using Microsoft Teams for conducting interviews in small groups did not hinder the conversation, as respondents actively participated in a positive and open manner. The interviews were conducted in Finnish, hence there is a slight risk that some of the underlying assumptions or feelings were lost due to translation or misunderstandings on the interviewer's part since the interviewer's mother tongue is Swedish.

Due to the limited time to conduct the research, the case study includes only observations on the deconstruction of tasks and reflections from the team on the process. The results or outcome of the suggestions, that is how or if they were to be implemented, was not included in the scope of this research.

3.2 Ethical Considerations

Ensuring confidentiality and anonymity is crucial for gaining access to organizations and individuals in research. Keeping this anonymity for participants during the research is important, especially as in a qualitative approach it might be tempting to use ideas from one interview to explore with other participants. A qualitative approach to research also tends to broaden the range of ethical considerations to consider. (Saunders, Lewis, & Thornhill, 2000)

Ensuring participant anonymity was a top priority for the researcher, particularly due to the small number of employees interviewed and their positions, which could potentially lead to easy identification if any identifying details beyond interview responses were linked to the data. Therefore, in reporting the interview analysis, no information regarding age, position, or field of work was included.

The researcher's dual role as both the manager of the team and participating in the workshop may raise concerns regarding power dynamics, given the inherent authority managers hold over team members. The ethical dilemma revolves around determining the extent of disclosure regarding the collected data to the group and ensuring that they feel their participation is voluntary, especially considering that the workshop was conducted during a team meeting and could be perceived as part of their regular work responsibilities.

The challenge of maintaining objectivity also raised some concerns, partly due to the researcher's personal interest in the subject, which could potentially influence the study to align with personal beliefs. Additionally, given the researcher's close collaboration with the team, there is a risk of preconceived notions about the subject influencing the study's direction.

3.3 Data Collection Methods

The research was conducted in two stages, pre-collection, and interviews to gain a deeper understanding of specific themes based on the pre-collection of information. Data gathered from the pre-collection was analyzed and formed into themes to be explored in a semi-structured interview. Interviews were transcribed and codified into themes and sub-themes to identify trends and opinions.

The first stage included desk research on recent reports, strategy and vision, mapping of the current process through learning diaries, and a workshop conducted in October – November 2023. Based on the findings in the first stage, a semi-structured interview was conducted with key stakeholders in January 2024. In this chapter, the different stages will be explained, and the findings analyzed.

Preparatory Data Collection

Preparatory research is when the researcher gets familiar with material on the subject to form a picture of what has been written about the subject. Desk research is a method that can be used in the preparatory research stage to explore the background or context of a specific research problem. In desk research primary or secondary data sources are used, that is data or material produced for a different purpose (primary) or research findings already analyzed but possible to reuse (secondary). (van Thiel, 2014)

The preparatory research focused on examining different materials produced by the commissioner to form a picture of perceived challenges and demands from outside stakeholders on the commissioner and how the commissioner was planning to take on these challenges. The aim was to find out the current demands for digitalization and utilization of digital tools and automation on the commissioner. When researching the commissioner's web pages, the focus was on strategy, digital vision, and the organization. As strategy and digital vision are important for the purpose of the study these were described in the chapter Background.

Data Collection during the Workshop

In August 2022 the City of Vaasa initiated the project “Lupa kehittää – ylihyvästä ännu bättre” to provide the employees with tools and guidance for continuous improvement. The goal of the project is to increase the courage to experiment, act autonomously, develop operations, and foster cooperation with internal and external networks and partners, as well as create models for continuous improvement. During the project, several workshops were held for both managers and internal developers (facilitators). The idea was to utilize these methods and ideas in the workshop, and for this, we chose the Me-We-Us method and the service designer from the innovation and digital team as the facilitator.

The facilitator’s role is to support the group in the process of reaching their goal. The facilitator’s job is not to lead the group work, but to guide the group through the work, letting the group members come up with their ideas and do the work with minimal influence on the subject. (Gullstrand, 2020)

The Me-We-Us method is a facilitation method used to get all team members equally involved in the development process. The advantage of the tool is that it’s easy to use and that the more silent coworkers get their voices heard. The stages of the method are individual work (Me), small group work (We), and group work (Us). In the Me-stage the individual work is emphasized, the person writes down his ideas and thoughts. The We-stage divides the group into pairs or smaller groups for sharing ideas and detecting further ideas. Finally, in the Us-stage ideas are shared with the whole group and the group then decides which ideas to pursue. (City of Vaasa, 2023b) (Wirtz, 2022)

Interviews as a Method for Data Collection

Interviews are a method often used in case studies to gather information through a conversation with one or more persons (van Thiel, 2014). With an interview, the researcher seeks to explore and compile relevant data about the research topic. Interviews can also aid in formulating research questions and objectives if these are not clear from the beginning (Saunders, Lewis, & Thornhill, 2000).

Interviews are categorized into structured, semi-structured, or unstructured interviews. Structured interviews are basically questionnaires, as each respondent is asked the same set of predetermined and standardized questions. Non-standardized interviews, semi-structured and unstructured interviews, provide a more in-depth understanding of the topic and allow for flexibility. (van Thiel, 2014) (Saunders, Lewis, & Thornhill, 2000)

The semi-structured interview is conducted through a set of themes and related questions. However, the researcher might depending on the context of the situation or the interviewee change the order of the questions, omit some questions, or add new questions as the interview proceeds. An unstructured interview has no outline or predetermined questions, the subject to be discussed is introduced, but no suggestion on where to go from there is provided. (van Thiel, 2014) (Saunders, Lewis, & Thornhill, 2000) For this reason, the semi-structured interview was chosen, as it allows adapting the outline of the interview depending on who is interviewed while still providing a theme and set of questions as a guideline.

4 Analysis of Results

The following chapter will focus on the results of the different stages of the research and analysis of data collection.

4.1 Analysis of the Background of the Study

The city of Vaasa has conducted numerous surveys on different topics including work satisfaction, remote work, participation, etc. During the preparatory stage, the focus was on the most recent reports that were either publicly available or published on the city's intranet domain, the personnel report, and the work satisfaction report as these would reveal the latest stand on opportunities, threats, and challenges facing the organization. The preparatory stage also involved gathering information on the case under study through self-documentation. The strategy of the City of Vaasa and the secretary development project was discussed in Chapter 1.1. Background of the Study.

The Wellbeing Report 2022

The Wellbeing report from 2022 does not give any direct information on how (increased use of) technology, digitalization, and automation are influencing employers and leaders, as the report mainly focuses on the well-being of workers in the workplace, the physical working environment, and leadership. If any conclusions could be drawn from the report, it is that one of the most common challenges with digitalization, communication, is also noticeable in the report. In the section dealing with tasks and goals, the average points for the statement "The flow of information is clear, transparent, and efficient" was rated lower than other statements. Only the statement regarding having sufficient staff to complete tasks received a lower average. Statements like defining goals to achieve agreed-upon results, inclusion in planning, and operation according to agreed procedures, which could be linked to communication, received the same points, that is the section's average score. In all, the points varied between 3,5 and 4,2, which is a high number.

The limitation of this report is that the secretaries are located in many different departments, and thus included in the responses of these departments. Hence, no overall view of the situation regarding the secretary services can be given. As many as 75%, or the majority of the respondents, were also from the education department, which might not

be affected by technological changes in the same way as secretaries, as their challenges might be of a different nature. (City of Vaasa, 2022)

The high number of personnel that considered their own work goals to be clear was surprising but could be explained by the high number of respondents from the education department. Similar research, targeted at administration personnel, could reveal interesting differences, and possible links to the challenges with digital transformation affecting the public service.

The Personnel Report 2022

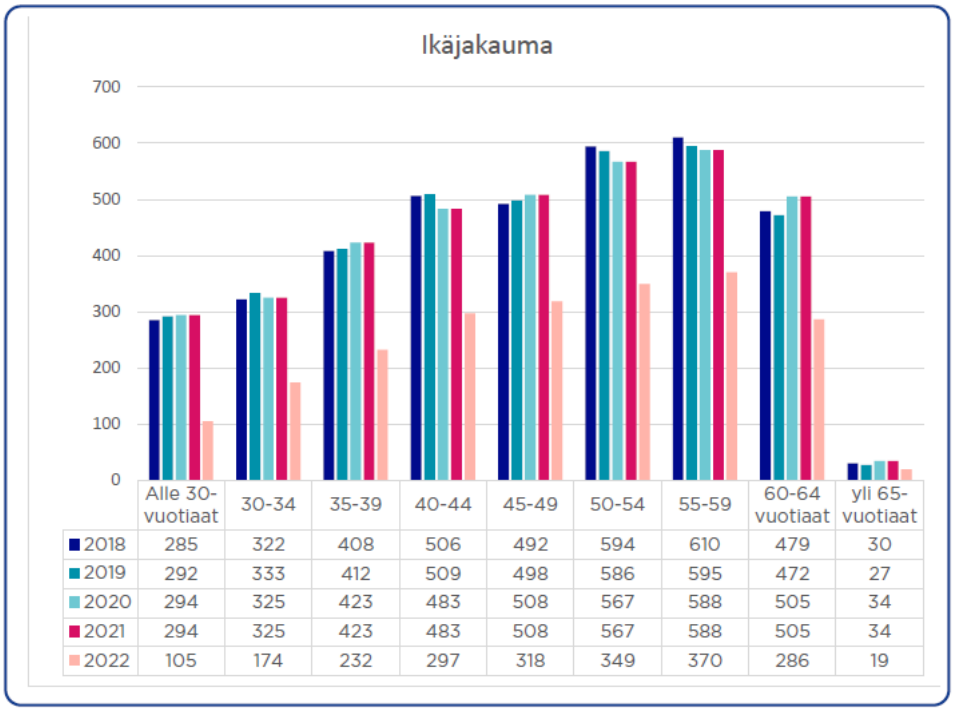
In the personnel report 2022 it is mentioned that the digital leap due to the COVID epidemic was significant. Every service area had to consider new digital solutions and ways to produce their service. Microsoft Teams and other digital applications are increasingly utilized by personnel in their daily work. Service design is an important part in developing customer-centric services and new solutions for automation and the digital and innovation team plays a central role. Development of services and processes as a means to improve customer and employee experience is emphasized especially in the central administration department. The importance of enhancing digital competencies and advancing digital services emerged as a significant theme, alongside the necessity for enhanced collaboration among various departments, particularly as the city competes for skilled personnel. (City of Vaasa, 2022)

In the personnel program of 2022-2025, specific objectives related to the management of the city's personnel, competence development, and well-being at work are outlined. Examples of actions for competence development are the utilization of online training platforms, implementation of “virtual assistants” or chatbots, and planning, piloting, and implementation of an “employee certificate” (työntekijäpassi) training program. (City of Vaasa, 2022)

A major concern for many organizations in the future is how to attract new employees in a world where demographic statistics show a decrease in the working population. Not only will many retire in the coming years, but there is also a big concern that when they do, their position will not be filled, and tasks divided among the remaining employees. The competition for digitally skilled employees between private companies and other

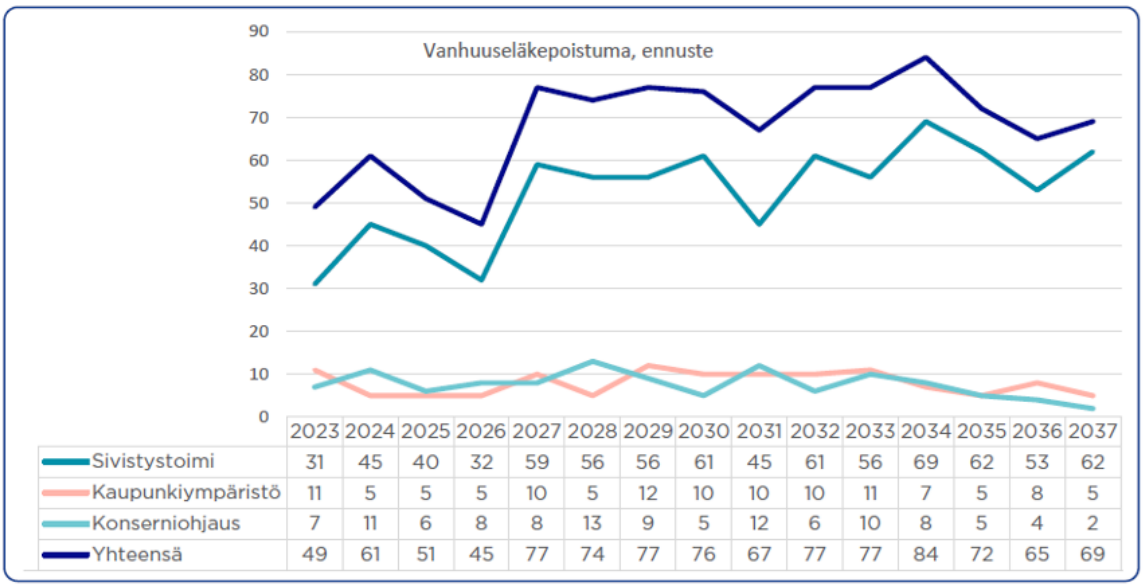
municipalities along with the pressure to decrease costs will be especially challenging for the public sector. (Tihinen (ed.), et al., 2019) (Pekola-Sjöblom, 2024)

Figure 6 describes the current age distribution among personnel in Vaasa, the drop between 2021 and 2022 is explained by the transfer of social service personnel to the Wellbeing Services County of Ostrobothnia. (City of Vaasa, 2022)



	Alle 30-vuotiaat	30-34	35-39	40-44	45-49	50-54	55-59	60-64 vuotiaat	yli 65-vuotiaat
2018	285	322	408	506	492	594	610	479	30
2019	292	333	412	509	498	586	595	472	27
2020	294	325	423	483	508	567	588	505	34
2021	294	325	423	483	508	567	588	505	34
2022	105	174	232	297	318	349	370	286	19

Figure 6 Age distribution among employees in the city of Vaasa (City of Vaasa, 2022)



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Sivistystoimi	31	45	40	32	59	56	56	61	45	61	56	69	62	53	62
Kaupunkiympäristö	11	5	5	5	10	5	12	10	10	10	11	7	5	8	5
Konserniohjaus	7	11	6	8	8	13	9	5	12	6	10	8	5	4	2
Yhteensä	49	61	51	45	77	74	77	76	67	77	77	84	72	65	69

Figure 7 Estimated number of retirements over the coming years in different departments. (City of Vaasa, 2022)

According to the personnel report a survey among applicants in 2022 concerning the recruiting process revealed that 90% of applicants responded that the recruiting process had run smoothly. However, as most of the temporary personnel are recruited directly by the school, and thus do not go through the official recruiting channels, they are not included in this survey. (City of Vaasa, 2022)

Self-Documentation Form Results

One of the objectives of the study is to document the current process of drafting employment contracts for part-time substitutes. As a basis for the case study, each participant was asked to reflect on issues related to the making of employment contracts by filling in a form while conducting the task. The form is included in the thesis as Appendix 2.

About ten example situations were returned before the deadline. The secretaries need personal information about the substitute to complete the employment contract, this includes a copy of the substitute's degree certificate if it affects the salary. Since many work at multiple schools, they are not always present when short-term substitutes are present, which means that contracts are prepared after the substitute has already been done. Insufficient information to the substitutes on what information is needed seemed to cause

a lot of extra work for the secretaries. Acquiring information through emails, sometimes as many as 15 were sent back and forth. Receiving a copy of the degree certificate also took a very long time, as much as a couple of weeks, in some cases. In all, collecting information to prepare the contract caused a lot of work for the secretaries. Considering that it could take up to one hour to get one contract prepared, the process is well worth developing.

Based on the returned forms, five stages of the process were recognized and identified as necessary to explore during the workshop: the initial stage of receiving the commission, information from the substitute teacher, information about the employment, other information necessary to complete the contract, and the notification.

4.2 Analysis of the Workshop

Based on the information gathered, a workshop was held for the secretary team. The workshop was held on 2.11.2023 for the Basic Education Secretary Team. The team consists of 13 secretaries located in basic education schools in Vaasa and two secretaries working in the basic education office. The workshop lasted for about three hours and in total 11 secretaries participated in the workshop. Since two of the secretaries do not prepare contracts in their work, they were asked to consider other tasks in their work that could be suitable for automation.

Present at the workshop, in the role of facilitator, was also the service designer of the digital and innovation team. The workshop was conducted using the facilitation tool “Me-We-Us”. This method is used to give every participant time to think and get their voice heard. Due to limited time, the Me part was conducted prior to the meeting, as the participants, through self-documentation were asked to fill in the form considering challenges to the process while preparing a contract. (City of Vaasa, 2023b)

The session started with an explanation of the case study and the agenda of the workshop. The main aim was not to come up with a solution to the technical specifications but to find out what the main problems/challenges are with the process of preparing contracts. This was done by looking at the different steps of the process and based on the pre-collection of information.

Based on the information given by the secretaries prior to the workshop five different steps were recognized in the process:

- The commission
- Information collected from the substitute teacher
- Information about the contract period
- Information concerning the contract details.
- The completion of the contract and notification

During the We-part 10 team members were divided into groups of two, their assignment was to in pairs reflect on challenges with the different stages of the process, how data was collected and from whom. After discussing in pairs, they were asked to write down different challenges on post-it notes and add any new ideas they had come up with to the boards in the room. The two team members not involved in the process of preparing contracts were assigned to think about processes/tasks that they perform that might be repetitive.

In the last stage, the Us part, the group reflected on all given challenges and individually gave 5 votes on which challenges they considered to be most important to resolve. Based on the voting a list of challenges was compiled and discussed.

In addition, the secretaries were asked to reflect individually on issues related to the process during the workshop. The aim was to gather insight into overall views and attitudes of automation, the process, and challenges. The data was collected via a questionnaire using the Mentimeter tool. The results of the questionnaire and observations during the workshop will be discussed next.

During the workshop, Mentimeter was used to gather feedback from the participants on different subjects about the case. The first question “What comes to mind from the word automation?” was asked to see if they had any prior knowledge about automation or preconceived notions. As Figure 8 displays the participants mainly connected the word automation with machines, easiness, speed, and robotics.

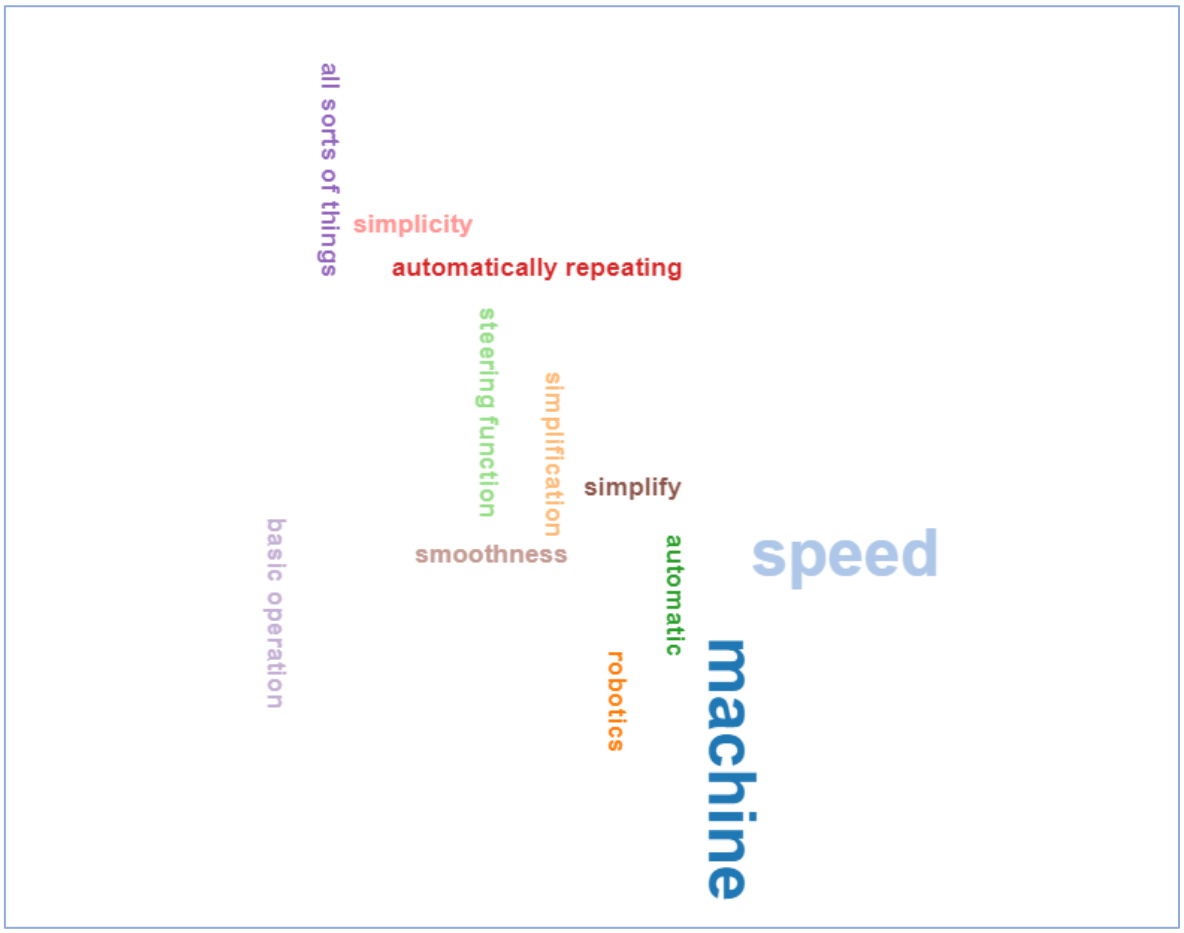


Figure 8 Responses to the question: What comes to mind from the word automation?

To give them an idea about how automation could be integrated into their work different examples and the general description of automation were discussed. Automation is not about replacing an entire task, but deconstructing the task into smaller tasks and identifying parts that could be automated. It was explained that RPA might provide an easy and affordable solution to fix problems with rigid programs that require continuous manual work to update information, as it can overcome some situations where it is not possible to change existing programs to better suit the current workflow. Making changes to programs can be very difficult as it might not suit the requirements of the employee, and custom-made software solutions might be expensive and time-consuming. The scheme was to give them some insight into automation and as such, in the future, they could more easily recognize tasks that could benefit from RPA.

The second question “What challenges do you encounter when performing the task?” revealed that the main challenge was insufficient information, that is, information needed to perform the task was not easily available or not handed in when or in the form

requested. Out of ten responses, as many as seven listed missing information as the main problem, other responses were the disperse of information into multiple sources and the urgency of completing the task.

In the workshop the challenges with data collection were addressed as two different parts of the process, receiving information from the substitute, and collecting information internally. Both steps displayed a variety of how the data was collected, from post-it notes, forms, and using shared Excel files.

During the final segment of the evaluation of the process, secretaries engaged in voting to determine the most pressing challenges among those identified earlier. The top three challenges that emerged were related to the complexity of information in various formats, insufficient information, and unclear processes or conflicting instructions. It became evident that the primary issue revolved around data collection at all stages. The secretaries encounter information in diverse formats such as emails, personal communication, forms, or Excel sheets. In certain instances, they must reach out to numerous individuals to verify or acquire the necessary information. Secretaries utilizing Excel for data collection highlighted its efficiency in minimizing errors and mitigating the need for additional clarifications. Nevertheless, it was acknowledged that certain information still required collection and clarification through alternative sources.

The final part of the workshop focused on the benefits of automation and the possibility of influencing processes and redesigning tasks. To explore the perceived benefits of automation, the question “How would you benefit from an improved workflow” was asked via Mentimeter to the participants. Results (Figure 9) show that the benefits were mostly perceived to benefit the person performing the task, by reducing stress and freeing up time for other tasks, providing a smoother workflow. The customer, that is the substitute teacher, would indirectly benefit in that an improved process would ensure timely payment of salary.

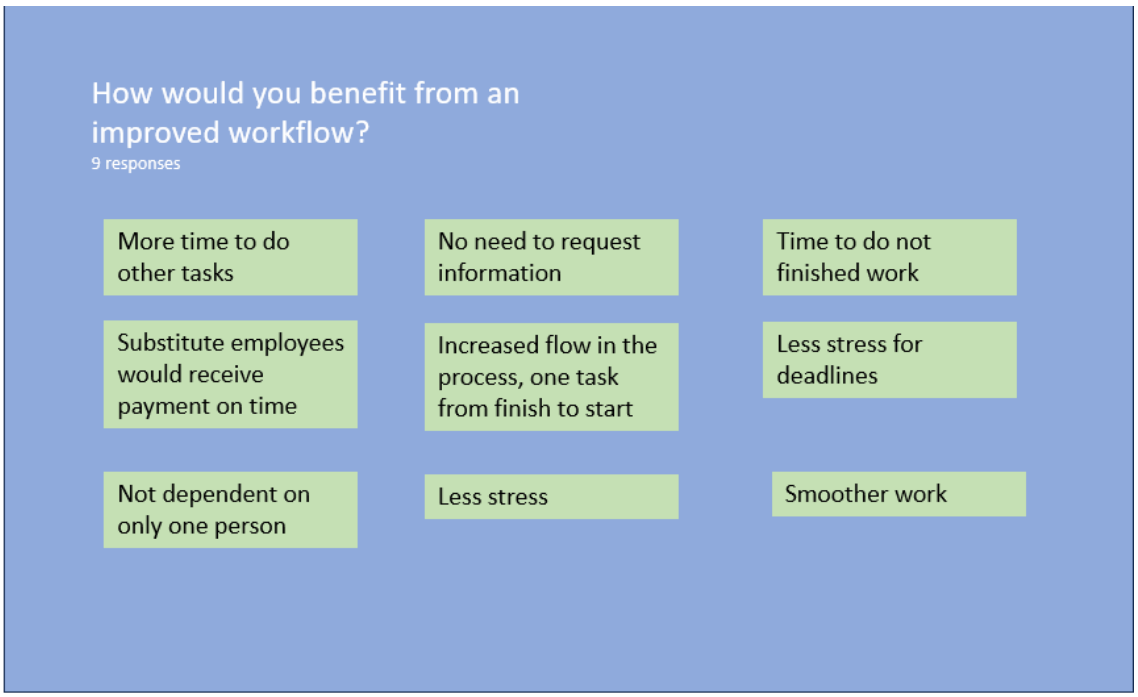


Figure 9 Mentimeter result from workshop 2.11.2023: How would you benefit from an improved workflow?

When reflecting on what we as a team and ourselves can do to change the process or steps of the process, the circle of impact was used as a tool. The inner circle represents things we can decide on and change, and the second circle represents things we can influence but do not have the authority to decide on. The third circle is things we neither can influence nor decide on.

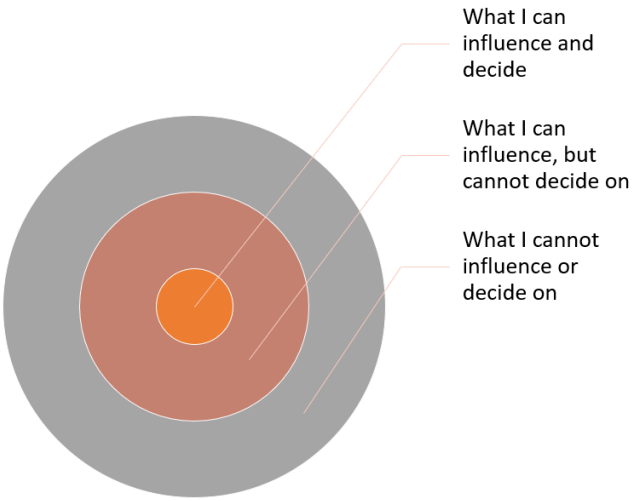


Figure 10 Circle of Impact

The conversations held during the workshop, along with the outcomes of the final Mentimeter question, indicate some apprehension about their ability to enact changes to the process. The result is hardly surprising, as it is a process that involves many different sectors, systems, and people, and the development of the process cannot be done by the secretaries themselves. Cooperation with other sectors as well as support from management is vital.

The feeling that they have little impact on how new technology is implemented or processes changed, might also have to do with the fact that many of them have been asked to start using new systems or programs with little training. When introducing new technology, not enough consideration has been given to the specific differences in practice in different schools. Instead of saving time, it often results in additional work or an equivalent workload in a different format.

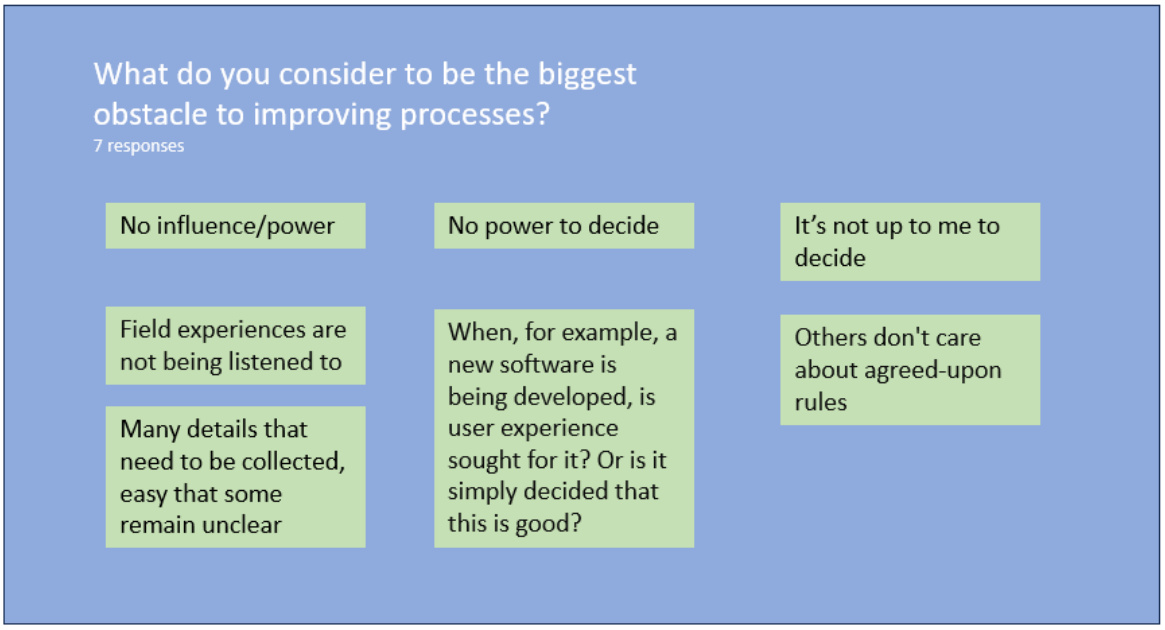


Figure 11 Mentimeter results to the question: "What do you consider to be the biggest obstacle to improving processes?"

The information gathered and feedback received during the workshop were summarized into five suggestions for further development and discussion:

- Automation and standardization of collection of information on substitutes
- Automation of Substitute Excel Data
- Common Practices, guidelines
- Clarification and Implementation of the Process, and from whom information is obtained (e.g. Accounting, Educational Services, Human Resources)
- Utilize the digitalization and innovation team's expertise.

As a result of the findings from the workshop, five themes were chosen for further exploration through interviews with key stakeholders. The five themes chosen for the interview were challenges and opportunities facing the public sector, the strategy of Vaasa, digital skills, views on the current work process and findings from the workshop, and inclusion and cooperation.

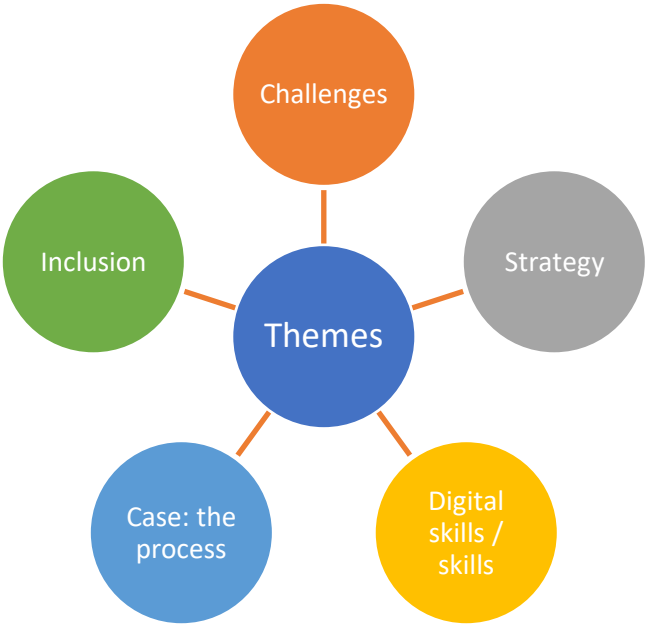


Figure 12 Visualization of themes explored in interviews.

The public sector is facing the struggle of digitally transforming its processes and organizational culture to better meet the needs of increasing customer expectations. The

first theme, challenges and opportunities facing public service explores employee views on this theme.

While the strategy clearly shows an intent to increase the use of automation for improved customer and employee experiences, is this commitment upheld in practice? What are the views on the strategic goals of Vaasa and how are they implemented in daily operations?

According to Kohnke (2017) digital transformation requires organizations to invest in obtaining digital skills, new leadership methods, and organizational capabilities. New organizational capabilities mean including and getting people from all levels of the organization on board with the change. Digital skills and cooperation were therefore chosen as themes to explore in the interviews.

Redesigning the process of the case study cannot be completed without the support and insight from other sectors, the fifth theme will therefore seek to get input from interviewees on the case study as well as suggestions for improvement regarding the process.

4.3 Results and Analysis of Interview Findings

The final part of the research was to interview key employees for further insight into the issues of digital transformation in public service.

The interviews were to take place in December, but due to time scheduling problems had to be moved to January 2024. Interviews were held via teams and recorded. The interviewees were chosen in collaboration with managers from four different departments of the central administration, departments that would have a role in the redesign of the specific process explored in the workshop or the digitalization of processes. Interviews were held on 4 different occasions through Teams with managers and experts from the Secretary services, Human Resources services, Recruitment services, and Digitalization and Innovation services, in all 8 persons. The meetings were recorded, transcribed, and analyzed. Each reply was coded according to themes and subcoded into categories to reflect topics and opinions. In the next chapter, the results are discussed in relation to the theory.

Challenges and Opportunities Theme

The theme first explored was the challenges and opportunities facing the public service sector and more specifically the city of Vaasa. Each respondent was also asked to reflect on the challenges facing their specific sector.

The responses were categorized into four main categories, identified as actions, challenges, sector challenges, and opportunities. Figure 13 displays the subcategories according to these four main categories.

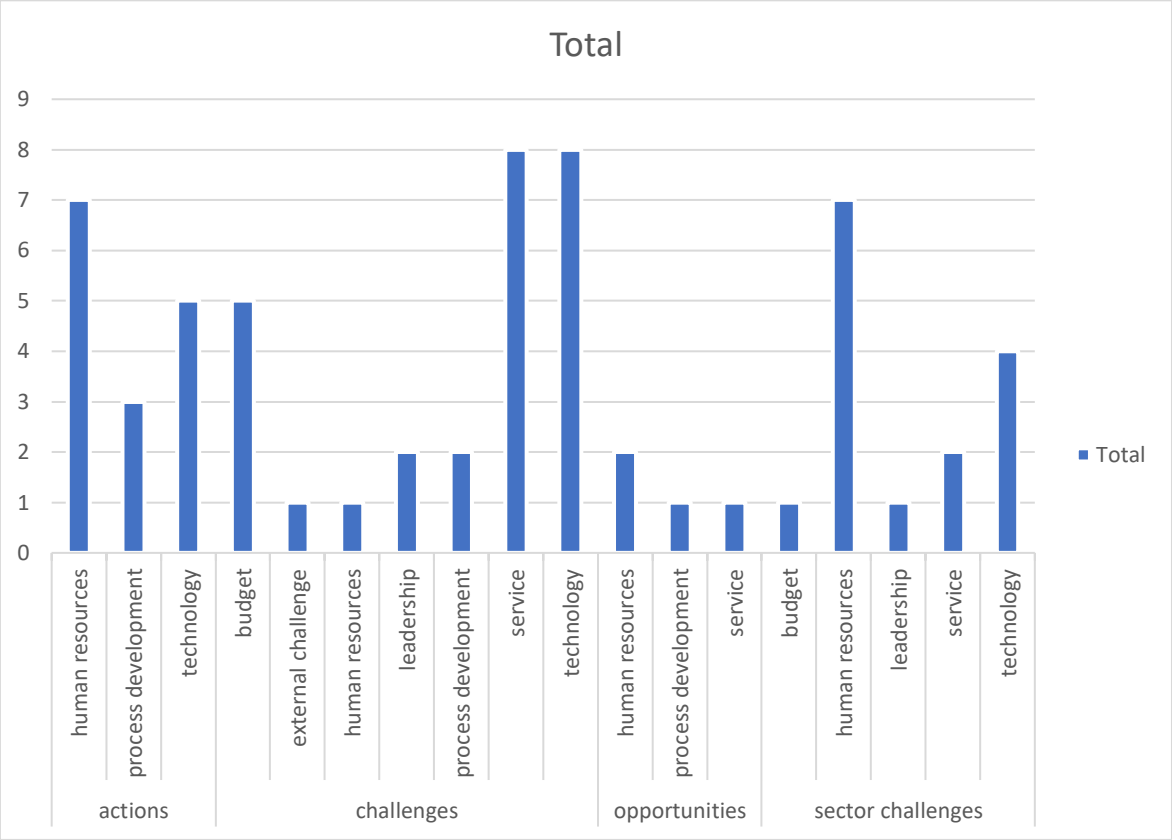


Figure 13 Public sector challenges and opportunities, results from interviews.

When discussing challenges and sector challenges service quality and pressure to diminish costs of administration were the main topics that arose. Respondents expressed concerns regarding the simultaneous pressures to reduce costs, particularly in administrative functions, while striving to enhance service development to meet the escalating demands of citizens.

Another significant concern raised was categorized under human resources, primarily challenges associated with high rates of retirement and difficulties in recruitment. This

observation appears consistent with the findings outlined in the "Kuinka kuntasi sykkii" survey conducted by Kuntaliitto in November - December 2023. According to the report, the second most pressing issue identified by leading public service officials and municipal representatives was the shifts in population structure, followed by concerns about the availability of skilled labor, which ranked third. (Pekola-Sjöblom, 2024) The human resources report (City of Vaasa, 2022) also identified this as a significant concern.

As discussed in the report there is a need to invest in proactive personnel and recruitment planning, supporting employee career development, and utilizing data for decision-making. The aim would be to gain a better understanding of current skill sets, and skills needed in the future. (City of Vaasa, 2022)

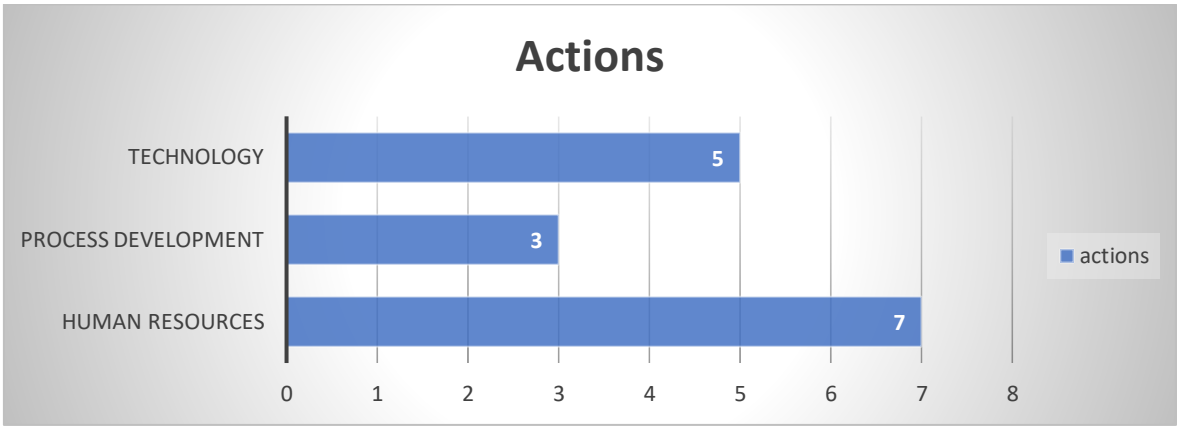


Figure 14 Subcategory actions.

In the interviews the respondents mentioned cooperation with universities, enhancing the image of the city as an employer, and monetary investments to recruit higher education students and employ them. Investing in recruiting students was seen as advantageous, as it could not only bring new employees to the city but also potentially encourage them to become permanent residents. Vaasa is one of the largest student cities relative to its population, every fifth person in Vaasa is a student either in a university or vocational school. The challenge of attracting new students and keeping the students already here are addressed in the city's strategy that lists numerous actions to increase cooperation with students, mainly in higher education. (City of Vaasa, 2024a) (City of Vaasa, 2022)

Investments in technology and process development were also viewed as necessary actions to take. While it was deemed crucial to enhance e-services, improve customer service through clearer communication channels, and implement automation and advanced

technology, development efforts appeared to be hindered by pressure to cut costs. However, investments in technology were also seen as a means to decrease expenses in the future. The emphasis on utilizing technology to enhance efficiency is common in public service, given that public service organizations typically deliver a broad range of services across various domains, and their organizational structure is often complex, with numerous vertically oriented sectors. (Thunes & Kempton, 2023)

Among the challenges discussed, the researcher categorized certain responses as opportunities because the interviewees recognized key aspects that could aid in addressing the challenges confronting the public sector. For instance, one respondent highlighted that the rapid pace of retirement in the upcoming years could offer an opportunity to enhance the development of processes, as new employees bring new insight and skills to the organization.

The younger employees might be more digitally savvy and prone to adapt to new technology more rapidly. However, they might also become frustrated with the slow pace of technology implementation. Rigid IT systems and slow adaptation might have a negative impact on an organization's attractiveness, hence making it difficult to recruit and retain skilled employees. (McAfee and Welch, 2008, as cited in Kohnke, 2017;p.76) A challenge also expressed in the interviews was how to decrease employee turnover, and if the issue of younger employees leaving due to weariness with outdated IT systems and rigid processes, is visible in turnover data. Overcoming said challenge might be difficult since the public sector has limited IT systems to choose from. Finding programs that are both user-friendly and meet all legal requirements and are easy to use for employees was viewed as problematic.

The Strategy Theme

The next theme discussed was strategy, or more precisely the goal of “skilled staff and excellent employee experience” listed in the “opportunity makers” theme, and the action of “Development and utilization of digitalisation, artificial intelligence, and robotisation skills” listed under said goal. (City of Vaasa, 2023a)

The responses were categorized into two main categories, first responses that reflect views on the strategic goal, and second examples of either already taken actions or future actions.

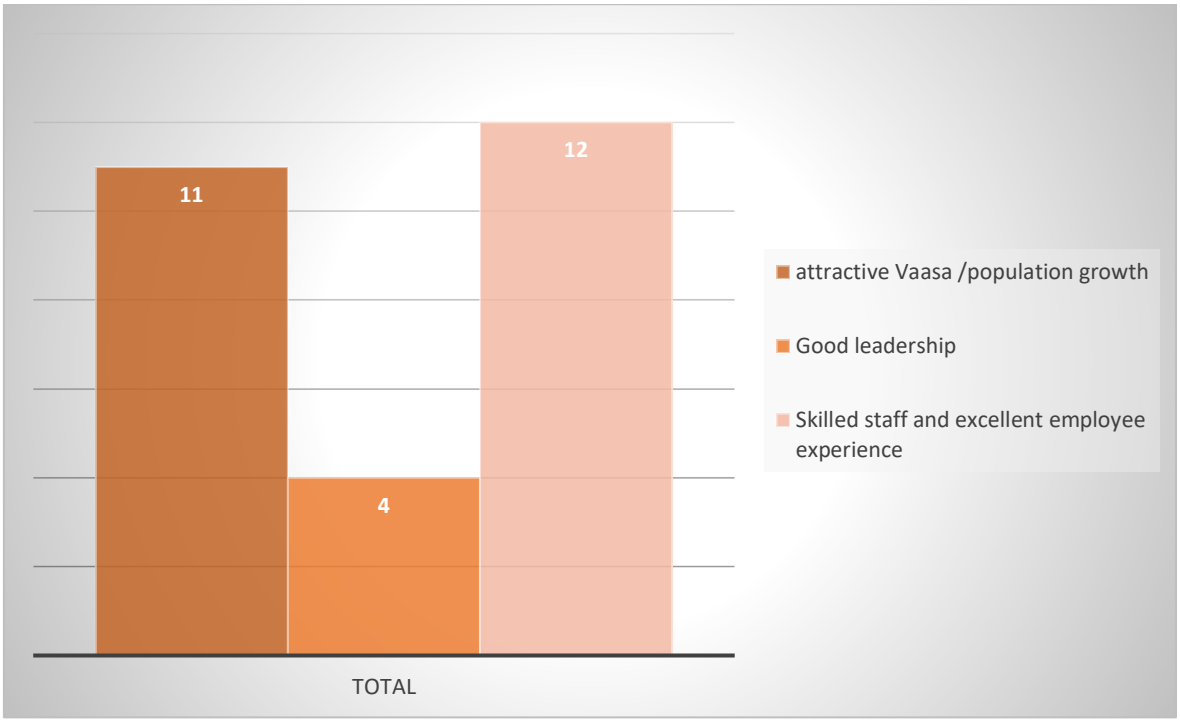


Figure 15 Interview theme "strategy" categories.

When reflecting on strategy three main categories stood out. The first category, here named “attractive Vaasa/population growth”, entailed responses that indirectly or directly could be viewed as contributing to the strategic theme of *Attractive Vaasa* and the goal of population growth.

When the individuals surveyed responded to what the strategic goal of providing an excellent employee experience meant to them or their team, they perceived it as broader than solely benefiting the employee. They believed that by concentrating on enhancing the employee journey, an indirect advantage would be a more favorable employer image. Consequently, this could attract new employees or even citizens. As one respondent mentioned, *“Employees serve as our outward business card, their positive word-of-mouth to friends and family is the kind of authentic communication that can assist us in acquiring new talent”.* The link between the employee image and the image of Vaasa was implied by respondents as they emphasized the significance of the other services the city provides to its residents to overall well-being, as well as the importance of qualitative services outside of working hours.

It was also noted that to ensure the availability of skilled employees in the future, proactive workforce planning is necessary, to map out what positions are needed. Good leadership

was also perceived to influence the employee experience, exemplified by fair leadership practices and appreciation.

Figure 16 Subcategory of strategy theme.

The common theme for increasing skilled staff and enhancing the employee experience seemed to be the focus on providing possibilities for employees to grow in their roles. When it comes to skill development, emphasis was placed on the employees' own responsibility for developing their skills: *The time should, in a way, be managed or provided by the employer. However, individuals also have a responsibility for themselves. This includes learning and acquiring knowledge.*

While the employer provides online courses, most of the skill development occurs through hands-on experience. Among other things participating in development projects, supporting well-being at work, modifying job descriptions to better meet future demands, and decreasing routine tasks were viewed as enhancing the employee experience.

The strategy themes categorized as examples were classified either as examples of vision or actions. Examples classified as vision were responses in which the interviewees expressed a desired outcome or plan for how to utilize automation in work.

Every respondent agreed that utilizing automation to decrease manual labor or automation of routine tasks needs to increase. Particularly HR processes, e.g. automation of recruitment processes, personnel reports, or HR systems were seen as areas that could benefit from automation. The desire to increase the use of technology for the visualization of data through dashboards and data analysis was also expressed, mainly to support management in decision-making.

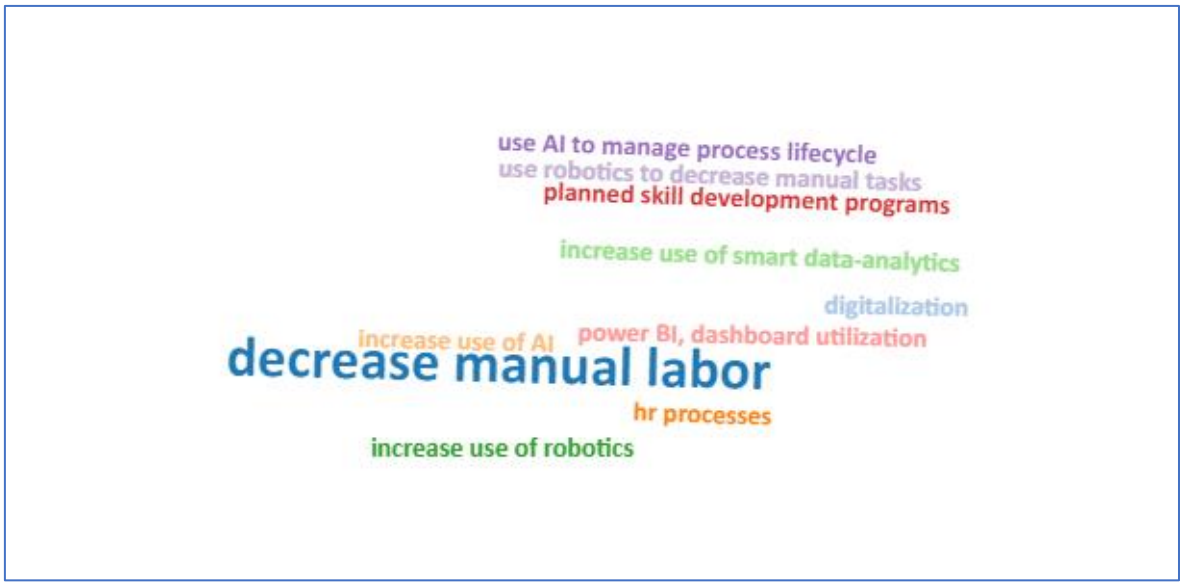


Figure 17 Vision word cloud.

The action word cloud visualization reflects the actions that have or are done in the organization in relation to the goal and action. One team had begun testing AI tools, mostly ChatGPT, to generate slogans and interview questions. Different projects to increase automation of routine work, process development, and redesign of job descriptions were also mentioned. The employees' own responsibility for skill development was emphasized, for example, to actively reserve time in the calendar for skill development. However, to be able to take time to focus on skill development, the support of the manager was considered important.

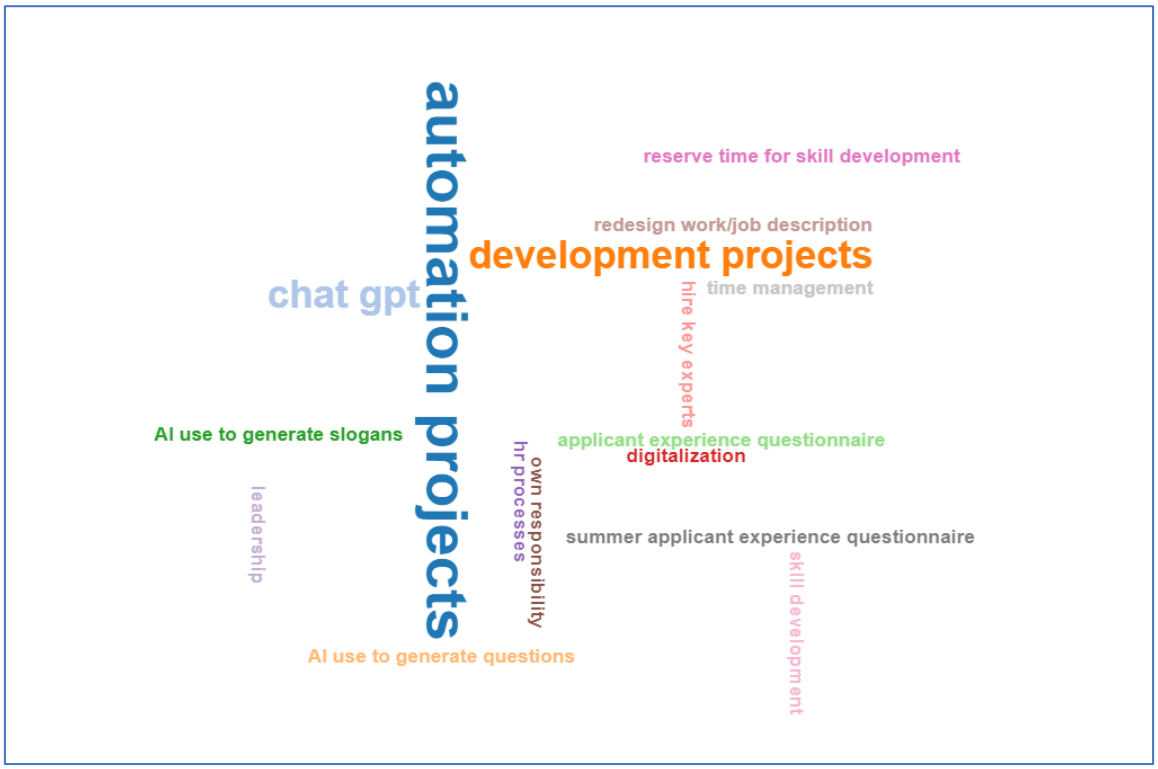


Figure 18 Actions word cloud.

Skills Theme

In the following theme, the respondents were asked to reflect on the skills they feel are important in the near future, how they would support employees, or how they would like to be supported if their work were to transform or undergo drastic change. Digital skills or digital literacy will surely be a requirement for most future jobs. As per Kohnke (2017, p. 75), digitalization will demand more from employees than just digital skills. Employees need to demonstrate core competencies such as resilience, and the ability to manage complex and rapidly changing environments.

It was intriguing to notice that when asked about skills considered important in the workplace, respondents mostly mentioned personal skills, rather than digital skills. Three respondents claimed that most employees have sufficient basic digital skills, especially the younger generation, for whom digital engagement is a daily part of their lives. Basic digital skills were seen as a necessity, as most jobs in one way or another require them. As summarized by one respondent, *"That IT (knowledge/skills) can no longer be separated from the rest, it's part of it (the job) and it's starting to become like the majority of it in many fields."*

Figure 20 displays responses categorized into skills (personal skills) and digital skills, further categorized into subcategories.

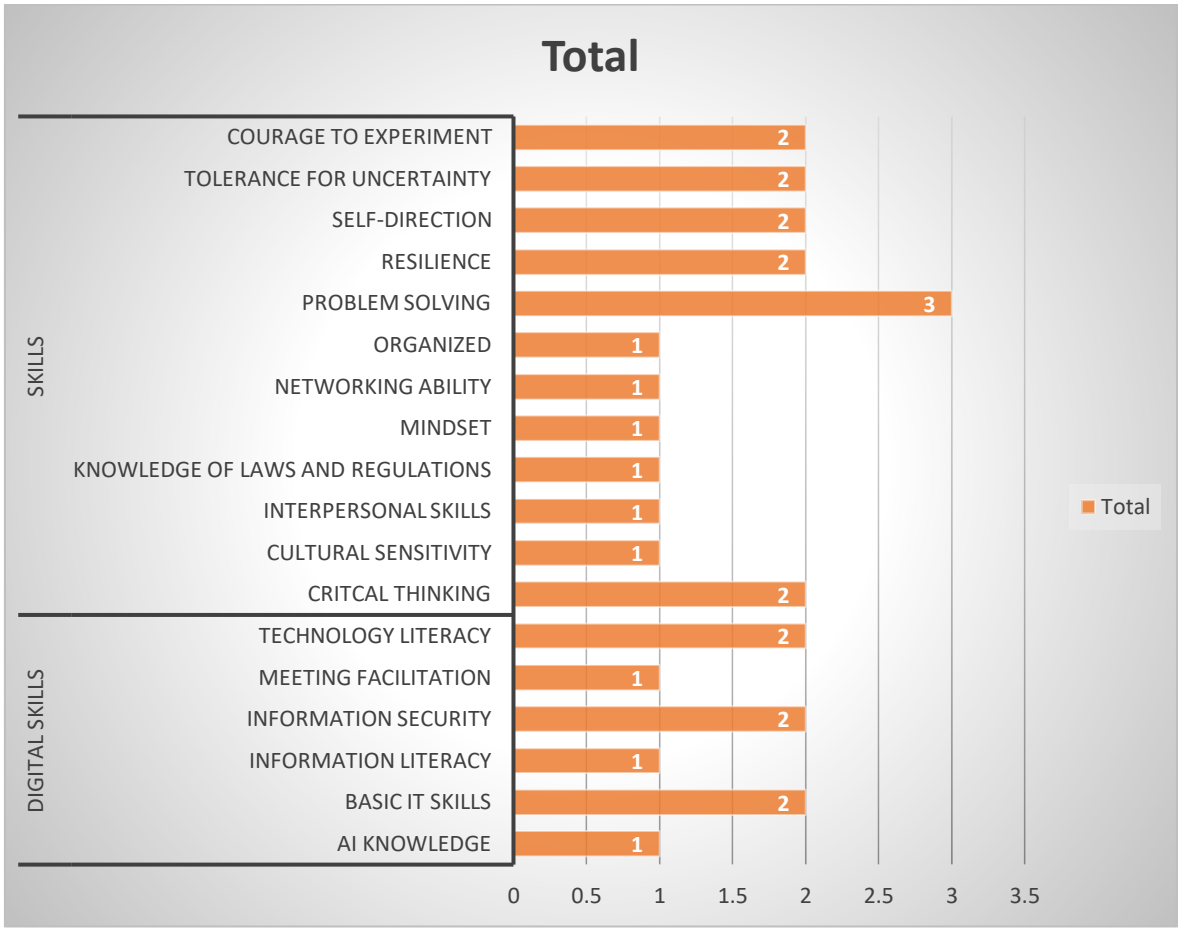


Figure 19 Skills theme, respondents' view of skills needed to cope with future demands.

Five of the respondents, in one way or the other, mentioned the importance of employees being able to cope with the fast-changing environment. Having a high tolerance for uncertainty, and recognizing that processes, work, and IT systems constantly change was viewed as valuable not only for employees but also for managers. As one respondent put it:

"When it comes to standardized manual work and similar tasks, changes are undoubtedly expected to occur. These changes, along with the availability of labor for such specific types of work, will likely become increasingly challenging in the future. Indeed, supervisors must possess the ability to tolerate uncertainty."

Critical thinking and problem-solving were seen as important in a more digital workplace. As technology and automation change the work, employees need to be able to solve

problems, critically evaluate different solutions, and have the courage to voice their opinions. As automation decreases manual labor, employees are left with tasks that require critical thinking and problem-solving in a solution-focused manner:" *Especially now, if these robots come, they become like work colleagues, that they start to do more of these manual tasks, then, well, it leaves us more (time) for problem-solving.*"

According to the respondents attracting and retaining digitally savvy employees is challenging, particularly for the public service, which often struggles to compete with private sector salaries. The solution might be to offer current and potential new employees a wide range of opportunities to grow and develop in their roles. As one respondent elaborated when considering challenges facing the public service, monetary compensation might not be the only factor employees are looking for, employer flexibility and benefits might be equally or even more important.

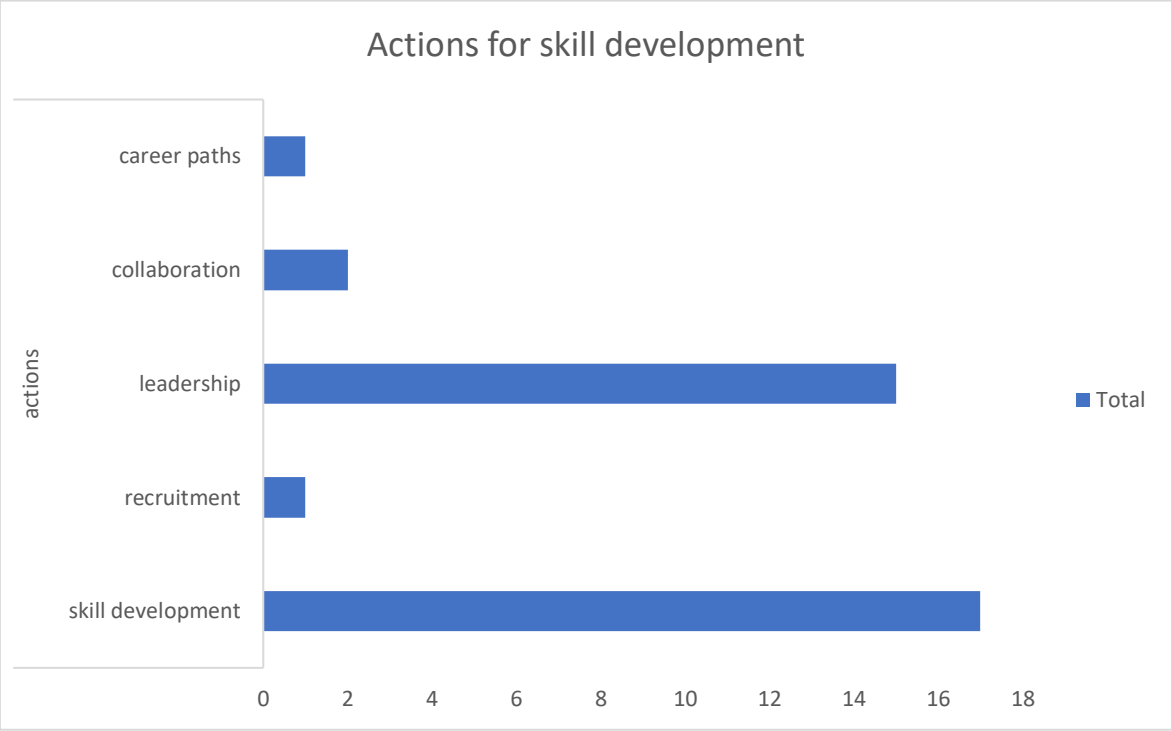


Figure 20 Views on how to enhance skill development.

The focus on skill development and leadership improvement was evident in the responses regarding what managers needed to focus on when faced with changes and increased demand.

Kohnke (2017, p. 76) argues that digital transformation requires organizations to invest in the education and training of employees. Mapping of current skills and future skills should be a priority for management, as poor allocation of funds for reskilling employees is regarded as a significant obstacle to digital transformation (Bonnet and Nandan, 2011, as cited in Kohnke 2017).

According to the personnel report 2022 (City of Vaasa, 2022) the employee perspective, well-being, and competence have been integral parts of the city's strategy for a long time. The key measures according to the report have been to develop leadership skills, particularly coaching and well-being at work leadership, as well as employee competence and teamwork skills. The report and the strategy suggest that these will be the focus in the future as well, along with more proactive personnel planning. Or as the Human Resource manager of Vaasa, Tuulikki Krushe-Poutanen (City of Vaasa, 2022) puts it in the report:

"In the future, we will focus not only on promoting employee well-being but also on proactive personnel and recruitment planning, supporting staff career development, and data-driven decision-making. We need a better overall picture and up-to-date information on the skills we already have, what additional skills we will need in the future, and how our employees are doing."

In the category of "skills" and actions for skill development, fifteen responses were subcategorized under leadership concerns. Two respondents also discussed proactive personnel planning, emphasizing the importance of clarity at the group level regarding role changes, and the need to support individuals in finding their path while ensuring awareness of common goals. It was considered important that the leader supports and leads the change, persuading employees that their capabilities would be better used in handling more challenging tasks.

A recurring topic during the interviews was how the constant rush led to insufficient time for developing and changing processes and workflows. Five of the respondents clearly stated that reserving time for development should be a priority. Enabling individuals to adapt new skills at their own pace, allowing employees to allocate time to develop new skills: *"And then providing training opportunities and time for it. That way, adopting new tasks*". Emphasizing the importance of providing skill development opportunities to upper management was highlighted as the key responsibility of leaders: *"It's the leader's task to*

strive to push forward, in a way, to the management. How important it is that our staff's skills are developed".

The majority of responses in the category of actions for skill development were further subcategorized as "skill development", as they included specific examples of what is or should be offered to employees. Kohnke (2017, p. 85) argues that the most successful formula for building digital skills and competencies is to offer a wide range of training methods, focusing on groups that lack sufficient skills. The interviews uncovered a similar approach to learning, with respondents listing numerous ways to enhance digital literacy and the advantages of diverse skill development opportunities. As summarized by one respondent:

"*Training (courses) are just one way of developing skills, there's also mentoring, the opportunity to work on various projects, different tasks to gain that expertise, that's really valuable. Experimenting, it's a kind of expertise that you don't really get from training (courses).*"

The interviews indicated that adequate orientation to new tasks and training could serve as a catalyst for sparking interest in further learning. However, it is crucial thereafter to provide employees with diverse opportunities to expand on that knowledge. This might include workshops, peer support, involvement in projects, and challenging tasks, allowing them to learn by doing.

Collaboration Theme

In the previous themes cross-sector collaboration, networking skills, and cooperation with other stakeholders were highlighted. The fourth theme examines what this could entail, with an overview of topics categorized as "cooperation" visualized in Figure 21.

Figure 21 Wordcloud, Collaboration theme, subcategory cooperation.

Larjovuori, Bordi and Heikkilä-Tammi (2018) conducted a study on the role and focus of leadership in digital business transformation. They found that when discussing networks two themes stood out, customer orientation and collaboration and partnership. The customer-oriented focus was seen as important, enabling the organization to gain insight and develop digital services. Customer-centric service development was not notably addressed in the discussion on collaboration; instead, the focus was primarily on internal collaboration or collaboration with service providers. However, in discussions on other topics, respondents mentioned gathering customer feedback from individuals who have applied for positions as a means to enhance the job application experience. For example, most applicants wish for salary information to be disclosed in the job advertisement, a change the city has adopted. Now, nearly all job advertisements state task-specific salary (City of Vaasa, 2022).

"Many applicants hope that salary information is included in job advertisements, and for the most part, it is included in ours."

The second theme Larjovuori et al. (2018) found that stood out in their research, relating to leading networks, was the role of collaboration and partnerships in digital business transformation. Similar to the study conducted by Laajavuori et al. (2018, p. 7), respondents voiced concerns regarding the insufficient time allocated for digitalization and development of processes. Laajavuori et al. (2018, p. 7) found that interviewees considered partnerships to be a possible solution since utilizing the knowledge of business partners could drive agile process development.

Respondents indicated that collaboration with external partners typically involved the development of IT systems and their functionality, although some also engaged in improving business processes. Internal collaboration focused on cross-sector cooperation, that is the importance of forums for feedback and development of processes. It also involved supporting departments when introducing new IT systems and engaging them at an early stage of development. The support of the digital and innovation department was particularly highlighted as valuable in the development of digital processes.

Recently the city has started evaluating the current HR system, from the comments it was clear that this was seen as a huge project, that required the involvement of many sectors. For example, when working on the requirements definition for the program, the dialog with the supplier is crucial. Some respondents also stressed the importance of involving employees at an early stage and the importance of making sure that all legal requirements were met.

The Process

When asking the interviewees to reflect on the process, the objective was to gather suggestions on how to proceed with its development. The interviewees were asked to comment on current challenges the secretaries are faced with and were also given the opportunity to offer advice and improvement suggestions.

When considering challenges, the complexity of the process and discrepancies in how information was received were perceived as both problematic and negatively impacting the employee image. Since information on substitute teachers is not centralized in one database, they are required to return and fill out forms multiple times for various schools

and/or departments. Consequently, this creates a confusing employee experience, which could potentially affect the employee image.

“The first thing is probably how standardized the process is, right? Like, does the substitute or the person from whom the input comes put it (information/data) in? Does it always come through the same channel? Is there a system where they come in? And it kind of forces that process to be somewhat uniform, so if it comes in, if they come in like through calls and emails and so on, I understand that's where the problem lies."

Other challenges identified by the respondents were a lack of interoperability between IT systems and unclear or not standardized procedures. Lack of interoperability in this case means that information stored in one system cannot easily be transferred or accessed by other systems. As a result, in some cases, data must be manually entered into each system separately, leading to inefficiencies and potential errors. For example, data gathered on personal information about the substitute via forms or the recruitment system still must be manually transferred into the program for preparing contracts.

"So, once it gets, if it gets into the database, then you can do a lot with it, but until then, as it moves through different channels, then it's difficult to do anything with it, especially if it's not in electronic form so that all requests are in the same format."

Unclear procedures or processes are difficult to modify if there is a lack of communication between suppliers and end-users. At the time of the interviews, the city had also received new guidelines regarding the procedure for tax deduction cards from their in-house company responsible for payroll. According to these guidelines, substitute teachers would no longer be obligated to return their tax deduction card, as the in-house company would receive them through their own channels directly from the Tax authorities. However, during the interviews, it became clear that the instructions were unclear on whether the guidelines only applied to permanent employees or also substitutes. At the time of writing some secretaries are still asked to return a copy of the substitute teachers' tax deduction card to the in-house company, just in case.

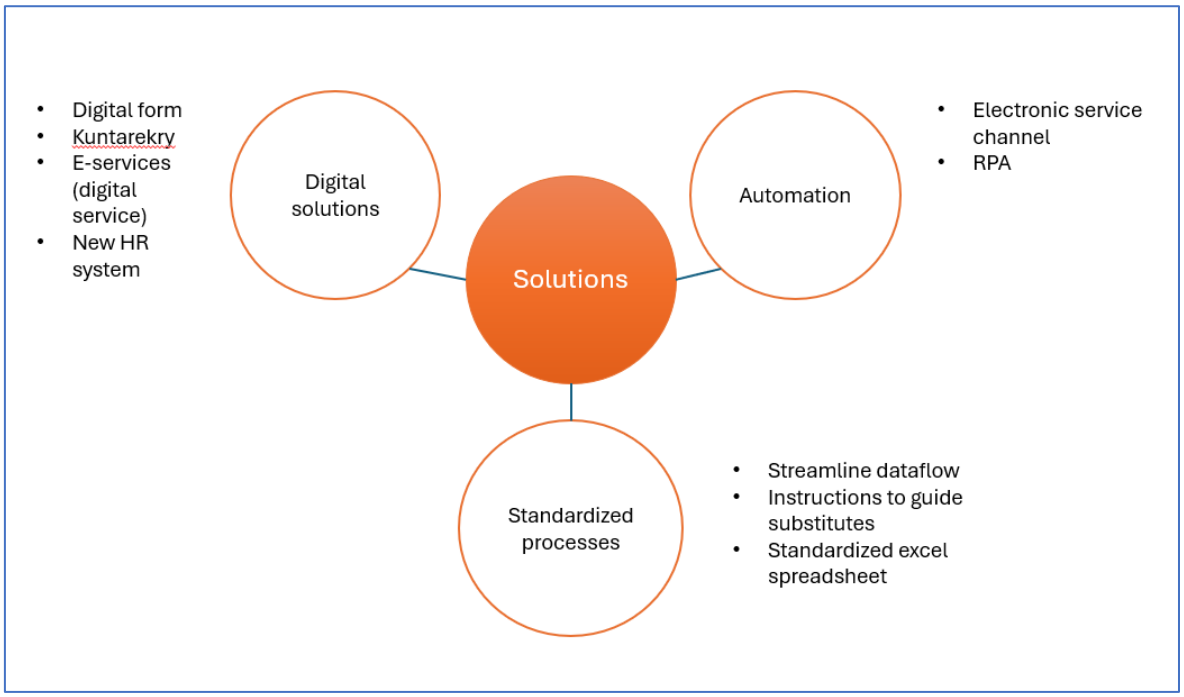


Figure 22 Suggested solutions to process challenges.

The first step in introducing automation would be to identify tasks that are repetitive, independent, and physical (Jesuthasan & Boudreau, 2018). Automation also requires that the process to a certain degree is standardized and rule-based, a problem summarized in a comment with one of the respondents on how to move forward:

"*Often, it's the basic things you have to start with to enable further development. It's about standardization; perhaps the issue is that we have too much variation and individual practices. Another issue is whether we have systems that support the process and whether everyone has access to what they need for their respective roles.*"

A clearer picture of the process, the need to identify people involved in the process and their responsibilities were seen as preconditions to set up a functioning workflow. Documentation was suggested as one way, a process description of all the phases and who is responsible for what part of the process.

More concrete solutions were also suggested during the interviews. For example, granting the secretaries access to the recruitment program Kuntarekry or developing an electronic form for gathering information from the substitutes. Access to Kuntarekry was seen as a favorable alternative since the program is already in use for the recruitment of substitutes

and information needed to complete the employment contract is updated regularly. Still, the need to streamline the entire process to boost automatization was seen as vital.

5 Discussion

In this section, the key findings from the workshop and interviews will be summarized and discussed. The discussion will focus on the objectives of the study and if they were met. The first two objectives concerned the process of preparing contracts, that is to document the current situation of the process of preparing contracts of employment for part-time employees and identify the main challenges with the process of preparing contracts of employment for part-time employees.

The process description was modified (Figure 23) based on information received from secretaries during the workshop and returned self-documentation papers, to visualize the many steps involved in the process and the multiple sources of information.

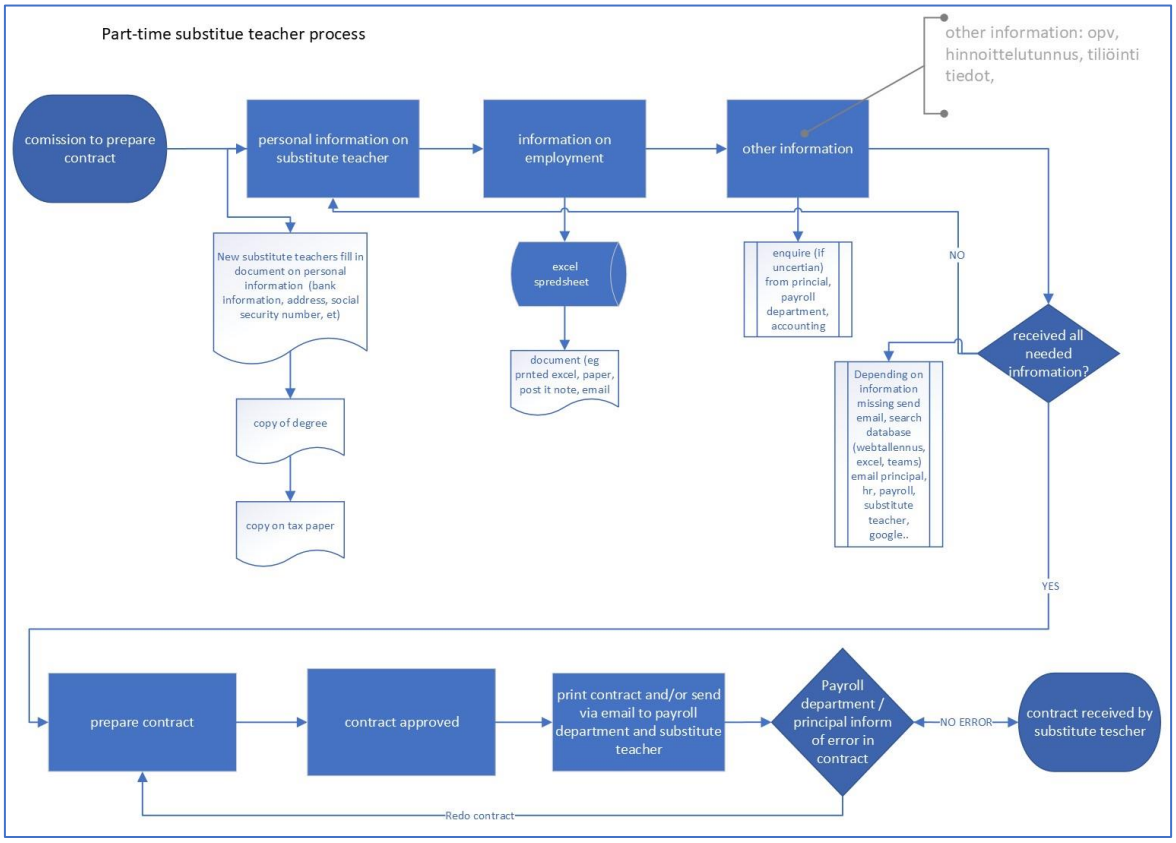


Figure 23 Process description of contract preparation for part-time substitutes.

The challenges with the process were documented during the workshop and discussed further in the interviews. The views expressed during the interviews were discussed earlier in chapter 4.3 As suggested previously, further development of the process is needed. Introducing a standardized data-gathering method would improve the entire process, leading to time savings for secretaries, fewer errors, and ultimately enhancing the

customer experience and perception of the employer. The first step would be to standardize the process, map out tasks, and evaluate how suited tasks or parts of the process are for automation.

Exploring the information-gathering process from the substitute's point of view would be useful, given the diverse array of methods employed in this phase. Although the city does enquire job applicants about their experience with the recruitment process, a more in-depth examination of the specific steps of recruitment could reveal pain points from a customer point of view. As this is out of the range of this research, it would however be beneficial to consider for further research as customer-centric services and increased use of digital tools is the aim of the digital vision, both for employees and citizens in the city of Vaasa.

Parvianen et al. (2017) as cited in Tihinen (ed.), et al., (2019) outline a measure for evaluating the digital development of a process (Fig. 24). If considering this measure, the process of preparing contracts could currently be considered to be at stage 0. The process, while including the work of different sectors, is a description of the secretaries' tasks. The goal would be to take it to stage 3. The process cannot be fully automated, as someone will have to check the information and the employer will have to approve every contract. However, a cross-sectoral approach to developing the process is needed, as well as a customer-centric focus. Using an automated workflow platform like Microsoft Power Apps can significantly streamline the process, enhancing efficiency and reducing manual intervention. When considering the four scenarios listed by Houy et al. (2019) three could be suitable for improving the process, either individually or in combination: automated data integration, automated data transformation, and automated process integration.

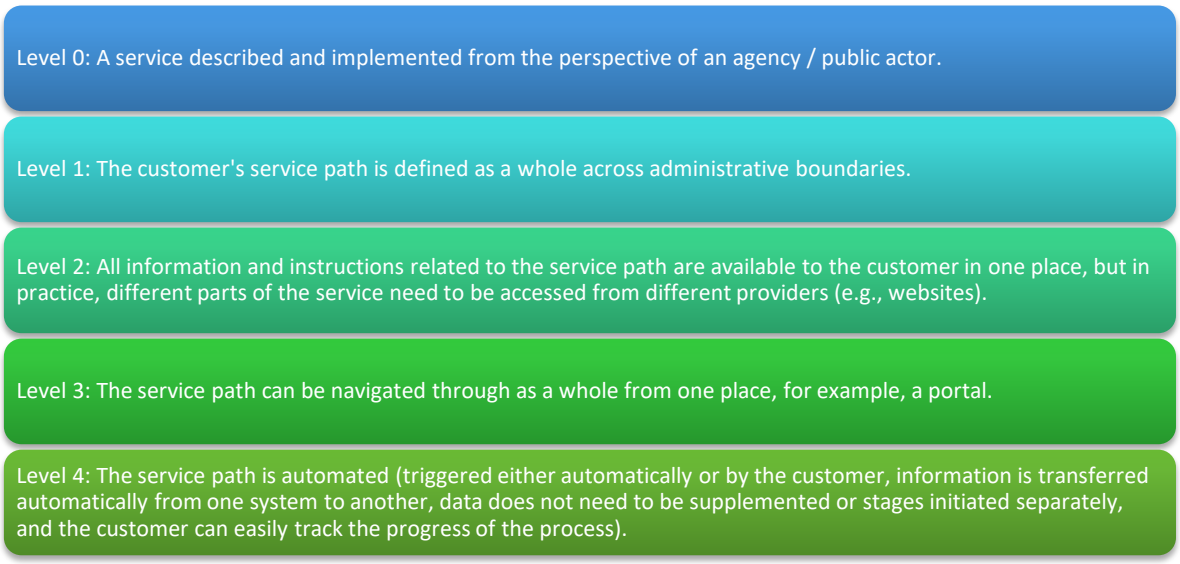


Figure 24 Defining the level of service path from the customer's perspective (Parviainen et al., 2017 cited in Tihinen (ed.), et al., 2019, p. 21)

Since one of the criteria for successful implementation of RPA is that the task is highly standardized (Asatiani & Penttinen, 2016), the need to streamline the process is clear. Currently, there are too many different sources of information and too much time is spent on gathering information from digital sources, coworkers, and substitutes.

The next two objectives were focused on exploring perceived challenges with digital technologies and digital transformation in the public service. The goal was to explore and identify challenges and views on digital transformation and strategy and identify areas of improvement for process development.

Challenges	Opportunities
• Budget • Time • Retirement • Difficulty in recruiting new personnel • Multiple digital channels, platforms, unclear processes • Interoperability (lack of)	• Students (image as student city) • Retirement • Employee image & Vaasa image • Skill development • Employee benefits

Figure 25 Challenges and opportunities.

The first theme discussed during the interviews explored the challenges and opportunities of digital transformation in public service, addressing the research question: "What are the main challenges the public sector faces in implementing digitalization, specifically within the City of Vaasa?". The main challenges were related to time and resources, personnel turnover, and technical constraints. The main opportunities were to enhance the city's image as an attractive employer and a desirable place to live. The challenges and opportunities, despite being discussed in a specific theme during the interview, were brought up during the discussion of other themes. The employer image and employee experience were an underlying notion in nearly every theme, from offering employees opportunities to develop their skills, to developing processes.

Robotization, automation, and digital transformation were mainly seen to be hindered by a lack of resources and time to develop. The organizational structure, laws and regulations, and insufficient change management slow down digital transformation (Thunes & Kempton, 2023). Investing in new IT systems is a costly and time-consuming project, new modern platforms and solutions that look good on paper, might not meet the requirements set by laws, regulations, or internal guidelines, and alterations to fit the needs of the organization are considered expensive and hard to implement. On the other hand, outdated systems, with their lack of interoperability and manual data entry, take time from employees to do other tasks such as developing and providing customer service. To sum up, automating specific tasks within a process can be a cost-effective approach that adds value to an organization by allowing employees to focus on other, more valuable activities.

The public sector will face challenges in recruiting and retaining employees in the coming years. The high retirement rate, combined with the need to reduce expenses, suggests that automation could be viewed as a means to enhance efficiency, thereby reducing the need to hire new employees. Retirements, though challenging, were also seen as an opportunity as new digitally skilled employees would enter the workforce. The challenge for municipalities, however, is figuring out how to attract IT specialists and other developers. There is a shortage of software and system developers, and working for municipalities might not be their top preference when seeking employment. (Tihinen (ed.), et al., 2019)

The thesis research concludes that to enhance the employee experience, five areas of concern need to be addressed. In addressing the research question "How can public sector

organizations support their employees in adapting to new work methods and embracing digital transformation?", these five concerns will serve as focal points.

Figure 26 Employee experience.

Manager support is vital for improving the employee experience. Managers at all levels need to get involved in the digital transformation. That might include upskilling their knowledge of technological solutions, new agile working methods, or coaching leadership methods. Most of all, they need to set an example, adapting and promoting new technologies and innovations in for example the organization's internal channels for communication.

Manager support includes involving the employees in developing processes and decision-making. Leaders should also focus on building networks and setting up forums for a free exchange of information between teams and across sector boundaries. Finally, leaders need to consider what skills will be needed and encourage employees to grow in their roles. In the next section, these will be discussed in more detail.

Responsibility	Skill development	Development	Networking/ cooperation
Leadership	Be an example Proactive personnel planning	Engaging employees, e.g. workshops	Involve end-users
Employee	Participate in training, Experiment e.g. Explore new technology (AI, ChatGPT, Copilot)	Mapping of tasks	Allocate time
Recruitment stage	Competence assessment	Developers, project and agile working method knowledge	Networking skills
Organization	Resources and time to develop	Easy access to information	Create spaces /Cross-sector

Figure 27 Visualization of themes of focus.

Considering the shift in jobs from manual administrative tasks to tasks requiring creative thinking and analytical skills, *Skill development* through training opportunities in various ways must be made accessible to all levels of the organization. The city offers employees multiple ways to improve their skills, from training programs to online training. Employees are encouraged to further their education with monetary incentives and offered days off to complete coursework. Fostering a culture where further education is encouraged and supported by managers was considered important by the respondents. While it is important to enhance skill development at all levels, focusing more on the administrative personnel could be beneficial as these are the employees who will most likely face the realities of changes to job descriptions and tasks due to digital technology innovations. Involving them, creating spaces to collaborate, and sharing ideas should be a top priority.

The city of Vaasa offers online training through the platform Eduhouse, promotes free online courses to their personnel, and is planning to implement a new *introduction to work course* (työntekijäpassi) which partly will be online for workers to complete at their own pace. The intention to develop a skill development path (työntekijäpassi) was mentioned in the interviews. The work on building a training course has begun, the goal being to introduce new employees to different themes needed to perform their work and get an

understanding of their obligations and rights. Prior to the project's inception, employees were asked to announce their interest in participating in the project, at which point the researcher applied and was accepted to join the group. The incentive to participate is that skill development starts with the basics, recognizing that employees need to know where to find information or from whom.

The city's strategy emphasizes attracting both new employees and citizens to enhance its image as an employer. However, with increasing pressure to reduce costs, the importance of finding the right personnel for each role increases, hence a solution would be *assessing skills when recruiting new personnel*. When considering hiring, it's crucial to ensure that job descriptions are up-to-date and ideally anticipate tasks that may arise in the near future. When hiring new personnel, it's important to evaluate whether the new position would benefit from seeking individuals with experience in agile working methods or project experience. The recruitment phase should thoroughly assess candidates' skills, to ensure compatibility. The *Future of Jobs Report 2023 survey* done by the World Economic Forum found that for skill-assessment work experience evaluation is still the preferred method. The survey also indicates that organizations increasingly are considering other credentials than university degrees as completed short courses or online certificates. (World Economic Forum, 2023). The survey suggests that the high number of organizations planning to use technology for training personnel might indicate why appreciation of certificates is high on the ranking list. In Finland where 40 % (average being 19,9 %) of companies reported considering these when hiring, this conclusion might very well be true. (World Economic Forum, 2023)

In all, a more proactive approach to skill development and recruitment is needed. The MIT report *The Work of the Future: Building Better Jobs in an Age of Intelligent Machines*, states that the focus when developing training has been on boosting carriers of young employees and relocating low-wage workers. Less attention has been paid to middle-aged workers who might find themselves dislocated due to technological advances. (Massachusetts Institute of Technology (MIT), 2020) Hence, exploring what kind of training is best suited for employees with many years of experience and hectic work hours is suggested.

Process development begins with breaking down jobs into tasks or configuring the workflow. If the objective is automation, each task must be assessed for its feasibility and

potential value in automation. In other words, it's essential to determine whether the benefits of automating a task outweigh any potential decrease in service quality. Involving end-users in the development stage is essential. Leaders must explore various methods to engage end-users in the process. Equality in involvement depends on the extent to which employees have access to information. Cultivating a culture of openness and transparency enhances this involvement.

Networking and collaboration within the organization, across departments, and with external partners require special attention, as siloed thinking can significantly hinder progress. The structure of public sector organizations is often referred to as delaying development and collaboration. Building networks, both internal and external should therefore be a priority. Cross-sector collaboration, between diverse groups of experts and end-users, is a precondition for the development of processes, especially if the process involves employees from different departments.

During the workshop with the secretaries, they expressed the feeling of not being able to influence the process. Involving end-users in process development, especially when it will have a direct impact on how they perform their work, can decrease resistance to change and provide the organization with valuable information about the process. New ways to include end-users need to be considered. Workshops or expert groups, with a mandate to experiment and implement changes, might be one solution, allocating time and resources for development another.

A great example of engaging end-users and fostering process development is the city's launch of a campaign called “pakkopulla-kampanja”. In English, a campaign described as “pakkopulla” would be equivalent to a “necessary evil”. It refers to a task or process that must be completed before moving on to more engaging or meaningful activities. Although it's not the most enjoyable part of the workflow, it's a critical step that can't be skipped. The aim was to eliminate routine tasks that take time away from more engaging work, streamline processes through technology, and ultimately improve services for citizens. This initiative was part of a larger project called “Vaasa 2.0”, which focused on boosting process efficiency, enhancing service quality, and redefining tasks. (Alasalmi, 2023)

In conclusion, challenges with digital transformation need to be addressed as many aspects affect the successful implementation of technological solutions. Changing the company

culture, reskilling workers, and setting up spaces for collaboration are the most urgent topics to address.

6 Conclusion

The research aimed to gather perspectives on digital transformation, including challenges and future skill requirements, while also exploring current and prospective collaboration opportunities, along with seeking feedback on the case study and gathering suggestions for further development.

The workshop exposed several pain points in the process and highlighted the most significant barrier to digital transformation: a lack of a sense of inclusion. Based on the findings from the workshop, five themes were further explored through interviews with key personnel within the group administration. The themes explored were challenges and opportunities with digital transformation, the strategic goal of *skilled staff and excellent employee experience* along with the action of *development and utilization of digitalisation, artificial intelligence, and robotisation skills,* views on skill development and skills needed in the future, suggestions for process development in the case studied, and future and present collaboration efforts.

The interviews highlighted that the biggest challenge was the pressure to develop services despite limited time and resources. Another issue was the challenge of attracting new employees. Improving the employee experience was viewed as crucial for enhancing the City's image as an employer, which could help attract both new workers and residents. An essential aspect of improving the employee experience was offering opportunities for skill development, enabling employees to grow and learn.

As public sector organizations explore ways to encourage employees to innovate in their work methods and embrace digital transformation, the research suggests that providing a variety of skill development opportunities and collaborative spaces could be a key strategy for advancing digitalization in public services.

Since only one process or case was studied, the findings may not apply to other cases but would suggest that the implementation of technology, or robotic process automation, needs to be considered at a broader level. Automation requires a redesign of work; job descriptions might have to be altered and tasks recombined into new job descriptions. The current and future skills needed to do this work need to be evaluated, to make sure that the resources are spent where they are most needed.

Although the research did not delve into the technical details of the process, it indicates the importance of conducting a comprehensive assessment of all steps and tasks from a technical perspective. This entails identifying available technical solutions and evaluating their implementation costs. Additionally, there is a necessity for follow-up evaluations after implementation to determine whether the changes have impacted the workload of secretaries and to identify any resulting benefits or drawbacks.

The narrow focus on a single process and a restricted range of interviews could impact the study's reliability. The researcher minimized some issues by incorporating multiple data sources and employing reliable documentation methods. However, the interviewer bias could not be completely eliminated, as the researcher’s familiarity with the process and internal workflows might have influenced the research direction. In public service research, focusing on a specific case or scenario means that the goal is not to achieve generalizability, but to describe and explain the specific situation.

As a conclusion, on a personal level, the research process was a great learning experience. The insights provided into the subject and the new ideas on how to enhance digital transformation were valuable. In particular, the realization that finding the right individuals from other sectors to collaborate with is essential for developing processes and tasks stood out. Team leaders, especially in the secretary services, need to take a more active role in building cross-sectoral contacts and networks, as their tasks and job descriptions will be the most affected by digital technology changes in the near future.

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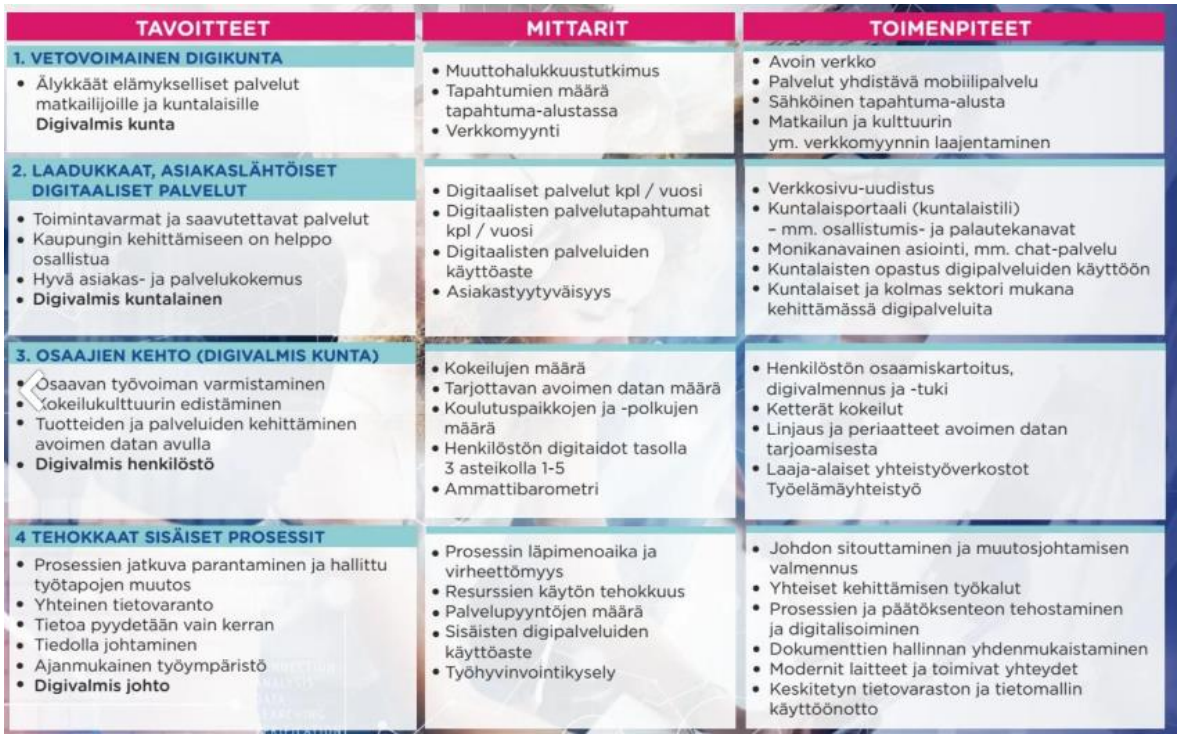
List of Figures

The digital vision of Vaasa, in Finnish. (City of Vaasa, digitalisaatio ja innovaatio palvelualue, 2019)



TAVOITTEET	MITTARIT	TOIMENPITEET
1. VETOVOIMAINEN DIGIKUNTA • Älykkäät elämykselliset palvelut matkailijoille ja kuntalaisille **Digivalmis kunta**	• Muuttohalukkuustutkimus • Tapahtumien määrä tapahtuma-alustassa • Verkkomyynti	• Avoin verkko • Palvelut yhdistävä mobiilipalvelu • Sähköinen tapahtuma-alusta • Matkailun ja kulttuurin ym. verkkomyynnin laajentaminen
2. LAADUKKAAT, ASIAKASLÄHTÖISET DIGITAALISET PALVELUT • Toimintavarmat ja saavutettavat palvelut • Kaupungin kehittämiseen on helppo osallistua • Hyvä asiakas- ja palvelukokemus • **Digivalmis kuntalainen**	• Digitaaliset palvelut kpl / vuosi • Digitaalisten palvelutapahtumat kpl / vuosi • Digitaalisten palveluiden käyttöaste • Asiakastyytyväisyys	• Verkkosivu-uudistus • Kuntalaisportaali (kuntalaistili) – mm. osallistumis- ja palautekanavat • Monikanavainen asiointi, mm. chat-palvelu • Kuntalaisten opastus digipalveluiden käyttöön • Kuntalaiset ja kolmas sektori mukana kehittämässä digipalveluita
3. OSAAJIEN KEHTO (DIGIVALMIS KUNTA) • Osaavan työvoiman varmistaminen • Kokeilukulttuurin edistäminen • Tuotteiden ja palveluiden kehittäminen avoimen datan avulla • **Digivalmis henkilöstö**	• Kokeilujen määrä • Tarjottavan avoimen datan määrä • Koulutuspaikkojen ja -polkujen määrä • Henkilöstön digitaidot tasolla 3 asteikolla 1-5 • Ammattibarometri	• Henkilöstön osaamiskartoitus, digivalmennus ja -tuki • Ketterät kokeilut • Linjaus ja periaatteet avoimen datan tarjoamisesta • Laaja-alaiset yhteistyöverkostot Työelämäyhteistyö
4 TEHOKKAAT SISÄISET PROSESSIT • Prosessien jatkuva parantaminen ja hallittu työtapojen muutos • Yhteinen tietovaranto • Tietoa pyydetään vain kerran • Tiedolla johtaminen • Ajanmukainen työympäristö • **Digivalmis johto**	• Prosessin läpimenoaika ja virheettömyys • Resurssien käytön tehokkuus • Palvelupyyntöjen määrä • Sisäisten digipalveluiden käyttöaste • Työhyvinvointikysely	• Johdon sitouttaminen ja muutosjohtamisen valmennus • Yhteiset kehittämisen työkalut • Prosessien ja päätöksenteon tehostaminen ja digitalisoiminen • Dokumenttien hallinnan yhdenmukaistaminen • Modernit laitteet ja toimivat yhteydet • Keskitetyn tietovaraston ja tietomallin käyttöönotto

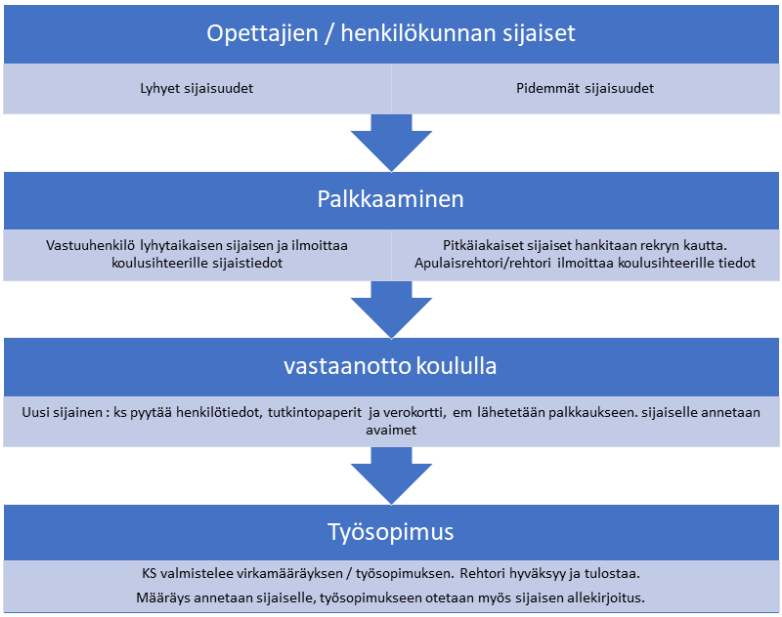
Johdanto

Kuvatkaa mahdollisimman yksityiskohtaisesti prosessin aikana esiin nousseet haasteet. Valitse 2 - 3 tapausta, joista kirjaatte prosessin aikana ylös esimerkiksi:

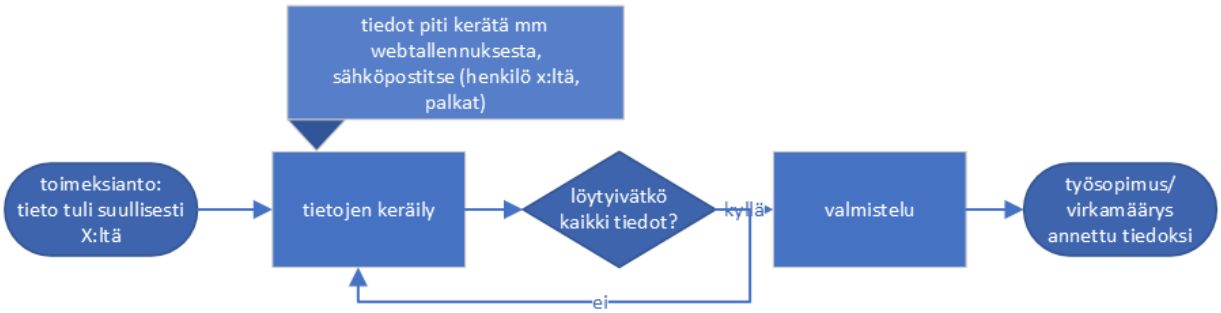
- Mitä tapahtuu eri vaiheissa?
- Ongelmakohdat ja miten ratkaisitte nämä?
- Arvioikaa myös, paljonko käytitte aikaa tehtävään sen aloituksesta valmistumiseen, tai tehtävän eri vaiheissa.

Huom! Tarkoituksena on kirjata nyt havaittuja ongelmakohtia tai haasteita, sekä kuvata nykytilanne: Älkää siis kirjatko aiemmin tehtyjä havaintoja.

Pohjana on käytetty koulusihteeritiimin prosessikuvausta. Toimitaanko koulussanne prosessikuvan mukaisesti?



Piirrä oma prosessikuvauksesi (paperille, sähköinen) jokaisesta tehtävästä, alla (2) esimerkkiä:



1. Esimerkkitehtävä 1: (virkamääräys / työsopimus)

- Miten ja missä muodossa saitte tiedon/toimeksiannon (esim. suullisesti, sähköisesti)?

Huomautukset:

2. Datan keräily

Miettikää esimerkiksi seuraavia kohtia ja kirjatkaa vastauksenne alla olevaan kenttään:

- Mitä tietoja teille ilmoitettiin / mitkä tiedot vastuuhenkilö ilmoitti?
- Missä muodossa saitte tiedot, kuten esim. henkilötiedot (lomake, sähköpostin viestinä…)?
- Ilmoitettiinko teille / saitteko kaikki tarvittavat tiedot kerralla/yhdellä ilmoituksella?
- Mitä tietoja puuttui? Ja keneltä pyysitte nämä tiedot?
- Jouduitteko itse hakemaan tietoja? Jos jouduitte, niin kirjatkaa myös mitä tietoja, mistä ja miten näitä haitte.
- Arvioikaa, paljonko kului aikaa siihen, että saitte tarvittavat tiedot.

Huomautukset:

3. Valmistelu

   Miettikää esimerkiksi seuraavia kohtia ja kirjatkaa vastauksenne alla olevaan kenttään:

   - Missä vaiheessa työsopimus valmistellaan?
   - Arvioikaa, kuinka nopeasti työsopimus on toimitettu lyhytaaikaiselle sijaiselle allekirjoitettavaksi ja/tai työsopimus on hyväksytty sijaisuuden päättymisen jälkeen.

   Huomautukset:

4. Onko jotain muuta, jota haluaisitte tuoda esille? Voitte esimerkiksi kertoa haasteista tai ongelmista, joita työsopimuksen valmistelussa ilmeni, mm. miksi työsopimuksen valmistelu vei aikaa, mahdolliset jälkikäteen korjattavat tiedot jne. Mikäli jouduitte korjamaan työsopimuksen tietoja jälkikäteen, kertokaa myös miksi ja mitä tietoja piti korjata.

   Huomautukset:

Workshop 2.11

- Case study for the purpose of documenting current situation with the process of preparing employment contrats for part-time/substitute teachers/other personnel in the basic education by the school secretary team
- Determine steps that cause challange
- What we can or cannot influence

Ohjelma - Agenda

- introduction
- process
- Me –we - us
  - Challenges
  - What works
  - What does not work
- What can we influence and not

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Process – me we us

Me – ennakko
yhteenveto prosessikuvaus
We - pareittain
mieti, mitkä ovat haasteet / mikä toimii hyvin
kirjaa nämä paperille
Us – kaikki yhdessä
top 5 haasteet, joita haluamme kehittää (äänestys)

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sijaisuudet

- Sisäinen sijaisuus
  - Opettaja sijaistaa toista opettajaa
  - Ohjaaja sijaistaa opettajaa
- Ulkoinen sijaisuus

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Miten ja missä muodossa saitte tiedon/toimeksiannon?

- Excel -taulukkona
- Sähköpostilla
- Paperilla, jossa on lukujärjestys ja sijaisen pitämät tunnit
- Listattuna paperille
- Kirjallisesti
- Suullisesti
- Lomakeella

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Datan keräily- muut tiedot

- Sijaisuuden kesto
- Koeajan pituus
- Hitu (hinnoittelutunnus)
- Opv (opetusvelvollisuus)
- Viikkotyöaika
- Palkkakustannusten tiliöinti
- Tiedot rehtorilta, apulaisrehtorilta, talousasiantuntijalta, palkattavalta, palkoista, kvtes, ovtes, hr-tuki
- Missä muodossa?
  - S-postitse
  - Suullisesti

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Datan keräily – sijaisen henkilötiedot

- Henkilötietolomake
- Tutkintotodistus
- Verokortti
- Tiedot sijaiselta, pyydetään tarvittaessa
  - Uusi työntekijä
  - Sisäinen sijainen – Primus
- Missä muodossa?:
  - Paperi - sihteeri ottaa kopion ja skannaa palkka-asiantuntijalle palkkahallintoon
  - Valokuva - tulostetaan, skannataan uudelleen pdf -muotoon palkkahallintoa varten (tutkintotodistusta, joka toimitettu linkkinä Opintopolkuun ei hyväksytä)

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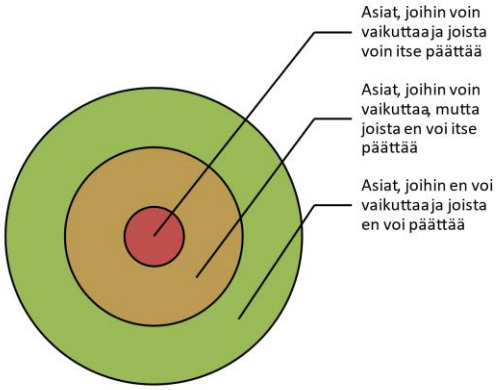

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Otsikko: Haastattelu
Päivämäärä: 19.1.2024
Aika: 13:00
Paikka: Teams
Haastattelija: Therese Kangas
Haastateltava: X

Johdanto:

Kiitos osallistumisestasi haastatteluun. Haastattelun tavoitteena on selvittää millaisia kokemuksia, haasteita ja ongelmia kohtaat työssäsi Vaasan kaupungilla johtajana/esihenkilönä/työntekijänä digitaalisen muutoksen/digitalisoitumisen näkökulmasta. Tavoitteena on lisäksi selvittää mitkä koet tärkeimpinä asioina automaation ja työtehtävien uudelleenorganisoinnin toteuttamisesta. Haastattelu kestää noin 45 minuuttia.

Olen Therése Kangas ja suoritan ylempää ammattikorkeakoulututkintoa (YAMK) Noviassa. Tällä hetkellä teen opinnäytetyötäni. Olen myös koulusihteeritiimin palveluesihenkilö ja työskentelen tiimin kanssa prosessiemme dokumentoinnissa ja tehostamisessa.

Osallistuminen haastatteluun on vapaaehtoista. Kaikki vastaukset käsitellään luottamuksellisesti eli haastattelun vastaukset ovat vain minun käytössäni eikä raportista voida tunnistaa vastaajia. Voit milloin tahansa lopettaa haastattelun, tai olla vastaamatta kysymykseen, jos niin haluat.

Haastattelua varten pyytäisin sinua antamaan suostumuksesi haastatteluun ja luvan haastattelun nauhoittamiseen.

Onko sinulla jotakin kysyttävää haastatteluun liittyen?

Kysymykset

Haasteet

Mikä on mielestäsi tällä hetkellä merkittävin haaste, joka kohdistuu yleisesti julkisiin palveluihin Vaasan kaupungin organisaatiossa?

Mitkä asiat koet olevan tiiminne merkittävimpinä haasteina lähitulevaisuudessa?

Voitko kertoa hieman tarkemmin tai antaa esimerkkejä? Esimerkiksi, tunnistatko tällä hetkellä sisäisiä ja/tai ulkoisia uhkia, jotka ovat akuutteja/edellyttävät toimenpiteitä nopealla aikataululla?

Strategia

Yksi tavoite Strategian "mahdollistajat" teemaohjelman mukaan on "osaava henkilöstö ja erinomainen työntekijäkokemus", miten selittäisit tämän omilla sanoillasi?

Miten tämä tavoite näkyy teidän työssänne?

Yksi toimenpide tavoitteen saavuttamiseen on "digitalisaatio- tekoälyn- ja robotisaatio-osaamisen kehittäminen ja hyödyntäminen", miten tämä näkyy teidän tiimissänne?

Voitko antaa konkreettisia esimerkkejä siitä, miten tämä voitaisiin toteuttaa?

Digitaaliset taidot

Mitkä ovat mielestäsi työntekijöiden / esihenkilöiden tärkeimpiä taitoja ja osaamisalueita, joita heiltä edellytetään lähitulevaisuudessa?

Työntekijöiden roolien muuttuessa digitalisaation ja automatisoinnin vuoksi, heiltä edellytetään kykyä oppia uusia työtapoja tai kykyä oppia kokonaan uudenlaiset työtehtävät. Mitä johdon/esihenkilöiden tulisi tehdä, jotta tässä muutoksessa onnistuttaisiin työntekijöiden näkökulmasta?

Miten sinä vahvistaisit digitaalista osaamista tulevaisuutta ajatellen Vaasan kaupungin organisaatiossa?

Prosessi – Tapausanalyysi

Työpajassa tunnistetut suurimmat haasteet olivat:

Kun koulusihteerit saivat tiedot sijaisopettajilta, osa tarvittavista tiedoista puuttuivat (esim. asiakirjat, henkilötiedot). Tämä aiheutti sen, että koulusihteeriltä kului aikaa tietojen saamiseksi esimerkiksi ottamalla yhteyttä sijaiseen tai pyytämällä jotain toista henkilöä hankkimaan tarvittavat tiedot. Tiedonkeruu tapahtuu yleensä paperilomakkeella.

Muut tarvittavat tiedot olivat saatavilla/haettavissa eri muodoissa ja usealla eri tavalla dokumentoituna. Tämä vie paljon työaikaa. Lisäksi koulusihteeri on riippuvainen useista muista henkilöistä saadakseen kaikki tarvittavat tiedot työsopimuksen valmistelua varten.

Mikä on näkemyksesi näistä haasteista?

Mitkä työprosessin kohdat soveltuisivat mielestäsi parhaiten automatisoitaviksi?
Onko mielestäsi osa-alueita, joita ei tulisi automatisoida?

Miten teidän mielestänne kannattaisi edetä prosessin kehittämisessä?

Miten minä ja tiimini voisimme auttaa/tehdä tämän työprosessin kehittämiseksi?

Mitkä työtehtävät tai työprosessit olisivat mielestäsi mahdollista automatisoida teidän työssänne?

Yhteistyö ja osallistuminen

Suurin haaste uuden työprosessin onnistuneelle käyttöönotolle oli koulusihteereiden mielestä vaikutusmahdollisuuksien tai päätösvallan puute. Miten osallistuttaisit työntekijät kehitysprosessiin?

Teetkö aktiivisesti yhteistyötä muiden johtajien/esihenkilöiden, tulosalueiden, toimintayksikköjen tai palveluntuottajien kanssa?

Voitko antaa esimerkin onnistuneesta yhteistyöstä eri toimijoiden kanssa liittyen uusien teknologioiden / digitalisaation käyttöönotossa?

Miten lisäisit yhteistyötä eri osastojen välissä?

Lopuksi

Onko sinulla jotain muuta aiheeseen liittyvää, jota haluaisit tuoda esille ja joka ei ole tässä haastattelussa tullut esille?

Kerro hieman itsestäsi:
Mikä on roolisi organisaatiossa?
Koulutustasosi?
Mies/nainen nainen
Ikä

Kiitos, että käytit aikaa vastataksesi tähän haastatteluun.
Jos sinulle tulee kysyttävää raportista tai haastattelusta, voit ottaa yhteyttä minuun sähköpostitse osoitteella therese.kanqas@edu.novia.fi / therese.kanqas@vaasa.fi